

Appendix A: Copies of all written comments

Ecology accepted comments during the formal public comment period between August 14th, 2012, and October 4th, 2012. A number of comments came in after the October 4th deadline; Ecology chose to respond to those comments through October 12th. Comments received after the 12th were not accepted or responded to.

Complete copies of all comments received by mail, email, or in another written format are provided in their original form for reference below.

December 2012

Publication no. 12-08-020

Download the Concise Explanatory Statement at:

<https://fortress.wa.gov/ecy/publications/publications/1208020.pdf>

From: Keever, Marcie <MKeever@foe.org>
Sent: Friday, October 12, 2012 12:46 PM
To: ECY RE Spills Rule Making; Larson, Sonja (ECY)
Cc: Felleman
Subject: Additional Comments from Friends of the Earth regarding Oil Spill Contingency Planning Rule
Attachments: FoE Oil Spill Contingency Comments Oct 12 2012.pdf
Importance: High

Dear Ms. Larson,

Due to a technical snafu, Friends of the Earth failed to send our organizational comment letter to your agency by the October 4 comment deadline. We hope you received the numerous comment letters submitted by Friends of the Earth members and activists and we would request that you accept and consider the attached comments on the Oil Spill Contingency Planning Rule from our organization.

Sincerely,
Marcie Keever

****PLEASE NOTE FRIENDS OF THE EARTH'S NEW ADDRESS****

Marcie Keever
Oceans & Vessels Project Director
Friends of the Earth
David Brower Center
2150 Allston Way, Ste. 240
Berkeley, CA 94704
510-900-3144 phone
510-900-3155 fax
mkeever@foe.org
www.foe.org



Department of Ecology
Sonja Larson
P.O. Box 47600
Olympia, WA 98504-7600
spillsrulemaking@ecy.wa.gov

October 12, 2012

Re: Amendments to the Oil Spill Contingency Planning Rule (Chapter 173-182 WAC)

Dear Ms. Larsen:

We appreciate the opportunity to provide the following comments on proposed changes to the oil spill contingency plans required by the State for ships and facilities posing major threats of a spill to Washington's waters. We understand this draft rule reflects many hours of stakeholder input. However, please accept these comments with the understanding that while the public appreciates that effort, it is not bound by the results. In addition, while we highlight the issues that are most important to our organization we adopt the comments submitted by the Makah Tribal Council, the San Juan County Council and the Clallam County Commissioners.

This review would have been greatly facilitated by a brief summary of the rationale and intent of the proposed changes as well as the lessons you have learned from spills and spill response drills. This is important not just for the public but also for the legislature, that was able to overcome industry opposition to the passage of ESHB 1186 calling for enhancements to our response capacity in light of the response failures to BP's Gulf oil spill disaster. The following comments take on even greater urgency given the proposed expansion of coal and tar sand derived exports by vessel through Washington waters that will significantly increase the risk of a major spill North of Admiralty Inlet and along the Olympic Coast.

Before addressing how well specific aspects of the rule meet the legislatures' call for Best Achievable Protection (BAP) for spill response, the public needs to be assured that it will be notified of any future updates or changes to contingency plans electronically. The current language does not require that contingency plans be submitted electronically. The public should no longer be required to make office visits to Ecology to see these documents regardless of how they are submitted to the agency.

We believe the two most significant improvements to our regions' response capacity are the inclusion of the 4-hr planning standard and the more formalized inclusion of vessels of opportunity (VOO) into the response effort. However, both of these provisions should be significantly enhanced as follows:

- In order to improve continuous response capacity, those areas required to meet the 4-hr rule need to include not just “current buster” type capabilities, but must be paired with at least one workboat and mini-barge (<300 bbls).
- There need to be more VOOs distributed throughout the region. The regions requiring VOOs are too large and the number of VOOs is too small.
- San Juan County needs to be designated a staging area, like Neah Bay, requiring dedicated gear—including storage barges—to cover up to the 6-hour planning standard.

We remain unconvinced the draft rule addresses storage issues adequately, which have been identified as inadequate for many years, especially in the Neah Bay staging area. We do not agree with requiring plan holders to have dedicated barges to store only 25% of recovered oil even though Ecology previously allowed the entire amount of recovered oil to be met with barges of opportunity. Furthermore, Ecology should only be providing storage credit for utilizing upland facilities if they can show how they meet the continuous recovery goals of the rule. In addition, there should be a defined phase in schedule in which all storage should meet Best Achievable Protection (BAP) standards thereby eliminating the use of bladders within 5 years rather than first addressing the issue in five years as proposed. We believe that inaccessible areas of high biological and cultural value associated with high traffic volumes such as Neah Bay and the San Juan Islands need both dedicated and resident equipment to be able to initiate a full response until additional equipment can cascade into the region. We believe this must include at minimum a dedicated mini-barge and two (2) resident workboats and VOOs.

We believe this rule misses a significant opportunity to improve our overall response capacity by not including the Neah Bay Response Tug, the most dedicated seaworthy vessel in the Makah Marina, into the spill response task force. The inclusion of a dedicated storage barge, combined with the Response Tug will also enable tankers to meet upcoming changes in federal regulations associated with moving the High Volume Port Line from Port Angeles to Cape Flattery. The current proposal gives no timeframe in which this major shortcoming will be filled even once the Makah Marina is enhanced nor does it explain how it meets the alternative compliance requirement of being a least as protective as what is called for in the rule.

Given the increase in tar sand derived oil being already being exported from Vancouver, BC through State waters and the further expansion of these exports planned, we urge Ecology to specify that diluted bitumen (dilbit) or synthetic crude are included in the definition of the “oils” subject to this rule. Similarly, it is important that there are specific strategies for responding to bunker spills since the proposed Gateway coal terminal is predicting close to 1,000 additional transits of bulk carriers that are notorious for being poorly maintained and crewed. These vessels can carry up to 4 million gallons of persistent bunker fuel that has been shown to have even greater toxicity to herring embryos than crude oil based on findings from the *Exxon Valdez* and the *Cosco Busan* spills. The current rule calls for a protracted period of 12 hours to respond to sinking oils (Group V). This timeframe needs to be significantly shortened given that the proposed Gateway coal terminal is being sited in the State’s once largest, and now severely imperiled, herring stock’s spawning grounds at Cherry Point. Furthermore, there needs to be a requirement for response contractors to have underwater video capabilities in order to document submerged oils.

Finally, since the most significant benefits of prompt oil spill response is achieved in the early

hours where containment is possible, it is imperative that the cost/benefit analysis in Appendix B include hourly cost savings over the duration of the spill for the first day or two rather than just averaging all days together and not rewarding early actions.

Thank you for the opportunity to comment. If you have any questions please contact Fred Felleman at (206) 595-3825 or felleman@comcast.net.

These comments are respectfully submitted by,

Fred Felleman, NW Consultant
Friends of the Earth

Marcie Keever, Oceans & Vessels Project Director
Friends of the Earth

From: Delano, Garrett <Garrett.Delano@leg.wa.gov> on behalf of Pike, Rep. Liz <Liz.Pike@leg.wa.gov>
Sent: Wednesday, October 10, 2012 2:24 PM
To: Larson, Sonja (ECY)
Cc: Justin, Jim (GOV); JHellman@washingtonports.org; Orcutt, Rep. Ed; Rivers, Ann; Harris, Paul; Benton, Sen. Don; Swecker, Sen. Dan; Moeller, Rep. Jim
Subject: Comments on proposed amendments to Chapter 173-182 WAC, Oil Spill Contingency Plan to Implement Chapter 122, 2011 Laws (E2SHB 1186)
Attachments: EcologyPortsLetterE2SHB1186.pdf
Follow Up Flag: Follow up
Flag Status: Completed

Sonja,

Please see the attached letter regarding comments on proposed amendments to Chapter 173-182 WAC, Oil Spill Contingency Plan to Implement Chapter 122, 2011 Laws (E2SHB 1186).

Please contact me with any questions.

Thank you,
Liz

Liz Pike
Washington State Representative
18th Legislative District
Cell (360) 281-8720
District Office (360) 673-2888
Olympia Office (360) 786-7850
Email: liz.pike@leg.wa.gov



Washington State Legislature

October 10, 2012

WA State Department of Ecology
ATTN: Sonja Larson
PO Box 47600
Olympia, WA 98504-7600

RE: Comments on proposed amendments to Chapter 173-182 WAC, Oil Spill Contingency Plan to Implement Chapter 122, 2011 Laws (E2SHB 1186)

Sent electronically to: sonja.larson@ecy.wa.gov

Dear Ms. Larson:

It has come to our attention the Department of Ecology is attempting to overreach with recent proposed rules pertaining to oil spill planning requirements regarding vessels of opportunity, aerial surveillance and the four hour response standard as they would be applied to cargo ships calling along the Columbia River.

Nothing in E2SHB 1186 requires Ecology to pass the kind of sweeping reforms called for in the current rule draft since this comprehensive reform is not directed in statute. Furthermore, the proposed rules will negatively impact discretionary trade along the Columbia River as the Maritime Fire & Safety Association (MFSA) and Washington Public Ports Association (WPPA) have indicated in their recent comments to Ecology. Only 12% of vessels traveling on the Lower Columbia River are tank vessels. Since 100% of the river traffic is discretionary, additional costs resulting from this overreach by Ecology will increase by more than \$1.1 million, (a 220% increase), which translates into additional vessel fees. The ultimate cost to our local maritime economy will be millions of dollars in lost trade since local businesses will find it to be more cost effective to export their goods out of competing ports in Canada or other states. Washington State is already recognized as the most expensive state on the West Coast for a vessel to call.

It is particularly disappointing to learn that Ecology has acted in a manner not consistent with recent stakeholder discussions which were working towards equitable solutions to many of the most important concerns put forward by the Columbia River maritime community.

As local government entities, ports tend to approach their economic development mission with a focus on long-term sustainability. In doing so, they take a balanced approach that considers many factors including environmental stewardship. Ports around the state spend millions of dollars each year on environmental enhancement programs to protect Washington's natural resources, including the threat of oil spills.

One size does not fit all. The new proposed rules are best suited for use in open-water situations where large expanses call for these specialized techniques. The proposed methods are untested in confined and predictable waters of a river system and are largely unsuitable in this environment where confined spaces call for more surgical techniques.

Columbia River ports are dependent on discretionary trade. The Port of Vancouver, like many other Washington Ports is investing in transportation infrastructure to increase capacity and create more jobs for our region. Port of Vancouver is in

the early phases of a \$275 million rail improvement project. Proposed rules such as those being currently promulgated by Ecology represent a giant step backward to improve the economic outlook for our region. In short, these rules address a problem that largely does not exist.

Lastly, the Legislature specifically directed Ecology to minimize potential impacts to discretionary cargo by including the following language in Sec. 2(2) of E2SHB 1186, the final bill passed by both houses of the Legislature and signed by Governor Gregoire: "Rule updates to covered non-tank vessels shall minimize potential impacts to discretionary cargo through the state." Gregoire went even further in her bill signing statement, addressing Ted Sturdevant, director of Ecology, dated April 20, 2011, reiterating this commitment to protect discretionary cargo as follows:

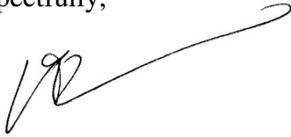
"Washington is the nation's most trade-dependent state. Our citizens are well aware of the major economic benefits and associated environmental risks posed by maritime commerce and petroleum transportation.

I ask you to ensure that rules addressing cargo ship spill response requirements minimize potential impacts to discretionary cargo moving through our state, providing protections appropriate to the level of risk posed by different vessels and sectors."

By specifically directing the agency to minimize impacts on discretionary trade, the Legislature made its intent very clear. This position was reiterated by Governor Gregoire in her signing statement. In doing so, Ecology's proposed rules are in direct conflict with legislators' and the governors' clearly and unambiguously stated intent.

For these compelling reasons, we ask you to reconsider the proposed oil spill planning requirements regarding vessels of opportunity, aerial surveillance and the four hour response standard as they would be applied to cargo ships calling along the Columbia River.

Respectfully,



Rep. Liz Pike
18th Legislative District



Rep. Ed Orcutt
18th Legislative District



Sen. Ann Rivers
18th Legislative District



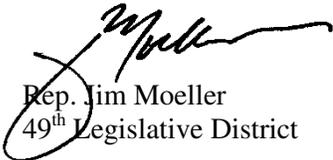
Rep. Paul Harris
17th Legislative District



Sen. Don Benton
17th Legislative District



Sen. Dan Swecker
20th Legislative District



Rep. Jim Moeller
49th Legislative District

cc: The Honorable Christine Gregoire, Governor
Johan Hellman, Assistant Director, Washington Public Ports Association

From: Johan Hellman <JHellman@washingtonports.org>
Sent: Thursday, October 04, 2012 7:55 PM
To: ECY RE Spills Rule Making
Subject: FW: Comments regarding oil spill contingency plan rules
Attachments: Letter (2.0) - Columbia C-plans - 10.4.12.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Comments from the Washington Public Ports Association regarding proposed oil spill contingency plan rules are attached, sent earlier today to Sonja Larson.

Thanks you for your consideration,

Johan

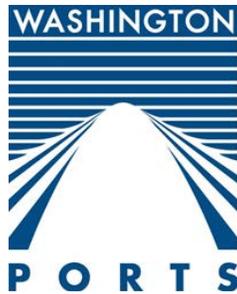
From: Johan Hellman
Sent: Thursday, October 04, 2012 5:00 PM
To: 'sonja.larson@ecy.wa.gov'
Subject: Comments regarding oil spill contingency plan rules

Comments from the Washington Public Ports Association regarding proposed oil spill contingency plan rules are attached.

I am happy to answer any questions.

- Johan

Johan Hellman
Washington Public Ports Association
(360) 943-0760



October 4, 2012

Washington State Department of Ecology
Attn.: Ms. Sonja Larson
P.O. Box 47600
Olympia, WA 98504-7600

RE: Comments on proposed amendments to Chapter 173-182 WAC, Oil Spill Contingency Plan to Implement Chapter 122, 2011 Laws (E2SHB 1186)

Sent electronically to: sonja.larson@ecy.wa.gov

Dear Ms. Larson:

Thank you for this opportunity to comment on the Washington Department of Ecology's ("Ecology") proposed amendments to the state's oil spill contingency plan requirements.

The Washington Public Ports Association (the "WPPA") is a public agency trade association which represents approximately 75 port districts around the state. These port districts are responsible for diverse infrastructure which includes marine terminals, barge facilities, industrial development, marinas, airports, railroads and other portions of the state and national trade infrastructure network. Although individual port districts may differ dramatically, they all play a critical economic development role in the communities they serve and, combined, are absolutely essential to maintaining Washington's competitive positioning as one of the most trade dependent states in the nation.

As local government entities, ports tend to approach their economic development mission with a special focus on long-term sustainability. In doing so, they take a balanced approach that considers many factors including environmental stewardship. Ports around the state spend millions of dollars each year on environmental enhancement programs and participate actively in efforts to protect our state's precious natural resources from numerous environmental threats, including the threat of oil spills.

Our association has monitored the current rulemaking process concerning oil spill contingency plans for more than a year. We tracked this matter as a legislative issue which led to final passage of E2SHB 1186 and we participated in Ecology's stakeholder outreach process thereafter. For most of this time, we were encouraged that discussions between Ecology and the Maritime Fire & Safety Association (the

“MFSA”) were advancing in good faith. For the better part of the last six months, it appeared these discussions were working towards equitable solutions to many of the most important concerns put forward by the Columbia River maritime community. Given the organization’s decades of experience providing umbrella response plan coverage along the river, we believe the MFSA has done an excellent job of highlighting areas where the proposed rule revisions may be unworkable and we support revisions Ecology has made as a result of these discussions.

However, we are very concerned that some of the most expensive provisions remain and that these mandates could have a dramatic impact on discretionary trade while providing limited enhancement to oil spill prevention and response along the Columbia River. We are also concerned that these mandates are not in keeping with commitments made by Governor Gregoire and the Legislature to protect discretionary trade. We will use this letter to address some of the key policy questions surrounding the current rule framework put forth by Ecology and then summarize with a brief conclusion.

What commitments did Governor Gregoire and the Legislature make to protect discretionary trade?

The Legislature specifically directed Ecology to minimize potential impacts to discretionary cargo by including the following language in Sec. 2(2) of E2SHB 1186, the final bill as passed by both houses of the Legislature and signed by Governor Gregoire: “Rule updates to covered non-tank vessels shall minimize potential impacts to discretionary cargo moved through the state.”

In her bill signing statement addressed to Ted Sturdevant, director of Ecology, dated April 20, 2011, Governor Gregoire reiterated this commitment to protect discretionary cargo as follows:

“Washington is the nation’s most trade-dependent state. Our citizens are well aware of the major economic benefits and associated environmental risks posed by maritime commerce and petroleum transportation.

I ask you to ensure that rules addressing cargo ship spill response requirements minimize potential impacts to discretionary cargo moving through our state, providing protections appropriate to the level of risk posed by different vessels and sectors.”

By specifically directing the agency to minimize impacts on discretionary trade, the Legislature made its intent clear. Governor Gregoire supported this intent by signing the bill and then reiterated her support by including it in her signing statement. In this way, our state’s leaders clearly and unambiguously stated their intent. Given these commitments, the question is then raised: “To what degree would the proposed rules affect discretionary trade along the Columbia River.”

How would the proposed rule affect discretionary trade?

Columbia River ports are absolutely dependent on discretionary trade. Cargo statistics show that 88 percent of vessels traveling on the Lower Columbia River are non-tank vessels, with 100 percent of traffic along the river being discretionary. The MFSA has presented these impacts to Ecology in numerous ways during discussions taking place over the last six months.

The current draft rule mandates three response methods that would be particularly costly and, therefore, have an especially corrosive impact on discretionary trade along the Columbia River. Furthermore, all three of these methods are best suited for use in open-water situations where large expanses call for these specialized techniques. However, these methods are untested in the more confined and predictable waters of a river system and are largely unsuitable in this environment where more confined spaces call for more surgical techniques. The three methods that continue to concern ports along the Columbia River are the following:

- Vessels of Opportunity: we appreciate Ecology's recent downsizing of the number of contracted vessels required, and the agency's reduction of the proposed zone where this response method would be mandated. However, we maintain that this method is ideally suited for a large area where unpredictable currents require a diverse and mobile volunteer force to collect spilled oil. These conditions do not exist in the confined and predictable waters of the Columbia River.

Even with Ecology's amendments, this section of the rule mandates a considerable dedication of resources for a response method used only in the absolute worst case scenario. Even under these conditions the ultimate environmental benefit is questionable. Therefore, we respectfully ask Ecology to reconsider the directive that this method be required for cargo ships calling along the Columbia River.

- Aerial Surveillance: while Ecology has shown flexibility in some areas, this an area where the requirements have actually grown more rigid. The recent draft rule now requires two aerial surveillance assets deployed within 6 and 8 hours (respectively) of a major spill for purposes of oil spotting. Again, this is an area where the scale of resources mandated is out of sync with the actual effectiveness this mandate would provide. During the *Deepwater Horizon* spill event (which inspired many of the ideas in this latest round of spill prevention measures) aerial surveillance aided oil spotting in the vast environs of the Gulf of Mexico.

Again, these conditions are very different from the confined and predictable conditions along the Columbia River. This is one of the costliest new elements in Ecology's proposal and will provide little benefit along the Columbia River where the flow of any leaked oil is inherently predictable and can be tracked from any number of points along the shore. Therefore, we ask that vessels along the Columbia River be exempted from this condition.

- Four Hour Response: the proposed enhancement to the Cathlamet Planning Standard requires the addition of a 4-hour response window and use of Current Buster technology. This equipment is untested especially in a riverine environment and poses a significant investment. Therefore, if use of this technology is mandated, the department should reconsider its applicability along the Columbia River.

Combined, these three mandates would require an initial cost increase of more than \$1.1 million. In general, every \$50,000 increase in contingency plan expense translates to a \$50 increase in the vessel

fee paid by ships calling along the Columbia River. This is roughly equivalent to a 10 percent increase in cost. Using these numbers, we can estimate that these three provisions alone will increase vessel expenses by more than \$1,100, an increase of more than 220 percent.

What makes these numbers all the more startling is the fact that Washington state is already recognized as the most expensive state on the West Coast for a vessel to call. Adding this kind of expense to an already lofty cost figure would place the state out of reach for many and result in much higher export fees for state agriculture and other exporters. For many local businesses it would likely be more cost effective to export their goods out of competing ports in Canada or in other states.

Finally, it should be recognized that existing safeguards currently in place along the Columbia River have kept spill volumes and frequency consistently low. From its comparatively narrow width to its more predictable current flows, the Columbia River is fundamentally different than Puget Sound. Industry response statistics show how existing safeguards are particularly well suited for protecting the river's unique conditions.

What is Ecology required to produce before the end of this year?

Throughout the process of the last six months, much has been made of legislative intent and the need to complete the Legislature's directive before the end of the current calendar year. However, it is important to recognize exactly what the Legislature directed Ecology to do. Section 2 of E2SHB 1186 directs Ecology to do the following:

- (1) The department shall *evaluate and update* planning standards for oil spill response equipment required under contingency plans required by this chapter, *including aerial surveillance*, in order to ensure access in the state to equipment that represents the best achievable protection to respond to a worst case spill *and* provide for continuous operation of oil spill response activities to the maximum extent *practicable* and without jeopardizing crew safety, as determined by the incident commander of the unified command.
- (2) The department shall by rule update the planning standards at five-year intervals to ensure the maintenance of best available protection over time. *Rule updates to covered non-tank vessels shall minimize potential impacts to discretionary cargo moved through the state.*
- (3) The department shall evaluate and update planning standards for tank vessels by December 31, 2012.¹

Subsection (1) of this section requires the department to "evaluate and update planning standards for oil spill response equipment... including aerial surveillance... in order to ensure access equipment that represents the best achievable protection... to the maximum extent practicable..."

¹ Emphasis added.

Subsection (2) of this section includes the directive that “rule updates to covered non-tank vessels shall minimize potential impacts to discretionary cargo moved through the state.”

Subsection (3) directs Ecology to evaluate and update planning standards for *tank vessels* before the end of the current calendar year.

Nothing in this section or anywhere else in the final bill requires Ecology to pass the kind of sweeping reforms called for in the current rule draft before the end of the current calendar year – at least not as these reforms would be applied to cargo ships calling along the Columbia River. Ecology should be recognized for the ambitious package it has put forward. However, this kind of comprehensive reform is not directed in statute. And it certainly is not necessary if it could negatively impact discretionary trade along the Columbia River as the MFSA, maritime and port interests have shown will undoubtedly occur.

Conclusions

In conclusion, we respectfully submit the following:

- Governor Gregoire and the Legislature directed Ecology to minimize potential impacts to discretionary cargo moved through the state in its rulemaking concerning oil spill response equipment.
- The current draft rule would have a significant negative impact on discretionary trade calling along the Columbia River.
- Three specific response methods (vessels of opportunity, aerial surveillance and the four hour response standard) would have a devastating impact on discretionary cargo trade by making vessel fees prohibitively expensive.
- A doubling of vessel fees placed on cargo ships calling along the Columbia River could have devastating financial impacts that would reverberate through the entire region in the form of higher export costs.
- Ecology is under no statutory directive to implement comprehensive regulations guiding cargo trade along the Columbia River before the end of the year.

For these reasons we ask that you reconsider the proposed oil spill planning requirements regarding vessels of opportunity, aerial surveillance and the four hour response standard as they would be applied to cargo ships calling along the Columbia River. If we can provide any additional information or assistance, please do not hesitate to contact me at (360) 943-0760. We stand ready to work with you.

Sincerely,



Johan Hellman
Assistant Director

Cc: Governor Chris Gregoire
Keith Phillips, Governor's Executive Policy Office
Director Ted Sturdevant, Washington State Department of Ecology
Senator Craig Pridemore
Senator Ann Rivers
Senator Don Benton
Representative Tim Probst
Representative Paul Harris
Representative Ed Orcutt
Representative Liz Pike
Representative Jim Moeller
Representative Sharon Wylie

From: scott herning <scwern@yahoo.com>
Sent: Thursday, October 04, 2012 6:58 PM
To: Larson, Sonja (ECY)
Subject: Oil Contingency Plan

Follow Up Flag: Follow up
Flag Status: Completed

Dear Ms. Larson,

I am a resident of San Juan County. Please enact all necessary measures as they relate to the Oil Contingency Plan and related precautions. I cannot imagine why the State of Washington would even allow coal to be shipped through the pristine San Juan Island waters. There must be some sort of why to oppose this.

Sincerely,

Scott Herning
Friday Harbor

From: scott herning <scwern@yahoo.com>
Sent: Thursday, October 04, 2012 6:54 PM
To: ECY RE Spills Rule Making
Subject: Oil Contingency Plan

Follow Up Flag: Follow up
Flag Status: Completed

To whom it concerns

I am a resident of San Juan County and I could not imagine an oil spill throughout these waters. Please enact all necessary precautions in regards to this manner. I cannot even imagine how devastating this would be.

Sincerely,

Scott Herning
Friday Harbor

From: Geoffrey Prentiss <Geoff@prentissarchitects.com>
Sent: Thursday, October 04, 2012 6:12 PM
To: ECY RE Spills Rule Making; Larson, Sonja (ECY)
Subject: taking care

Follow Up Flag: Follow up
Flag Status: Completed

As a resident of San Juan Island and a citizen of our country, I beg you to make the rules as tough as you can in protecting our environment, in particular the waters of Puget Sound and the Straights from potential spills of toxic materials.

I was forwarded the below list from a friend who is a member of Friends of the San Juan's. Rather than paraphrase I am just pasting it in here; I endorse these concepts completely. My big message is that we way too often defer to the needs of economy when we should be tightening the belt more and defer to the earth that supports us. Economies always come and go and business is always looking for the cheapest way to produce or transport goods. But they look only at the immediate outlay of dollars and the immediate gain--- the environmental loss when looked at over time has always been a bigger loss to more people (tax payers) and more living beings and plants than the short term gain ever warranted.

The Oil Spill Contingency Plan Rule:

1. Must define San Juan County as a Staging Area and must specify that the two, three, four, and six hour planning standards are resident;
2. Distribute equipment and personnel to the San Juans sufficient to address the risk from oil and diluted bitumen tar sands spill;
3. Require and ensure the ability to respond, contain and cleanup spills of oils that sink. Potentially sinking oils include Group V oils, bunker fuels, and diluted bitumen tar sands;
4. Require that all contingency plans, technical manuals, and planning standards be publicly available on Ecology's website;
5. Require that public review and comment be provided on all proposed changes to contingency plans, technical manuals, and planning standards;
6. Prohibit the use of Coexit as a dispersant as has been done in the United Kingdom; and
7. Specifically state that all Alberta Tar Sands/Canadian crude products including diluted bitumen and all forms of synthetic crude being transported by land-based pipelines also be subject to the Oil Spill Contingency Plan Rule.

Thank you for helping keep the earth alive and safe from our greed.

Geoff

Geoffrey T. Prentiss | [prentiss architects, inc.](http://prentissarchitects.com)

224 West Galer Seattle, WA 98119 | p 206.283.9930 | www.prentissarchitects.com

From: Mark Wilson <markwilson@portofkalama.com>
Sent: Thursday, October 04, 2012 5:09 PM
To: Larson, Sonja (ECY)
Subject: Comment Letter for Oil Spill Contingency Planning Rules
Attachments: 20121004170815856.tif

Follow Up Flag: Follow up
Flag Status: Flagged

Please see the attached letter from the Port of Kalama.

Mark Wilson
Deputy Director
Development Director
Port of Kalama
380 W. Marine Drive
Kalama, WA 98625
www.portofkalama.com
360-673-2325 voice
360-673-5017 fax

This email is confidential and should only be read by the intended recipient.



October 4, 2012

Director Ted Sturdevant
Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

RE: Oil Spill Contingency Plan Rule Update

Dear Director Sturdevant:

As an active member of the Washington Public Ports Association (WPPA) and the Marine Fire & Safety Association (MFSA) the Port of Kalama has followed development of the draft rules concerning oil spill contingency planning. We are concerned that while the Department has listened to the maritime industry and made some select changes to the proposed rules, the most onerous, costly aspects of the draft ignore the unique nature of the Columbia River and place untenable requirements, inconsistent with those of the state of Oregon on a system struggling to stay competitive.

Our key concerns:

- + Increased costs that could stifle export trade. Mandates in the current draft rules are conservatively estimated to add \$1,100 to each cargo vessel in the Columbia River, a 220% cost increase.
- + Our cargos are discretionary and highly cost sensitive. Significant cargo diversions will be inevitable and damaging to the regional and state economy.
- + Hard fought economic growth and the benefits from expensive transportation infrastructure improvements will not be realized.
- + The Columbia River is fundamentally different than Puget Sound. Safeguards already in place along the Columbia River have kept spill volume and frequency consistently low.

The Port of Kalama is at the crossroads of global trade. Each year over 10 million tons of cargo pass through Kalama bound for international destinations. Nearly 1,000 people work within the Port area and many more jobs are supported by the industrial base.

Focus, tenacity, partnership, and political and financial support have allowed the Port of Kalama and others on the Columbia River to maintain their highest competitive advantage – transportation connections of river, road, and rail. Investments like the 43' Columbia River channel that provides over 40,000 local jobs and supports over 40 million tons of cargo each year; valued at \$20 billion in 2009. And, the same partners

that championed the channel project continue to work collectively to manage a plethora of navigation, environmental, and economic needs of this critical river system across two states and with multiple federal agencies.

We have valued the support of our congressional leadership and Governor Gregoire as we have grown - investing heavily in port and rail infrastructure and attracting nearly \$500 million in private investment over the past few years. This new business is reliant on an economical and efficient transportation system. Unnecessary requirements, particularly those that significantly drive up underlying costs, will serve to discourage this new business activity and the resulting jobs.

Governor Gregoire has stated that the Department should *"ensure state requirements protect our state's economy and that rules addressing cargo ship spill response requirements minimize potential impacts to discretionary cargo moving through our state, providing protections appropriate to the level of risk posed by different vessels and sectors."* We believe the Department's economic analysis conducted on the rules is inadequate to date and ask that you fully vet the concerns advanced by MFSA and WPPA on our behalf.

Sincerely,



Mark Wilson
Deputy Director
Development Director

Cc: Governor Gregoire
Keith Phillips, Governor's Executive Policy Office
49th District Senator Pridemore
49th District Representative Moeller
49th District Representative Wylie
18th District Senator Rivers
18th District Representative Orcutt
18th District Representative Pike
17th District Senator Benton
17th District Representative Probst
17th District Representative Harris

From: Johan Hellman <JHellman@washingtonports.org>
Sent: Thursday, October 04, 2012 5:00 PM
To: Larson, Sonja (ECY)
Subject: Comments regarding oil spill contingency plan rules
Attachments: Letter (2.0) - Columbia C-plans - 10.4.12.pdf

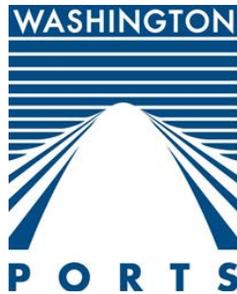
Follow Up Flag: Follow up
Flag Status: Completed

Comments from the Washington Public Ports Association regarding proposed oil spill contingency plan rules are attached.

I am happy to answer any questions.

- Johan

Johan Hellman
Washington Public Ports Association
(360) 943-0760



October 4, 2012

Washington State Department of Ecology
Attn.: Ms. Sonja Larson
P.O. Box 47600
Olympia, WA 98504-7600

RE: Comments on proposed amendments to Chapter 173-182 WAC, Oil Spill Contingency Plan to Implement Chapter 122, 2011 Laws (E2SHB 1186)

Sent electronically to: sonja.larson@ecy.wa.gov

Dear Ms. Larson:

Thank you for this opportunity to comment on the Washington Department of Ecology's ("Ecology") proposed amendments to the state's oil spill contingency plan requirements.

The Washington Public Ports Association (the "WPPA") is a public agency trade association which represents approximately 75 port districts around the state. These port districts are responsible for diverse infrastructure which includes marine terminals, barge facilities, industrial development, marinas, airports, railroads and other portions of the state and national trade infrastructure network. Although individual port districts may differ dramatically, they all play a critical economic development role in the communities they serve and, combined, are absolutely essential to maintaining Washington's competitive positioning as one of the most trade dependent states in the nation.

As local government entities, ports tend to approach their economic development mission with a special focus on long-term sustainability. In doing so, they take a balanced approach that considers many factors including environmental stewardship. Ports around the state spend millions of dollars each year on environmental enhancement programs and participate actively in efforts to protect our state's precious natural resources from numerous environmental threats, including the threat of oil spills.

Our association has monitored the current rulemaking process concerning oil spill contingency plans for more than a year. We tracked this matter as a legislative issue which led to final passage of E2SHB 1186 and we participated in Ecology's stakeholder outreach process thereafter. For most of this time, we were encouraged that discussions between Ecology and the Maritime Fire & Safety Association (the

“MFSA”) were advancing in good faith. For the better part of the last six months, it appeared these discussions were working towards equitable solutions to many of the most important concerns put forward by the Columbia River maritime community. Given the organization’s decades of experience providing umbrella response plan coverage along the river, we believe the MFSA has done an excellent job of highlighting areas where the proposed rule revisions may be unworkable and we support revisions Ecology has made as a result of these discussions.

However, we are very concerned that some of the most expensive provisions remain and that these mandates could have a dramatic impact on discretionary trade while providing limited enhancement to oil spill prevention and response along the Columbia River. We are also concerned that these mandates are not in keeping with commitments made by Governor Gregoire and the Legislature to protect discretionary trade. We will use this letter to address some of the key policy questions surrounding the current rule framework put forth by Ecology and then summarize with a brief conclusion.

What commitments did Governor Gregoire and the Legislature make to protect discretionary trade?

The Legislature specifically directed Ecology to minimize potential impacts to discretionary cargo by including the following language in Sec. 2(2) of E2SHB 1186, the final bill as passed by both houses of the Legislature and signed by Governor Gregoire: “Rule updates to covered non-tank vessels shall minimize potential impacts to discretionary cargo moved through the state.”

In her bill signing statement addressed to Ted Sturdevant, director of Ecology, dated April 20, 2011, Governor Gregoire reiterated this commitment to protect discretionary cargo as follows:

“Washington is the nation’s most trade-dependent state. Our citizens are well aware of the major economic benefits and associated environmental risks posed by maritime commerce and petroleum transportation.

I ask you to ensure that rules addressing cargo ship spill response requirements minimize potential impacts to discretionary cargo moving through our state, providing protections appropriate to the level of risk posed by different vessels and sectors.”

By specifically directing the agency to minimize impacts on discretionary trade, the Legislature made its intent clear. Governor Gregoire supported this intent by signing the bill and then reiterated her support by including it in her signing statement. In this way, our state’s leaders clearly and unambiguously stated their intent. Given these commitments, the question is then raised: “To what degree would the proposed rules affect discretionary trade along the Columbia River.”

How would the proposed rule affect discretionary trade?

Columbia River ports are absolutely dependent on discretionary trade. Cargo statistics show that 88 percent of vessels traveling on the Lower Columbia River are non-tank vessels, with 100 percent of traffic along the river being discretionary. The MFSA has presented these impacts to Ecology in numerous ways during discussions taking place over the last six months.

The current draft rule mandates three response methods that would be particularly costly and, therefore, have an especially corrosive impact on discretionary trade along the Columbia River. Furthermore, all three of these methods are best suited for use in open-water situations where large expanses call for these specialized techniques. However, these methods are untested in the more confined and predictable waters of a river system and are largely unsuitable in this environment where more confined spaces call for more surgical techniques. The three methods that continue to concern ports along the Columbia River are the following:

- Vessels of Opportunity: we appreciate Ecology's recent downsizing of the number of contracted vessels required, and the agency's reduction of the proposed zone where this response method would be mandated. However, we maintain that this method is ideally suited for a large area where unpredictable currents require a diverse and mobile volunteer force to collect spilled oil. These conditions do not exist in the confined and predictable waters of the Columbia River.

Even with Ecology's amendments, this section of the rule mandates a considerable dedication of resources for a response method used only in the absolute worst case scenario. Even under these conditions the ultimate environmental benefit is questionable. Therefore, we respectfully ask Ecology to reconsider the directive that this method be required for cargo ships calling along the Columbia River.

- Aerial Surveillance: while Ecology has shown flexibility in some areas, this an area where the requirements have actually grown more rigid. The recent draft rule now requires two aerial surveillance assets deployed within 6 and 8 hours (respectively) of a major spill for purposes of oil spotting. Again, this is an area where the scale of resources mandated is out of sync with the actual effectiveness this mandate would provide. During the *Deepwater Horizon* spill event (which inspired many of the ideas in this latest round of spill prevention measures) aerial surveillance aided oil spotting in the vast environs of the Gulf of Mexico.

Again, these conditions are very different from the confined and predictable conditions along the Columbia River. This is one of the costliest new elements in Ecology's proposal and will provide little benefit along the Columbia River where the flow of any leaked oil is inherently predictable and can be tracked from any number of points along the shore. Therefore, we ask that vessels along the Columbia River be exempted from this condition.

- Four Hour Response: the proposed enhancement to the Cathlamet Planning Standard requires the addition of a 4-hour response window and use of Current Buster technology. This equipment is untested especially in a riverine environment and poses a significant investment. Therefore, if use of this technology is mandated, the department should reconsider its applicability along the Columbia River.

Combined, these three mandates would require an initial cost increase of more than \$1.1 million. In general, every \$50,000 increase in contingency plan expense translates to a \$50 increase in the vessel

fee paid by ships calling along the Columbia River. This is roughly equivalent to a 10 percent increase in cost. Using these numbers, we can estimate that these three provisions alone will increase vessel expenses by more than \$1,100, an increase of more than 220 percent.

What makes these numbers all the more startling is the fact that Washington state is already recognized as the most expensive state on the West Coast for a vessel to call. Adding this kind of expense to an already lofty cost figure would place the state out of reach for many and result in much higher export fees for state agriculture and other exporters. For many local businesses it would likely be more cost effective to export their goods out of competing ports in Canada or in other states.

Finally, it should be recognized that existing safeguards currently in place along the Columbia River have kept spill volumes and frequency consistently low. From its comparatively narrow width to its more predictable current flows, the Columbia River is fundamentally different than Puget Sound. Industry response statistics show how existing safeguards are particularly well suited for protecting the river's unique conditions.

What is Ecology required to produce before the end of this year?

Throughout the process of the last six months, much has been made of legislative intent and the need to complete the Legislature's directive before the end of the current calendar year. However, it is important to recognize exactly what the Legislature directed Ecology to do. Section 2 of E2SHB 1186 directs Ecology to do the following:

- (1) The department shall *evaluate and update* planning standards for oil spill response equipment required under contingency plans required by this chapter, *including aerial surveillance*, in order to ensure access in the state to equipment that represents the best achievable protection to respond to a worst case spill *and* provide for continuous operation of oil spill response activities to the maximum extent *practicable* and without jeopardizing crew safety, as determined by the incident commander of the unified command.
- (2) The department shall by rule update the planning standards at five-year intervals to ensure the maintenance of best available protection over time. *Rule updates to covered non-tank vessels shall minimize potential impacts to discretionary cargo moved through the state.*
- (3) The department shall evaluate and update planning standards for tank vessels by December 31, 2012.¹

Subsection (1) of this section requires the department to "evaluate and update planning standards for oil spill response equipment... including aerial surveillance... in order to ensure access equipment that represents the best achievable protection... to the maximum extent practicable..."

¹ Emphasis added.

Subsection (2) of this section includes the directive that “rule updates to covered non-tank vessels shall minimize potential impacts to discretionary cargo moved through the state.”

Subsection (3) directs Ecology to evaluate and update planning standards for *tank vessels* before the end of the current calendar year.

Nothing in this section or anywhere else in the final bill requires Ecology to pass the kind of sweeping reforms called for in the current rule draft before the end of the current calendar year – at least not as these reforms would be applied to cargo ships calling along the Columbia River. Ecology should be recognized for the ambitious package it has put forward. However, this kind of comprehensive reform is not directed in statute. And it certainly is not necessary if it could negatively impact discretionary trade along the Columbia River as the MFSA, maritime and port interests have shown will undoubtedly occur.

Conclusions

In conclusion, we respectfully submit the following:

- Governor Gregoire and the Legislature directed Ecology to minimize potential impacts to discretionary cargo moved through the state in its rulemaking concerning oil spill response equipment.
- The current draft rule would have a significant negative impact on discretionary trade calling along the Columbia River.
- Three specific response methods (vessels of opportunity, aerial surveillance and the four hour response standard) would have a devastating impact on discretionary cargo trade by making vessel fees prohibitively expensive.
- A doubling of vessel fees placed on cargo ships calling along the Columbia River could have devastating financial impacts that would reverberate through the entire region in the form of higher export costs.
- Ecology is under no statutory directive to implement comprehensive regulations guiding cargo trade along the Columbia River before the end of the year.

For these reasons we ask that you reconsider the proposed oil spill planning requirements regarding vessels of opportunity, aerial surveillance and the four hour response standard as they would be applied to cargo ships calling along the Columbia River. If we can provide any additional information or assistance, please do not hesitate to contact me at (360) 943-0760. We stand ready to work with you.

Sincerely,



Johan Hellman
Assistant Director

Cc: Governor Chris Gregoire
Keith Phillips, Governor's Executive Policy Office
Director Ted Sturdevant, Washington State Department of Ecology
Senator Craig Pridemore
Senator Ann Rivers
Senator Don Benton
Representative Tim Probst
Representative Paul Harris
Representative Ed Orcutt
Representative Liz Pike
Representative Jim Moeller
Representative Sharon Wylie

From: Gary Martinke ISS-Portland <Gary.Martinke@ISS-Shipping.com>
Sent: Thursday, October 04, 2012 5:00 PM
To: ECY RE Spills Rule Making
Subject: WAC 173-182

Follow Up Flag: Follow up
Flag Status: Completed

Good day,
Thank you for the informative meeting 27 Sept in Vancouver. I believe good planning for prevention, preparedness and response is of the up most importance. At the meeting the idea of worst case scenario was discussed – what is worst case? You always have to be ready for something, but you don't always know what for. WAC 173-182 is about may be good for the Puget Sound area where the water is salty and cargo carried perhaps needs what you are proposing, however the shoe does not fit here on the Columbia River. The Columbia River does not see a lot of oil tankers. Adding more costs to call on this river adds gives more fuel to shippers to take their business elsewhere. Please do not let this happen. Thank you.

Best regards

Gary Martinke
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(As Agents Only)

Inchcape Shipping Services – A World of Local Expertise

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From: Barton, Stephanie <SBarton@nrcc.com>
Sent: Thursday, October 04, 2012 4:52 PM
To: Larson, Sonja (ECY)
Subject: Comments and Recommended Revisions to Proposed Changes to WAC 173-182
Attachments: WDOE Regs - NRC Comments to Proposed Changes to WAC 173-182 - 10-4-12.pdf

Dear Ms. Larsen:

Please find attached NRC's Comments and Recommended Revisions to Proposed Changes to WAC 173-182.

Best Regards, Stephanie

Stephanie Barton

Director, Emergency Response Programs

NRC

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October 4, 2012

Washington State Department of Ecology
Spills Program
Attn: Sonja Larson
PO Box 47600
Olympia, WA 98504-7600

Via Email

RE: Comments and Recommended Revisions to Proposed Changes to WAC 173-182

Dear Ms. Larsen:

NRC Environmental Services Inc. (NRC) has a central role in providing oil spill response coverage to vessels operating in Washington waters. For over 20 years, NRC has been the Primary Response Contractor (PRC) for the Washington State Maritime Cooperative (WSMC), the non-profit organization that provides umbrella contingency plan coverage to meet Washington Department of Ecology (Ecology) oil spill response requirements for over 90% of the vessels requiring coverage for the Strait of Juan de Fuca and Puget Sound and 100% of vessels requiring coverage in Grays Harbor. NRC also provides response contractor services to MFSA, the non-profit providing umbrella contingency plan coverage for 100% of the ship traffic on Columbia and Willamette Rivers. Based on this unique perspective and over 30 years of experience in all facets of oil spill response, NRC respectfully submits the following comments and suggested revisions to Ecology's proposed changes to WAC 173-181.

NEW AND REVISED SECTIONS RELATED TO VOO:

WAC 173-182-030 Definitions.

WAC 173-182-317 Covered vessel planning standards for vessels of opportunity (VOO).

WAC 173-182-130 Phase in language.

NRC Comments:

In general, NRC believes that the cost benefit analysis for the VOO system does not accurately reflect the significant cost in time and money that would be required to meet the additional equipment and training requirements in the proposed changes and does not address the lack of benefit in improved oil spill response capabilities or preparedness that would be provided.

The cost benefit analysis is based on the unsupportable assumption that the costs will be shared among PRCs. There is no historical basis for this assumption. In fact, despite NRC's willingness to cooperatively approach solving various response issues in Washington state and nationwide, over the past 20 plus years, cost sharing has not happened. Therefore, given that there are two PRCs covering 100% of the vessels operating in the Strait of Juan de Fuca, whatever the actual costs would be to maintain the proposed VOO system would be at a minimum double the estimate in the analysis. In addition, NRC is the only PRC providing coverage to vessels operating in Grays Harbor and providing no cost sharing potential.

On the benefit side of the equation, a huge amount of time and money will be invested in training vessels and crews that are not obligated to be available for actual spill response. While the proposed numbers of required boats is not based on any historical precedent, WDOE acknowledges in the discussion that it is based on the assumption that only 50% of the vessels trained as VOOs will be available when a spill actually happens. NRC has significant experience using non-dedicated resources and the key to making such a system work is to increase the total number of assets in the program without increasing the costs to maintain the program. Since non-dedicated resources are not planned to be the first on scene, but often are, there is time to provide basic training and outfitting at the time of an event as more fully described below without requiring prescriptive and very costly pre event training. The reality of not knowing which specific non-dedicated assets will be used at the time of an event further decreases the marginal benefit of training these vessels in advance.

NRC understands that the goal of the proposed VOO system should be to allow PRCs to access non-dedicated boat and personnel in the event of a significant spill event. However, given the serious health and safety issues in tasking non-professionals in on-water spill response operations, VOOs should only be included in the operational plans after the initial emergency response actions have been performed. WDOE has recognized this reality by including a 12-hour response timeframe for VOOs in the proposed regulations.

Therefore, NRC believes that the more operationally sound and cost effective approach to utilizing VOOs would be for PRCs to have the capability to train non-dedicated vessels and crews that are available and appropriate to actual spill response circumstances and requirements within 12 hours such that they can be deployed as needed for the second day planning cycle. NRC does not support using VOOs for skimming operations. As a PRC with hundreds of personnel available on the West Coast, NRC has no need to augment its personnel with non-professional spill responders for these activities. Instead, the VOOs would be tasked with appropriate activities, such as shoreline surveys, boom tending and on-water logistical support.

In order to establish VOOs that are interested in providing spill response support and that may be available during an actual spill response, NRC believes that WDOE should conduct out-reach needed to identify interested participants and vet them through a registration process. Because of the potential liability associated with utilizing non-professional spill responders in on-water spill response activities, NRC's insurance will not cover non-employees. Therefore, as part of the vetting process, NRC believes it is the states' responsibility to require that VOO participants maintain the appropriate insurance for these activities or have such coverage provided by the state of Washington. Finally, in order to qualify for participation in the registry, the VOO should be required to sign a hold-harmless document and be available to respond to any qualified PRC.

Recommended Revised Language:

WAC 173-182-030 Definitions.

(((52))) (63) "Vessels of opportunity response system" means nondedicated vessels and operating personnel, including fishing and other vessels, that may be available to assist in spill response when necessary. In order to qualify for use in spill response, The vessels of opportunity must be registered with Ecology, have necessary insurance to perform spill response activities, be available to any plan holder or PRC and sign a hold-harmless agreement with the requesting entity prior to engaging in spill response activities ~~are under contract with and equipped by contingency plan holders to assist with oil spill response activities including, but not limited to, on-water oil recovery in the near shore environment, the placement of oil spill containment booms to protect sensitive habitats, and providing support of logistical or other tactical actions.~~

WAC 173-182-130 Phase in language.

Delete all references to VOO requirements.

WAC 173-182-317 Covered vessel planning standards for vessels of opportunity (VOO).

Delete entire section and replace with the following:

In order to enhance the ability to respond to spills using nondedicated resources, Ecology will maintain a registry of qualified approved VOO resources interested in performing spill response support activities on an as needed basis as determined by the Plan Holder and/or PRC. In order to qualify, vessels of opportunity must update their registration and be re-approved by Ecology on an annual basis, including providing evidence of General Liability, Pollution Liability, P&I, Hull & Machinery, Workers Comp and USL&H insurance. In addition, VOOs must commit to responding to any plan holder or PRC on an "as available" basis and be willing to sign a hold-harmless agreement with the requesting entity prior to engaging in spill response activities. Prior to being utilized in spill response activities, the requesting entities will provide training to the VOO as appropriate for the response activities to be provided.

Plan Holders will include description of potential uses of VOO resources based on the numbers and types of qualified VOOs registered with Ecology.

NEW SECTION:

WAC 173-182-324 Planning standards for Group 5 Oils.

NRC Comments:

The proposed language for plan holders carrying Group 5 Oils states that they must have a contract with a PRC that maintains the resources and/or capabilities necessary to respond to a spill of Group 5 Oils including Sonar and Dredges. While a PRC can be expected to have access to these types of non-traditional spill response equipment, it is not cost effective to require that a PRC "maintain" these resources and/or capabilities. The specified resources are non-dedicated spill response capabilities that should be identified and available within 24-hours.

In addition, the requirement to have “other appropriate equipment as necessary” maintained and available within 12-hours is an impossible planning standard to meet. NRC suggests the following revisions:

Recommended Revised Language:

(1) Plan holders carrying Group 5 Oils must have a contract with a PRC that either owns or has access to non-dedicated ~~maintains the~~ resources and/or capabilities that may be effective ~~necessary~~ to respond to a spill of Group 5 Oils. Such equipment may ~~shall~~ include, ~~but is not limited to~~, the following:

- (a) Sonar, sampling equipment or other methods to locate the oil on the bottom or suspended in the water column;
 - (b) Containment boom, sorbent boom, silt curtains, or other methods for containing the petroleum oil that may remain floating on the surface or to reduce spreading on the bottom;
 - (c) Dredges, pumps, or other equipment necessary to recover petroleum oil from the bottom and shoreline;
 - (d) Equipment ~~necessary~~ to assess the impact of such discharges; and
 - (e) Other appropriate equipment as needed ~~necessary~~ to respond to a discharge involving the type of petroleum oil handled, stored, or transported.
- (2) The equipment identified should ~~must~~ be suitable for the geographic area authorized for operations and these resources ~~must be~~ capable of being on scene within ~~twelve~~ twenty-four hours of spill notification.

AMENDATORY SECTIONS:

WAC 173-182-370 San Juan County planning standard.

WAC 173-182-380 Commencement Bay((-))Quartermaster Harbor planning standard.

WAC 173-182-395 Neah Bay staging area.

WAC 173-182-405 Grays Harbor planning standard.

WAC 173-182-415 Cathlamet staging area.

NRC Comments:

The planning requirements for San Juan County, Commencement Bay, Neah Bay, Grays Harbor and Cathlamet have been revised to include the following “boom” requirement:

At least an additional 200 feet of boom and temporary storage of at least 196 bbls with the ability to collect, contain, and separate collected oil from water could have arrived. The additional boom should be capable of encountering oil at advancing speeds of at least 2 knots in waves. This boom shall be of a type appropriate for the operating environment

This proposed requirement is widely acknowledged as an effort to require plan holders to have dedicated access to a specific brand of skimming equipment (Current Busters) is a wholly inappropriate use of regulatory power. The efficacy of the Current Buster type of system should be documented before requiring in regulations that this system be deployed in such widely varied environments as the Columbia River, Commencement Bay, the Strait of Juan de Fuca and Grays Harbor. For example, there is new ‘grooved disc’ skimmer technology that has been formally

tested that may be more appropriate, which reinforces the point that the regulations should not require a specific brand of equipment.

In addition, the requirement that the system “could have arrived” at Hour 4 indicates that one system could meet the requirement if centrally located and packaged for rapid mobilization. However, arrival of a recovery system within 4-hours is meaningless without having the vessels capable of towing it available at the same time and the availability of such vessels is limited in all the required locations and will likely not be available within 4 hours.

Finally, there is no historical justification for increasing the recovery requirements in these areas to a 4-hour standard. The current 2 and 6 Hour standards, including resident equipment requirements, already provide response capabilities that far exceed the USCG standards and a lack of adequate recovery resources has not been an issue in actual spill responses.

Therefore, NRC proposes that the proposed 4-hour requirement for Current Busters be deleted from the area-specific planning standards and the following language be replaced with a requirement for an appropriate type system to be available, for the operating environment, within 12-hours such that VOOs capable of towing a Current Buster (or similar system) could be reasonably accessed. This change would in effect reduce the cost impact to acquiring this response capability only as justified while having no impact on the realistic deployment time in any of the specified locations.

Recommended Revised Language:

Delete the following Hour 4 proposed requirement from the above referenced planning areas:

~~At least an additional 200 feet of boom and temporary storage of at least 196 bbls with the ability to collect, contain, and separate collected oil from water could have arrived. The additional boom should be capable of encountering oil at advancing speeds of at least 2 knots in waves. This boom shall be of a type appropriate for the operating environment~~

Add the following to Hour 12 “Minimum Oil Recovery Rate % of WCS volume per 24 hours” for above referenced planning areas:

200 feet of boom with the ability to collect, contain, and separate collected oil from water could have arrived if appropriate to the operating environment

AMENDATORY SECTION

WAC 173-182-335 Planning standards for storage.

NRC Comments:

There is no demonstrated justification for requiring dedicated storage in the Puget Sound. Access to available tank barges has never been a limiting factor to cleanup operations. The current planning standards are sufficiently rigorous to ensure (more than) adequate storage capabilities are identified far in excess of historically demonstrated need. Therefore the proposed requirement to have 25% of the total worst case discharge be staged and dedicated

would be a huge cost with no additional benefit to the current requirements. In addition, the cost benefit analysis did not address this issue. Therefore, NRC requests that the proposed language be deleted in its entirety.

Recommended Revised Language:

~~For covered vessels at least twenty five percent of the total worst case discharge on water storage requirement must be staged and dedicated to oil spill response.~~

General Comment on Cost Benefit Analysis

WDOE's cost benefit analysis allocates the rule implementation costs between those costs to be borne by plan holders and those to be borne by PRCs. This allocation is erroneous. All private sector costs of implementation will fall to the plan holder alone. It is a straightforward business practice, regardless of whether the PRC is a not for profit or commercial entity, that any company, such as a PRC, would only incur a business expense when they had a member/client to pay for it. Therefore, all of the PRC implementation costs listed in the cost benefit analysis must be considered to be plan holder costs. The practical reality of this misconception is that plan holders can bear only so much expense and without their support, the PRCs will eventually be driven out of business.

NRC appreciates the opportunity to communicate these comments and suggested revisions to WDOE and would welcome an opportunity to review and discuss these issues in further detail. If there are any questions or further information needed regarding this submission, please contact me by phone at 206-730-3993 or by email at sbarton@nrce.com.

Best Regards,



Stephanie Barton
Director, Emergency Response Programs
NRC Environmental Services Inc.
9520 10th Avenue S., Suite 150
Seattle, WA 98108

From: Fred Felleman <felleman@comcast.net>
Sent: Thursday, October 04, 2012 4:49 PM
To: ECY RE Spills Rule Making
Cc: Chad Bowechop
Subject: MTC 1186 Rule Comments
Attachments: MTCFinal1186rulecmmmts.doc

Follow Up Flag: Follow up
Flag Status: Flagged



IN REPLY REFER TO:

MAKAH TRIBE

P.O. BOX 115 • NEAH BAY, WA 98357 • 360-645-2201



Department of Ecology
Sonja Larsen
PO Box 47600
Olympia, WA 98504-7600
spillsrulemaking@ecy.wa.gov

4 October 2012

Re: Proposed Oil Spill Contingency Plan Rule making (WAC 173-182)

Dear Ms. Larsen -

The Makah Tribal Council appreciates the opportunity to provide the following comments on proposed changes to the oil spill contingency plans required by the State for ships and facilities that may pose a threat of a major spill to Washington's waters. We understand this draft rule reflects many hours of stakeholder engagement and tribal consultation. We appreciate the improvements proposed to our region's spill response capacity offered by this process. In order to effectively implement these proposed changes we believe there still is more that can be done to afford protection to our treaty resources. We view the opportunity of continuing the dialogue on this issue is of such importance that we have retained the services of Nuka Research and Planning Group, in the development of these comments.

The legislatures' passage of ESHB 1186 was in part motivated by the "Lessons Learned" from the response to the Deepwater Horizon spill and called for setting a standard of Best Achievable Protection. We firmly believe that this term needs to reflect the varying operating environments found throughout the State, including seasonal weather patterns. The following comments take on even greater urgency given the proposed expansion of coal and tar sand derived exports through Washington waters that will significantly increase the risk of a major spill, emphasizing the need for broad, comprehensive spill response strategies due to the nature of these exports.

Taken in that light the proposed rule should address how adverse weather (e.g. wind, sea state) would impact mobilization and deployment of response equipment. Offered as a comparison the State of Alaska regulations require that plan holders describe "procedures for the transport of equipment, personnel, and other resources to the spill site, including plans for alternative methods in adverse weather conditions."¹ Alaska regulations also require that the C-plan "state what conditions were assumed and must take into account the realistic maximum response operating limitations and their effects on response capability and the deployment of resources."²

¹ 18 AAC 75.425(e)(1)(E)(i).

² 18 AAC 75.445(c).

Alaska C-plan approval regulations state, “The plan must use realistic efficiency rates for the specified response methods to account for the reduction of control or removal rates under those severe weather or other environmental limitations that might reasonably be expected to occur. The department may require the plan holder to take specific temporary prevention or response measures until environmental conditions improve to reduce the risk or magnitude of an oil discharge during periods when planned mechanical spill response options are rendered ineffective by environmental limitations.”³

The concept of Realistic Maximum Response Operating Limitations (RMROL) is powerful, because it acknowledges the fact that environmental conditions can and will limit response effectiveness during certain periods of time. It also provides a basis for the state to require an operator to take additional precautions during a period of time when spill risk exists (e.g. vessels are operating) but response may be impaired. In Alaska an example of these restrictions are the Hinchinbrook entrance closure limits that preclude laden tankers from operating when sea state and wind conditions exceed a certain threshold. There is no equivalent concept in Washington regulations.

The Makah Tribal Council recognizes the two most significant improvements to our regions’ response capacity to be the inclusion of the 4-hr planning standard and the more formalized inclusion of vessels of opportunity (VOO) into the response effort. We understand the effectiveness of both of these provisions would be significantly enhanced by including the following:

- In order to improve continuous response capacity, those areas required to meet the 4-hr rule need to include not just “current buster” type capabilities, and need to be paired with at least one workboat and mini-barge (<300 bbls).
- There needs to be more VOOs distributed throughout the region. The regions requiring VOOs are too large and the number of VOOs per region is too small. We currently have the means with which to obtain more VOOs in the Makah Treaty Area.
- San Juan County needs to be designated a staging area, like Neah Bay, requiring dedicated gear, including storage barges, to cover up to the 6-hour planning standard. This is critical if plan holders intend to move equipment to Neah Bay to meet the new High Volume Port requirement without backfilling what they may take from Port Angeles.

Inaccessible areas of high biological and cultural value associated with high traffic volumes, such as Neah Bay and the San Juan Islands, need both dedicated and resident equipment to be able to initiate a full response until additional equipment can cascade into the region. This needs to include a dedicated mini-barge and 2 resident workboats and VOOs. The training regime for each VOO should also be specified in the Technical Manual involving two on water and classroom sessions annually. We believe there needs to be Technical Manuals for each planning area to support the training improvements.

The MTC has the most difficulty with the way the rule addresses storage of recovered oil, which has been identified as inadequate for many years, especially in Neah Bay. The MTC

³ 18 AAC 75.445(f).

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strongly recommends there be a defined phase in schedule where all storage should meet Best Achievable Protection (BAT) standards thereby eliminating the use of bladders within the first 5 years of rule implementation.

It is also our belief that Ecology should only provide storage credit for utilizing upland facilities if they can show how they meet the continuous recovery goals of this rule. There should be a timeframe set as to how long it will take to accomplish. We request that this be specified in the rule and documented in the Technical Manual.

This rule could be significantly improved by including the Neah Bay Response Tug to our overall response capacity. We recognize the Neah Bay Response Tug as the most seaworthy and resident vessel in the Makah Marina and should be incorporated into the spill response task force. The inclusion of a dedicated storage barge, combined with the Response tug, will also help tankers to proactively meet upcoming changes in federal regulations associated with moving the High Volume Port Line from Port Angeles to Cape Flattery.

Given the increase in tar sand derived oil being already being exported from Vancouver, BC and the further expansion planned, we urge Ecology to specify that diluted bitumen (dilbit) or synthetic crude are “oils” subject to this rule. Similarly, it is important that there are specific strategies for responding to bunker spills given that the proposed Gateway coal terminal is predicting close to 1000 additional transits of bulk carriers that have proven to exhibit a substantially higher level of risk than other carriers. These vessels can carry up to 4 million gallons of persistent bunker fuel that has been shown to have even greater toxicity to marine resources than crude oil based on findings from the *Exxon Valdez* and the *Cosco Busan* spills. The current rule calls for a protracted period of 12-hours to respond to sinking oils (Group V).

The Makah Tribal Council is firm in our understanding that this timeframe needs to be significantly shortened given that the proposed Gateway coal terminal is being sited in the State’s once largest herring stock’s spawning grounds, a critical component to salmon and killer whale recovery. The MTC also supports the need to have a requirement for response contractors to have underwater video capabilities in order to document submerged oils. Also large oil handling facilities should be required to stockpile shoreline cleanup equipment as is required for vessels in this rule and to have the same aerial surveillance capabilities as we learned from the Point Wells spill.

Since the most significant benefits of oil spill response efforts are achieved in the early hours where containment is possible, it is imperative that the cost/benefit analysis in Appendix B include hourly cost savings over the duration of the spill for the 48 hours rather than simply averaging all days together and not rewarding early actions. Similarly, the cost/benefit analysis needs to account for the significant expense associated with small spills in sensitive areas and with responding to sinking oils as is documented in the Kalamazoo spill. It is also important that the age of the existing equipment be considered given the number of years it has been amortized.

The MTC also supports being notified and be offered opportunities to comment on any future updates or changes to contingency plans, technical manuals or planning standards

electronically. The current language at 120, 173, 182, does not require that plans be submitted electronically. However, due to our relative geographic isolation and the need for open and frequent communications, we view making office visits to Ecology to review the documents as problematic. We absolutely appreciate the effort you made to make the WSMC plan available on line and extending the comment period. We also respectfully request that future changes be reflected in red line to facilitate review of proposed changes.

Again we thank you for this opportunity to participate and comment to this important rule making.

Recommendations:

- Expand the definition of BAT at 172-182-030.4 to specify that Ecology will issue written findings on BAT determination (see Alaska BAT rule below).
- Include operating environment as an analytic parameter for BAT analyses, and specify appropriate operating environments when making BAT determinations.
- Revise proposed rule for aerial observation to include a requirement that oil spill contingency planholders identify the limitations to aerial observation posed by specific weather and environmental conditions, and specify how limitations to observation and spotting may reduce on-water recovery. Have it apply to high volume facilities as well as vessels.
- Provide a response time standard for the 25% dedicated storage requirement at 173-182-335 and have all storage meet BAT within the first 5 year rule cycle.
- Require that alternate mobilization or deployment times allowed under 173-182-350 reflect average or typical (rather than ideal) weather and environmental conditions for the operating area.
- Ensure that regulations specifying response standards contemplate entire forces needed to accomplish on-water recovery. Ensure that all areas of regulations discussing response equipment specify that equipment is appropriate for operating environment.
- Provide mobilization timeframe requirement for 100 trained shoreline cleanup workers.
- Clarify the 3-mile passive recovery requirement and make it apply to high volume facilities as well as vessels.

Alaska BAT Regulations 18 AAC 75.447: Department examination of new technologies

(a) To assure that proven new technologies are considered for use in oil discharge prevention and contingency plans, the department will review and appraise technology applied at other locations in the United States and the world that represent alternatives to the technologies used by plan holders in their oil discharge prevention and contingency plans submitted to meet response planning standards in 18 AAC 75.430 - 18 AAC 75.442 and the performance standards of 18 AAC 75.005 - 18 AAC 75.080. The department will conduct this review and appraisal by

(1) sponsoring a technology conference at least every five years and in cooperation with persons, organizations, and groups with interests and expertise in relevant technologies;

this conference will provide interested parties with an opportunity to describe the status of existing technologies in use as well as technologies that may be considered superior to those in use at that time; and

(2) engaging in studies, inquiries, surveys, or analyses the department believes appropriate to the consideration of new technologies.

(b) After its review and appraisal under (a) of this section, the department will issue written findings identifying new technologies that the department considers represent proven technological breakthroughs in oil discharge containment, control, or cleanup equipment. In its findings, the department will

(1) provide an evaluation of the technologies applied at other locations based on the applicable criteria in 18 AAC 75.445(k) (3);

(2) identify the evidence that clearly and convincingly supports the determination that the equipment represents a proven technological breakthrough that could result in superior advances in the efficiency or effectiveness of oil spill response efforts; and

(3) identify specific operations, geographical locations, or physical environments where the technology could be applied.

(c) If a finding is issued under (b) of this section, the department will inform plan holders, primary response action contractors, and other interested persons of the department's findings, the availability of the new technology, and the opportunity to submit comment on the report to the department.

Vessel of opportunity system

Proposed regulations at 173-182-317 will require operators to self-report training qualifications for vessel of opportunity crew. It is not clear from the regulatory language whether a process is envisioned for vetting vessel of opportunity training. We are not aware of any State or Federal accreditation of fishing vessel/vessel of opportunity spill response training. For example, how will Ecology ensure that the requisite number of vessels are pre-trained (per paragraph #5 on pg. 26)?

On page 27, a minimum number of vessels is established for each planholder to contract with. Does Ecology intend for each planholder to contract directly with vessels of opportunity? If so, then the minimum numbers will probably be sufficient. However, if contracts are established at the PRC level and planholders meet their minimums through PRC-executed contracts, this creates the potential for multiple planholders to rely on the same small pool of vessels of opportunity. In essence, a PRC could establish contracts with less than 80 vessels statewide and meet the planning requirements. If 10 or 20 operators all rely on that PRC, then you create a situation where a very small pool of vessels is in place. By comparison, the vessel of opportunity fleet in Prince William Sound (to cover only that region, not the entire state) is over 300 vessels.

One improvement to this situation is to shrink the size of the planning areas from which VOOs can be drawn from and increase the number of planning areas thereby helping to assure there will be VOO's with local familiarity throughout the waterways.

We believe only one training a year is insufficient to keep a viable VOO program. How will Ecology staff observe/evaluate drills? The training program needs to be specified in the Technical Manuals.

The proposed regulations are not clear in terms of the system that Ecology would use to test the 12-hour callout for Tier I vessels. It is also not clear what the ramifications will be for not meeting the 12-hour callout; would vessels be disqualified?

Recommendations:

- Expand regulatory language regarding vessel of opportunity training to specify the type and extent of training, and the process that Ecology will use to vet training.
- Increase the number of VOO planning areas to assure greater VOO distribution.
- Clarify whether the minimum numbers of vessel of opportunity contracts are expected to be met directly by planholders, or through PRC contracts. If PRCs are the intermediary to vessels of opportunity, verify that the vessel pool is sufficiently large to cross-cover multiple vessels simultaneously.
- Verify that Ecology has sufficient staff to observe and evaluate vessel of opportunity training, particularly initial training on on-water tactics.
- The regulations should clarify what the ramifications would be for vessels that cannot meet the Tier I 12-hour callout.

Volunteer coordination system

Given that Ecology envisions fulfilling the legislature's call for volunteer coordination through the NW Area Committee, the draft rule should specify how long Ecology intends for this task to take.

Joint large-scale equipment deployment drills

The new requirement to exercise multiple plans at 173-182-700 is a positive improvement, and reflects lessons learned from past major spills where local/regional resources can be quickly absorbed by a single planholder.

The draft regulations at 173-182-720 rely on the NPREP program for drill evaluation. We suggest considering a stronger drill evaluation model, such as the Homeland Security Exercise and Evaluation Program (HSEEP), which is more focused on using exercises to feed continuous improvement. https://hseep.dhs.gov/pages/1001_HSEEP7.aspx

Recommendation:

- Model large-scale equipment evaluation after HSEEP.

Notification

The addition of "substantial threat of spill" language at 173-182-220 is positive. How has this been resolved with the Coast Guard's claim of federal preemption?

“Umbrella” organizations

The Makah Tribe understands the value of being able to offer umbrella plan coverage for the majority of vessels that call on Washington waters as reflected in our patience during the protracted review of the WSMC plan. We are encouraged by recent developments and will be providing separate comments on the WSMC plan itself shortly. However, given the primary shortcoming of the WSMC plan has been in the Neah Bay Staging Area we fail to understand why they have not sought or Ecology required them to utilize the Response Tug to help address these shortcomings?

Oil spill contingency plan review and approval process.

The requirement for PRC plans to be submitted or updated to support planholders that rely on them is also positive

The requirement at 173-182-142 for notification of changes in response capability is positive. However, it is not clear how or whether there is an enforcement link or penalties for non-reporting.

The requirement at 173-182-230.4(f) to list all oils by name, product and API gravity is positive. However, in the case of diluted bitumen (tar sands) tankers, this product is highly variable by batch. One way to deal with this would be to require c-plans to list a range of products, and then require amendments to be filed for each transit providing specifics on the product carried.

The regulations at 173-182-349 regarding technical manuals read as if they expect each operator to have their own technical manual. In practices, tactics or technical manuals are typically developed by PRCs. Technical manuals at the PRC level ensure more commonality in terminology and tactics. In Alaska, a statewide oil spill tactics manual was developed through a work group, and the tactics in that manual (Spill Tactics for Alaska Responders)⁴ are often cited in oil spill contingency plans.

Recommendations:

- Add a requirement that planholders submit plan renewals in a “redline” format that shows changes/additions and facilitate state and public review.
- Clarify how Ecology will enforce and penalize non-reporting of changes in response capability.
- Specifically address the characteristics of tar sands oil, and variability in those characteristics, as it relates to contingency plan information on types of oil carried.
- Clarify whether technical manuals are expected to be developed and maintained by operators or PRCs. Consider a statewide manual.

Other Issues and Comments

The 1186 legislation called for penalties for dispersant/in-situ burning applications that don't comply with laws. Why have not these provisions been included in the rule?

⁴ <http://dec.alaska.gov/spar/perp/star/docs.htm>

Suggested Definitions and modifications:

WAC 173-182-130 Phase in language (p.13)

Each plan update will be given a 30-day public **notification**, review and comment period. Ecology will approve, disapprove or conditionally approve the plan update no later than 65 days from the plan submittal date. **Conditional plan approval is only to last for 90 days before needing to be renewed with appropriate public notification and review.**

WAC 173-182-142 Significant changes to approved plans require notification.

Any significant changes lasting longer than three days requires public notification.

WAC 173-182-350 Documenting Compliance with Planning standards. 5(c) If ecology

grants plan holder or PRC owned response equipment an alternative mobilization, transit speed, recovery or storage volume, through the plan review process, and the alternative is not demonstrated to the satisfaction of the department during a drill or spill or **verified by modeling using defined mobilization times** it may result in disapproving the alternative or adding additional conditions.

Continuous operations – this explicit goal of the legislature should be defined to include the role of storage to achieve objective.

Good Faith Effort – is a term only used to define why an alternative to establishing a VOO can be considered, but it is never defined. We believe that it is imperative in this context that it explicitly include appropriate compensation for the activity.

Unconventional Oils – some reference is needed to recognize the diversity of oil types and characteristics that are transported through Washington waters as a result of Alberta tar sand exports that are subject to this rule.

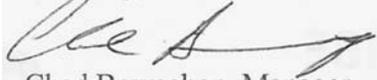
Alternative Compliance – needs clarification as to how determination of comparable protection is made.

Navigable waters of the state and **Waters of the state**, both need to include all marine and river waters to the borders with British Columbia and Oregon.

Northwest Area Contingency Plan (NWACP) means the regional emergency response plan developed in accordance with federal **and state** requirements. In Washington State, the NWACP serves as the statewide master oil and hazardous substance contingency plan required by RCW 90.56.060.

Thank you for your consideration. We request formal consultation to assure that these observations are understood as they were intended.

Sincerely,



Chad Bowe chop, Manager
Makah Office of Marine Affairs

From: Kirk Bonnin <kbonnin@harleymarine.com>
Sent: Thursday, October 04, 2012 4:47 PM
To: ECY RE Spills Rule Making; tim.probst@leg.wa.gov; Harris, Paul; Rivers, Ann; brian.blake@leg.wa.gov; dean.takko@leg.wa.gov; jim.moeler@leg.wa.gov; Wylie, Sharon
Cc: Bryon Fletcher
Subject: Comments to Proposed Changes to WAC 173-182

Importance: High

Follow Up Flag: Follow up
Flag Status: Completed

Dear Public Officials,

RE: Comments to Proposed Changes to WAC 173-182

By not listening and working with the Marine Industry, you will be doing a huge injustice to the environment and financial well-being to the maritime commerce of the Columbia Snake Willamette River System.

- In 34 years of sailing the Columbia River, I have witnessed much more pollutants in the rivers from highway run off than from marine incident.
- DOE was doing well when working towards prevention. As a bunker provider, I have seen the effects. Presently, their presence is almost nonexistent. Not even to witness the drills and exercises that they require. Prevention is where the money should go first.
- I have a creek that runs through my property. Should this be treated like a river? Should a river be treated like an Ocean? Do not treat the Columbia River like the Puget Sound. We are not the same.
- The Columbia has been referred to as the ditch. Any pollutants will travel down it with the water flow. Let's be real here, if oil travels down the ditch, which way will it go? Do you really need a helicopter to figure that out?
- The Industry in the Columbia River is far more proactive to prevention than others. Please do your homework and research anything that may compare to the service provided by the Non Profit MFSA.
- If there is proven technologies that actually work, we will acquire it without mandate. Some products look good on paper but do not perform well in the field. Let those who use them figure the best way to retrieve the oil. Have you ever tried spooning sugar into your coffee with a fork? Has DOE asked the Columbia River response professionals if the equipment they are proposing will work? Are they listening? or are you going to let them dictate what works from a desk that they no longer can afford to get away from. Please listen to the Industry. They truly want what is best for all.
- The Columbia River is traditionally more expensive to visit than the Puget Sound. The deeper draft vessels cannot come in. Profit margins are smaller. You are making the situation worse, which will cause for more trucks on the highway, more pollutants flowing from them into the river and elevating highway maintenance costs.
- Water transportation is the safest, cleanest, and most cost effective form of transporting goods to market. The Columbia River is the Inland Empire to many US States and Nations abroad.
- Black oil may become the next dinosaur. The Future for low sulfur fuel has already started the marine industry to build LNG powered vessels. If you are looking to prevent future spills, have you thought about what that fuel will be?

This is a big issue for the Columbia Snake Willamette River Systems, and the environment. Please stop, listen, and consider the effects and applicability of your actions.

Respectfully,

Captain Kirk Bonnin

Port Captain

Olympic Tug & Barge

2311 SE 10th Street

Battle Ground, WA 98604

Ph: 503-519-2579

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From: Roberts, C. Kent <CKRoberts@SCHWABE.com>
Sent: Thursday, October 04, 2012 4:45 PM
To: ECY RE Spills Rule Making
Cc: Bean, Carolyn
Subject: 10_04_12_ Lt WDOE Sonja Larson.DOC
Attachments: 10_04_12_ Lt WDOE Sonja Larson.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Comment letter by Kent Roberts

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October 4, 2012

VIA E-MAIL SPILLSRULEMAKING@ECY.WA.GOV
VIA FACSIMILE 360-407-7288

Washington State Department of Ecology
Attention: Ms. Sonja Larson
P.O. Box 47600
Olympia, WA 98504-7600

Re: Comments on Proposed Amendments to Chapter 173-182 WAC
Oil Spill Contingency Plans
Our File No.: 014033/070538

Dear Ms. Larson:

I am an attorney and the majority of my practice is representation of maritime industry clients, including vessel operators, shipyards, cargo interests and ancillary businesses to the maritime trade. I represent the Maritime Fire and Safety Association as well as Clean Rivers Cooperative. I am making these comments in addition to those by others in the industry as an attorney for members of the maritime industry but also as an interested observer in the rule making process who has a concern both for our marine environment and our regional economy.

First, I was disappointed to see the limitation in the Small Business Economic Impact Statement that specifically did not address the impact of these rules on non-profit agencies. The purpose of an SBEIS is to consider the special impact on small businesses. Washington statute specifically *requires* an umbrella plan holder to be a non-profit corporation. Both Washington State Maritime Cooperative and Maritime Fire and Safety Association are non-profits, as they are required to be by Washington law to do what they do. While the general Cost Benefit Analysis looks at costs in a general way, neither the Cost Benefit Analysis nor the SBEIS evaluates the impact of these rules on the operation, staffing, management or cost burden of these two non-profits. Accordingly, excluding this type of evaluation appears as a slight of hand when looking at the CBA and the SBEIS together.

I second the request I heard from Tidewater Barge Lines at the public hearing on September 27, that the aerial surveillance requirement be clarified to eliminate applicability as a planning standard for the upper Columbia River. The upper Columbia is narrow, confined

waters. The only products carried as cargo or fuel are non-persistent petroleum. And most importantly, there is only one contingency plan holder operating on these waters – Tidewater. The regulatory cost of compliance falls on only one vessel operator, not all of the vessel operators calling in the Columbia River. This hard fact is ignored in the CBA. To impose this expense, without overwhelming proof that it would be effective for the types of products carried and in the river environment, as well as overwhelming proof that the risk far outweighs the high cost is not only poor policy, it is simply unfair.

MSFA earlier asked WDOE to eliminate the requirement at WAC 173-182-142(1)(e) to notify WDOE when the person signing the binding agreement leaves employment and to replace the binding agreement with a new signatory. I reiterate that request.

The reason given by Ecology for this rule is that there is a federal rule making the same requirement. Ecology does not appear to be reading that federal rule correctly. 33 CFR 155.170 speaks to a change in the owner or operator of a vessel covered by a contingency plan, not to an individual who signs the certification required by 33 CFR 155.1065(b) on behalf of the vessel owner or operator. Under the federal rule, if Dick Lauer of Sause Bros. signed federal plan certification under Part 155.1065, and then retired as he has been threatening to do (don't do it Dick!), and there is no change to the legal owner or operator of the vessel, there is no re-certification requirement and then nothing needs to be filed under the federal rule. Dick's retirement would do nothing to undermine the legal validity of the certification he as a Vice President of Sause Brothers. The certification remains valid after his retirement as does Sause Brothers federal plan and its approval.

Unless there is a rule that ascribes some special status or qualification requirement to the individual who signs the federal certification or Ecology's binding agreement (and neither the federal rules nor Ecology's proposed rules do so), then so long as that individual had the requisite authority to sign for a corporate owner or operator, what happens to that individual after the plan is approved is irrelevant to the ongoing validity of the 155.1065(b) certification or of Ecology's binding agreement. This is basic corporate and agency law. If an officer of a corporation is fired, quits, retires, is disabled or dies, the corporation does not have someone else re-sign and re-submit every contract, certification or other legal obligation that this person signed while he or she was with the company.

It just seems odd for Ecology to make a rule that suggests the plan and the binding agreement are no longer valid if an individual who holds no position in the plan and no position in ICS leaves employment with the plan holder. Indeed, it seems to undermine the significance of the binding agreement itself.

Finally, if loss of the binding agreement signer is a "significant change" requiring a new binding agreement, this also suggests that the individual signing in a representative capacity has some special capacity, personal responsibility or liability (beyond the duties as an officer of a corporation). The way the rule is written, I could not advise that person otherwise. This is especially so where, as Ecology has proposed, the person who then replaces the binding agreement signer is subject to Ecology approval, even though there are no standards stated for

that approval and the approval or denial could be arbitrarily made. Finally what is the policy reason for this specific provision and what in the new legislation leading to this rulemaking mandates that Ecology make this particular rule?

The second reason I have heard for this binding agreement signer rule is that Ecology needs to know who is the person responsible for maintaining a contingency plan for ongoing administration. This is an excellent reason to have each contingency plan designate a primary contact person and to update that information if the contact person changes. The best person for this job, however, is not necessarily the responsible manager who signs the binding agreement for the Washington contingency plan. For MFSA, the binding agreement was signed by the Executive Director of the organization. But, as Ecology knows, the person most knowledgeable about the details of the plan for administration purposes and for interfacing with Ecology, is Ms. Wainwright's able assistant, Marissa Chilafoe.

This is an easy fix. Below is a suggested addition to WAC 173-182-230 for each plan holder to designate a person to be the plan administrator.

WAC 173-182-142(1), delete subparagraph (e):

~~“(e) Permanent loss of personnel designated as the binding agreement signer.”~~

WAC 173-182-230, add a new subparagraph (8) reading as follows:

“(8) Each plan shall designate a person or persons as the plan holder’s plan administrator who is to be ecology’s primary contact for plan content and administration. The plan holder shall notify ecology within three business days of any temporary or permanent change to the plan holder’s designated plan administrator(s).”

Thank you for your time and efforts.

Very truly yours,

/s/ Kent Roberts

C. Kent Roberts

CKR:mjd

cc: Ms. Elizabeth Wainwright (via e-mail wainwright@pdxmex.com)
Dick Lauer (via e-mail dickl@sause.com)
William H. Collins (via e-mail bill.collins@tidewater.com)



From: Elaine Truitt <truitt@pdxmex.com>
Sent: Thursday, October 04, 2012 4:20 PM
To: ECY RE Spills Rule Making
Subject: Comments on Proposed Amendments to WAC 173-182
Attachments: 10_04_12_ Lt WDOE_Clean Rivers.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Attached are Clean Rivers Cooperative comments on the proposed amendments to WAC 173-182.

Elaine Truitt
Sr. Administrator
Administration, Wireless Communications & Logistics

Clean Rivers Cooperative

200 SW Market Street, Suite 190
Portland, Oregon 97201
503.220.2084 office
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503.703.2007 cell

October 4, 2012

VIA E-MAIL
VIA FACSIMILE

Washington State Department of Ecology
Attention: Sonja Larson
P.O. Box 47600
Olympia, WA 98504-7600

Re: Comments on Proposed Amendments to WAC 173-182

Dear Ms. Larson:

Clean Rivers Cooperative is an Oregon non-profit cooperative corporation whose members consist of petroleum and petroleum using facilities on the lower Columbia and Willamette Rivers. Clean Rivers provides spill response services to its membership, and also serves as the primary response contractor (PRC) to Maritime Fire and Safety Association (MFSA). Clean Rivers manages the MFSA oil spill response system both through Clean Rivers' own equipment and through contracted services from Clean Rivers' own PRC, NRC Environmental Services, and from service providers.

Clean Rivers submits the following comments and suggested revisions to Washington State Department Ecology's current draft language revised in Chapter 173-182 WAC, contingency plan, real program and response contractor standards.

WAC 173-182-317 Covered Vessel Planning Standards for Vessels of Opportunity

Clean Rivers does not believe the Cost Benefit Analysis (CBA) for the VOO system accurately reflects the significant cost in both administrative time and training time required to meet the additional requirements in the proposed rule, nor does it identify any improved oil spill response capabilities or preparedness on the Columbia River as a result of this requirement.

Clean Rivers operates only on the Columbia River, in the areas of operations defined in the MFSA contingency plan and in our member response plans. The CBA does not distinguish the effectiveness of a VOO program on the Columbia River versus other open ocean or Puget Sound environments. The focus in the rule making process on the VOO program was for major crude oil traffic through north Puget Sound, Strait of Juan de Fuca and Neah Bay. Clean Rivers believes that WDOE has the flexibility within its rule making authority to distinguish that

operating environment from the confined waters of the Columbia River. Ecology should recognize that the shallow water, fast response boat based system developed by Clean Rivers is the appropriate response system for the Columbia River working environment.

There is no rational basis for Ecology to combine its estimate of all VOO training, vetting and contracting costs as PRC and plan holder shared costs across all planning regions. This makes no sense. Plan holders operating on Puget Sound are not going to share VOO expenses for a VOO system on the Columbia River. By lumping together its unreasonably low costs for VOO systems across the entire state, Ecology has not recognized the high cost of maintaining an unshared system on the Columbia River alone.

Using Ecology's numbers, the annual cost per training VOO vessels on the Columbia River would be \$44,000. I am responsible for planning, budgeting and coordinating training for spill response by Clean Rivers' members, and for coordinating training with our PRC and MFSA's first responder program. Based on that actual experience, Ecology has grossly underestimated costs relating to the VOO program. For our river system, Clean Rivers also questions the rule making policy of forcing the Columbia River to spend a disproportionately large sum of money to train VOO responders who are to be the *last* line of defense and the resource *least likely* to be called upon, when compared to the costs incurred to maintain training for the responders who answer every call. This is not the best use of limited resources and is illogical as a policy choice.

Of even greater concern is that Ecology does not take into consideration the existing VOO programs supplied by Clean Rivers membership and the extensive training and VOO program currently in place as additional resources. Clean Rivers and MFSA have letters of intent with various commercial entities who are available to respond, participate in regular training programs and meet all requirements for insurance, liability, work conditions, etc. These organizations are listed in Appendix J of the MFSA plan, consisting of fourteen organizations in addition to Clean Rivers' PRC. Imposing this program on the Columbia River simply adds unnecessary expense to a successful program already maintained by Clean Rivers.

WAC 173-182-321 Aerial Surveillance

Aerial surveillance is practically applicable only in the Puget Sound and open ocean environments. It is untested on a river environment, particularly given the ceiling and floor operating restrictions for aerial assets over the confined waters of the Columbia River. This requirement should be removed for the Columbia River. Vessel based technology has proven successful in locating oil on the Columbia River environment and it can be supplemented by aerial assets already identified and available to Clean Rivers members and MFSA. Moreover, forcing PRC's and plan holders to incur this huge expense serves to *limit* use of best achievable technology rather than enhance it. The response industry is developing multiple ways to locate, monitor and respond to oil spills, yet Ecology is dictating the acceptable technology. This immense cost is not warranted for the Columbia River, and the Columbia River should be excluded from this requirement.

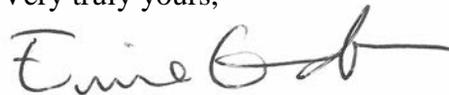
WAC 173-182-349 Technical Manuals

Clean Rivers is familiar with technical manuals used in other work environments which are different from the Columbia River. For example, Clean Rivers has worked with the technical manual prepared for Alaska response by Exxon Mobil. The needs and purposes of that manual do not match with the more limited needs and purposes for a confined water space on the Columbia River, especially since most of the technical information and response information for the Columbia River system is already laid out in the MFSA contingency plan and in training materials used by Clean Rivers members and Clean Rivers' PRC. Based on Clean Rivers' experience working with technical manuals in spill response training, drills and responses, it is unreasonable and absurd to estimate that a technical manual can be produced for all of the equipment systems in the Clean Rivers response system in 40 hours.

Ecology can meet its needs for technical manuals by participating actively in drills and training exercises conducted regularly by Clean Rivers on the Columbia River. We are happy for Ecology's personnel to join us at any time. This is a much better approach to comprehensive spill response management than requiring PRC's like Clean Rivers to prepare a very expensive set of manuals that add nothing to the training of Clean Rivers and PRC personnel and add nothing to the responsiveness of the Clean Rivers system.

Thank you for the opportunity to comment on Ecology's proposed rules. We welcome the opportunity to review and discuss any of these issues with Ecology in greater detail. If you have any questions, please do not hesitate to contact me.

Very truly yours,



Ernie Quesada
General Manager
Clean Rivers Cooperative

cc: Clean Rivers Board of Directors and Membership

From: Liz Wainwright <wainwright@pdxmex.com>
Sent: Thursday, October 04, 2012 4:19 PM
To: ECY RE Spills Rule Making
Cc: chilafoe@pdxmex.com
Subject: MFSA Written Comments - Proposed Amendments Chapter 173-182 WAC
Attachments: MFSA Written Comments signed ECY Proposed Amendments Chapter 173-182.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Categories: Red Category

Sonja,

Please find attached MFSA's written comments to Proposed Amendments Chapter 173-182 WAC, Oil Spill Contingency Plan.

Regards,
Liz

Liz Wainwright
Executive Director

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Columbia and Willamette Rivers • Oregon and Washington

October 4, 2012

VIA EMAIL

VIA FAX

Washington State Department of Ecology (Ecology)
Attn: Ms. Sonja Larson
PO Box 47600
Olympia, WA 98504-7600

RE: Comments on Proposed Amendments Chapter 173-182 WAC, Oil Spill Contingency Plan to Implement Chapter 122, 2011 Laws (E2SHB 1186)

Dear Ms. Larson,

The Maritime Fire & Safety Association ("MFSA") is a non-profit organization that has served the Columbia River maritime community for 30 years. For close to 20 years, those services have included providing an umbrella Vessel Response Plan for the Columbia and Willamette Rivers approved by the States of Oregon and Washington. As the sole umbrella plan in this river system, this Plan covers 100% of the ship traffic on the Columbia River. Based on its analysis, MFSA believes that the proposed amendments to Chapter 173-182 WAC, Oil Spill Contingency Plan, being promulgated by the Department of Ecology ("Ecology") would significantly impair MFSA's ability to effectively continue to serve the Columbia River maritime community as a plan holder and could critically impact the region's commerce.

The proposed amendments exceed the regulatory directives established by the Washington Legislature in E2SHB 1186 and in Governor Gregoire's directive of April 20, 2011 to Ecology Director Ted Sturdevant. Section 2 (2) of E2SHB 1186 states "**Rule updates to covered non-tank vessels shall minimize potential impacts to discretionary cargo moved through the state.**" The Governor's letter directs Ecology to "**...minimize potential impacts to discretionary cargo moving through our state, providing protections appropriate to the level of risk posed by different vessels and sectors**". As discussed in the comments below, the proposed amendments fail to follow these directives.

Summary of MFSA's Request:

- MFSA requests that Ecology modify the proposed amendment to the Oil Spill Contingency Plan Rule to incorporate planning standards into Chapter 173-182 WAC for the Columbia River that are appropriate to the level of risk, are cost effective, and support the continuation of discretionary cargo movement on the Columbia River and its regional multi-state transportation system.
- Specifically, MFSA seeks modification to the Vessel of Opportunity System ("VOO"), Aerial Surveillance and 4-hour Planning Standard (Current Buster Technology) through best achievable technology and best available protection appropriate to the Columbia River.

- MFSA strongly urges Ecology to reach out to the Oregon Department of Environmental Quality to obtain its recommendations and to coordinate proposed rule amendments which are appropriate for the Columbia River.

Factors for Consideration:

MFSA has continuously participated in commenting during the legislative process for HB 1186 and in the rulemaking process. Our message throughout those processes has been and now continues to be: (1) the Columbia River is a significantly different risk environment and economic environment than the Puget Sound; (2) the planning standards for the Columbia River should be cost effective, sustainable, and appropriate to this river environment; and (3) the nature of the multi-state transportation system necessitates communication with other regulators in other states. The proposed amendments are a "one size fits all" approach that imposes undue costs and threatens the economic viability of the Columbia River maritime industry.

Columbia River is a significantly different risk environment than Puget Sound:

- Regulations should reflect the type and volume of vessels, the type and volume of petroleum cargo, the type and volume of discretionary non-petroleum cargo

The Columbia River varies greatly from the Puget Sound. From its comparatively narrow width to its predictable current flows, the risk profile of the Columbia River is fundamentally different and lower than that of Puget Sounds.

Ship traffic is significantly lower on the Columbia River at 53% of the total traffic of the Puget Sound. Tank traffic makes up only 11.25% of the total ship traffic in the Lower Columbia River as opposed to the nearly 20% of traffic in the Puget Sound. The worst case discharge for vessels calling the Columbia River is approximately 300,000 bbls of refined product rather than 830,000 bbls of crude (unrefined oil) in the Puget Sound.

The risk profile of Puget Sound was the basis for HB 1186 law and the target of the proposed rules. The Cost Benefit Analysis (CBA) prepared by the State of Washington supports this position: Appendix B: Inputs for Quantifiable Socioeconomic Daily Benefits of Reduced Clean-up Duration for the Columbia River is based on a 25,000 Bunker C spill while a 250,000 crude oil spill is cited for the Straits of Juan de Fuca, at a volume impact 160 times greater than a spill on the Columbia River. The Columbia River does not have the petroleum product volume of the Puget Sound or types transported. The CBA clearly acknowledges the Columbia River as different from Puget Sound, yet the proposed rules do not in any meaningful way.

- The Columbia River has a robust, well tested, environmentally responsive Contingency Plan

The existing umbrella plan is cost effective and enables the Columbia River to remain commercially competitive. The Plan utilizes local resources, subject matter experts knowledgeable in spill response on a river environment and a partnership with Clean Rivers Cooperative to deliver a Plan that has been repeatedly and continuously approved by the states of Washington and Oregon since 1993.

The Proposed Planning Standards are not risk appropriate and threaten economic viability of the Columbia River maritime industry:

- New mandates are untested and expensive and erode competitiveness.

The Vessels of Opportunity, Aerial Surveillance and 4-Hour Planning Standard (Current Buster Technology) are the most costly proposed rules amendments totaling an estimated \$1.1million in start-up, CapEx and on-going operating costs. Yet these requirements have the least demonstrated effective impact to response on a river system environment. This equates to a doubling of MFSA's costs, a cost that will be borne by only 1500 vessels, and cost that is not supported by the risks present on the Columbia River. The requirements under the proposed amendments may drive PRCs out of the business or limit the range of their services, limiting competition and raising costs.

- The cost to implement these rules will be shared by fewer than 1500 vessels.

The MFSA program is supported solely by vessel fees. While the number of vessels calling in the Lower Columbia River has declined over the last 10 years, the cost to provide coverage continues to rise. Starting in 2013, MFSA will need to double its vessel contingency plan program fees to all vessels to cover a doubling of operating and CapEx costs needed to meet the requirements of the Oil Spill Contingency Plan Rule now proposed by the State of Washington.

It is conceivable, even with an increase in vessel fees to cover increased costs, that the consequences of the proposed amended rules could impact MFSA's ability to maintain sufficient equipment and resources necessary to provide its Umbrella Vessel Response Plan. In that event, MFSA would be forced to cease its contingency planning and response coverage for oil spills on the Columbia, Willamette and Snake Rivers. Without an available umbrella plan, vessels would be forced to develop individual plans at immense cost which would make calls to the Columbia River cost prohibitive. Ecology would also incur significant additional cost in managing hundreds of individual plans rather than one umbrella plan. Further, Ecology's rules will have eliminated the umbrella plan that Oregon relies upon as well, a plan system which has received consistent approval from Oregon DEQ.

- Columbia River ports depend on discretionary trade.

Cargo statistics for 2011 show that 88% of vessels on the Lower Columbia River are non-tank vessels transporting cargo including grains, other bulk commodities, containers and autos. In 2011, tank ships and tank barges (collectively referred to as "tank vessels") made up only 11% of ship traffic in the Columbia River. With no refineries on the Columbia River, even petroleum cargos are discretionary. But while HB 1186 targeted tank vessels, Ecology's proposed rules have their greatest impact on the remaining 88% of non-tank vessel commerce on the Columbia River, which trades solely in discretionary cargo.

- Increased costs threaten Columbia River's ability to compete.

The Columbia River already suffers from high port costs for vessels calling here and the new port expansion and development in Canada, the widening of the Panama Cana, and the current labor

uncertainty pose significant additional challenges to Columbia River competition. The proposed regulations will make the Lower Columbia River an even less attractive port, impacting the citizens and economy of both Washington and Oregon.

- The economy and the livelihoods of nearly 40,000 jobs depend upon the success of maritime commerce in the Lower Columbia River.

The public ports of Longview, Kalama and Vancouver WA and Astoria and Portland, OR along with several dozen private facilities located on the Lower Columbia River depend on the Columbia River marine transportation system. Thousands more people are employed outside the region in production, processing and distribution of products moving through our ports. These trade dependent jobs provide excellent family wages.

Communication with Regulators in Other States is Critical:

- The Columbia River is a federally designated multi-state "marine highway" transportation system carrying commodities to and from Washington, Idaho and Oregon.

Commodities reach Lower Columbia River ports via rail and barge and are exported throughout Asia and the Middle East. In turn commodities imported through lower Columbia River Ports are transported to the Upper Columbia River largely by barge and rail, reducing truck traffic on highways and the impact to the environment. Therefore, coordination in this rulemaking with Oregon and Idaho, as well as the U.S. Coast Guard, should be evident for rules applicable to the Columbia River. It is not.

- Rulemaking failed to consider impact on Oregon economy.

Another point which has not been considered by Ecology during the rulemaking process is the significant impact to the State of Oregon's economy as the impact on commerce will affect its ports, including the State's largest, the Port of Portland, and the livelihoods of Oregon citizens working in the local maritime industry.

Proposed Changes:

MFSA has been engaged over the last 18 months in this legislative and rulemaking process, including active participation with the informal Advisory Committee. During that time we've attended meetings, engaged in discussion and submitted comments with suggestions to improve the rules being proposed by Ecology. While there was some movement – and some recognition of the Columbia River as distinct from Puget Sound, the rules as published on September 5 do not go far enough to address our concerns. We continue to urge Ecology to consider the very serious impact these rules will have on the discretionary cargo of the Columbia River and the State of Oregon.

MFSA is committed to continuing to work with Ecology to identify planning standards that are cost effective and appropriate to the Columbia River and to ensure state requirements protect the Columbia River's economy, quality of life and natural resources appropriate to the level of risk posed by different vessels and sectors as directed by the Washington Legislature and Governor Gregoire. Therefore MFSA is providing Ecology with additional comments and alternate language for Chapter 173-182 WAC.

MFSA asks that Ecology make the following specific changes to the proposed rules. These specific changes are the minimum changes needed to address the MFSA's significant concerns.

Vessel of Opportunity System Chapter 173-182-317 WAC

Amend WAC 173-182-317(5)(d) as follows:

"(d) Region 4: Plan holders must have contracts with a minimum of six ~~twelve~~ VOO at the Tier I level."

Reasons for request: The Columbia and Willamette Rivers covered by the MFSA umbrella plan are different fundamentally from the Puget Sound in character as well as vessel traffic. The MFSA coverage area does not have tank vessel crude oil traffic and its level of tank vessel traffic is significantly different in terms of volume, size and characteristic from that in Puget Sound. This fact is demonstrated by Ecology's preliminary CBA identifying the cost basis for a worst case spill on the Columbia River at 25,000 barrels of Bunker C versus a 250,000 barrel crude oil spill for Puget Sound locations.

The cost of the VOO program under the MFSA plan will be borne exclusively by MFSA. The vessels covered by the MFSA plan, which are calling in the river for discretionary cargo, will ultimately pick up the tab. The substantial training and drilling expense for MFSA to manage this program is not warranted by the CBA, nor by the characteristics of the Columbia River, which is a confined space with predictable flow and oil disbursement patterns. The primary PRC to MFSA, Clean Rivers Cooperative, has an existing mutual aid based and contracted network of vessels of opportunity. MFSA further has partnerships with fire agencies on the lower Columbia River who have trained in MFSA's First Responder Program and who can assist in any response. Ecology's ruling making ignores these existing programs and instead requires MFSA to embark on an entirely new program.

Working towards a VOO level of six vessels will allow MFSA to develop the program (provided sufficient vessels self-identify to Ecology) and incorporate the existing back up responders into this program. Ecology and MFSA can revisit the size of the program in five years based on the results shown.

Aerial Surveillance Chapter 173-182-321

Amend WAC 173-182-317, subparagraphs (1), (2), and (3) as follows:

"WAC 173-182. 321 (1). For covered vessels operating in Puget Sound (Regions 1, 2, 3 and 5), access ~~Access~~ to a helicopter or fixed wing, under contract or other approved means, that is appropriately located and could have arrived with a trained aerial oil spill spotter (spotter) to those planning standard areas plan holders operate or transit within six hours of spill notification. The contracted asset must have the following capability: . . ."

"WAC 173-182.321(2). Plans must also include logistical sources of ~~additional~~ resources not under contract that may be utilized as ~~additional~~ aerial spotting resources in addition to resources as may

be required under WAC 173-182-321(1), to maximize the effectiveness of enhanced skimming, or as resources to identify the extent of oil to inform shoreline clean up and assessment teams and shoreline clean up activities.”

“WAC 173-183.321(3). In order to provide best achievable technology for aerial oil surveillance, vessel plan holders for tank vessels operating in Puget Sound (Regions 1, 2, 3 and 5), must also provide for access to a helicopter or fixed wing asset, under contract or other approved means, with the capability to provide a strategic picture of the overall spill; assist in detection of slicks when they are not visible by persons operating at, or near, the water's surface or at night; extend the hours of clean-up operations to include darkness and poor visibility; identify oceanographic and geographic features toward which oil may migrate. . . .”

Reasons for requests: Ecology's rulemaking for aerial surveillance is particularly oriented around Puget Sound and is further focused on ocean and open water operating environments, not the inland waters of the Columbia River. This is confirmed by the schematic presented by Ecology at its public hearing for these rules on September 27, 2012, for aerial asset use in open water along with an ocean capable response vessel. MFSA agrees with comments by other interested parties during the rule making process that the requirement for aerial surveillance as laid out in Ecology's rulemaking is not necessary because the aerial assets described are already in the hands of public agencies, such as the Coast Guard, and will as a practical matter be brought into any spill that is of a size or magnitude requiring such assets. The responsible party in that spill will pick up the cost of using these assets.

The duplicative cost of imposing these same asset requirements on vessels handling discretionary cargo in the Columbia River is simply not warranted. Moreover, Ecology's charge under HB1186 and as specifically noted by Governor Gregoire was to review the aerial surveillance components of the existing rules. Ecology was not told to impose a “one size fits all” burden on Columbia River vessel traffic.

While MFSA does not believe this aerial surveillance requirement is warranted at all, there is insufficient justification for this requirement on the Columbia River, whose confined spaces, consistent flows and geographic response planning make the need for this type of asset marginal at best. Further this technology is improper in a river environment whose product mix does not include crude oil. Based on MFSA's observation of the rule development process, MFSA believes that at the least this rule should be modified to apply only to Puget Sound. The edits suggested by MFSA above accomplish this objective.

Four Hour Planning Standard Chapter 173-182-415

WAC 173-182-415 Carthlamet staging area – Either eliminate this provision or amend 4 hour planning standard as follows:

Time – change 4 hours to 12 hours

Boom/Assessment – Amend to read “At least an additional 200 feet of boom and temporary storage of at least 196 bbls with the ability to collect and contain spilled oil and ~~separate collected oil from water could have arrived.~~ The additional boom should be capable of encountering oil at advancing

speeds of at least 2 knots in waves. This boom shall be of a type appropriate for the operating environment.”

MFSA objects to the requirement for Four Hour Planning Standard on the Cathlamet reach of the Columbia River and asks that proposed rule at WAC 173-182-415 be modified or eliminate the Cathlamet region requirement entirely.

The addition of a four-hour response Current Buster system for the Cathlamet region is an expense which will fall squarely on MFSA. This requirement is imposed based on a Puget Sound model. Ecology has again failed to adequately recognize the distinct operating environment for the Cathlamet region of the Columbia River. Ecology's CBA cost estimate at § 3.3.2.1 again grossly underestimates the impact of this particular rule on the Columbia River.

There is no sharing opportunity for a Puget Sound based asset. This cost will be borne by MFSA and passed on to covered vessels. A Current Buster system in Puget Sound cannot respond on the Lower Columbia River within four hours. This fact alone means that Ecology's minimum cost assumption under this section at \$350,000 is wrong. At minimum it will be \$700,000 for all affected plan holders.

The CBA also ignores deployment equipment costs. The Current Buster systems are designed for open ocean. These technologies have not been evaluated by Ecology in the context of a shallow water river environment. The MFSA response system has boom deployment vessels capable of operating in shallow water and near shore areas along the Columbia River, particularly in the Cathlamet reach. Because MFSA has developed a response system for a river environment, its existing fast response deployment vessels available to the Cathlamet section on a four-hour planning standard are not suitable for deployment of the Current Buster system. MFSA would have to acquire a deployment vessel and two towing vessels capable of handling a recovery system which is designed for deep water and open ocean environments. This is confirmed by the schematic for this system presented by Ecology at its public hearing for these rules on September 27, 2012. The three vessels needed to support this system at CISPRI in Cook Inlet, Alaska are each larger than the largest vessels owned by MFSA's PRC, Clean Rivers. The most expensive response vessel currently in the Clean Rivers system had an all in CapEx cost of \$285,000 in 1996 dollars. Purchasing the three much larger deployment vessels required by this system, of the type Ecology has observed at CISPRI, would cost MFSA millions of dollars today. This is not addressed by Ecology.

MFSA believes there are better ways to address current and wave conditions in the Cathlamet reach using the type of equipment that is already in the MFSA system and the response strategies that take advantage of the currents found in that region.

Technical Manuals WAC 173-182-349

MFSA objects to the requirement for technical manuals and asks that proposed rule at WAC 173-182-349 be struck from the new rulemaking. In the alternative, MFSA suggests that Ecology review the existing information in contingency plan appendices describing the equipment in deployment systems, and work with stakeholders to enhance the existing plan information during a normal plan review cycle, rather than require the production of expensive technical manuals which do not enhance spill response by PRCs or responsible parties.

With the exception of pictures or diagrams, the information WDOE seeks is for the most part already included in spreadsheet appendices to the MFSA plan describing planning standards, and

in schedules describing equipment systems. The only justification for this expensive requirement is to help Ecology train its own people. This should be an activity taken on by Ecology, rather than a cost imposed on the plan holders. Ecology staff would be informed on equipment used by PRCs, much of which is standard in the industry, through attendance at deployment drills, training sessions or other activities regularly conducted by PRCs and plan holders. The technical manuals add nothing to PRC preparedness and they add nothing to a spill response managed by a plan holder and RP.

Further, for the Columbia River system and MFSA's area coverage, it is nonsensical to have the technical manual apply to the Cathlamet region. The majority of the MFSA response equipment in its system is concentrated in the industrial areas upstream from Longview, Washington. Because the MFSA system is a multi-tiered, flexible system with equipment that moves up and down the river, with the ability to be deployed within 48 hours on the entire lower Columbia River, this requirement imposes on MFSA the obligation to provide technical manuals for virtually all of the spill response equipment in its system.

Because of the nature of the MFSA system on the Columbia River, Ecology grossly underestimates in its CBA the cost of complying with WAC 173-182-349. First, Ecology assumes plan holders will share the cost of a PRC preparing technical manuals. Even if this was to occur in Puget Sound, and there is no commercial reason to expect this there, this will not occur on the Columbia River. This cost will be borne exclusively by MFSA. Ecology identifies at Section 3.2 of the CBA the various plan holders and PRCs. Ecology fails to account for the fact that only MFSA and its covered vessels operate a contingency plan on the Columbia River for the Cathlamet region. Tidewater Barge Lines does not currently operate in the Cathlamet region under its plan, and the other plan holders all enroll with MFSA when entering the Columbia River.¹ Accordingly, any costs for providing technical manuals by a PRC will be paid by MFSA.

Second, Ecology's assumptions on time needed to prepare technical manuals is grossly understated. Technical manuals will have to be prepared for virtually all of the response equipment in the MSFA system that might be used to meet a Cathlamet region response. Ecology's time estimate is divorced from any recognition of the scope of the technical manual requirement within an existing contingency plan covering the entire lower Columbia River. There is no indication that Ecology obtained any industry information supporting its time estimates that would include technical manuals for the entire Columbia River equipment pool that benefits the Cathlamet region.

Finally, Ecology's use of a mean hourly wage rate of \$22 to \$40 in the CBA technical manual § 3.3 and in all other cost sections of the CBA, is fundamentally flawed. The statistic utilized is a base wage rate for an employee. It does not include the burden (taxes, benefits, overhead, and administration) that any employer will have. It does not reflect the cumulative effect of all of the tasks driven by the rules and the need of an organization like MFSA to hire additional staff to comply, or in the alternative contract outside services to comply. And it also does not reflect the cost of contracting for such services in the marketplace. Discussion of wages divorced from an investigation of and recognition of easily discoverable, real costs in the marketplace is capricious and unsupportable.

¹ It should be noted that to MFSA's knowledge, the four tank ship operating companies holding individual contingency plans enroll within MFSA when their vessels come into the Columbia River. And when they come in, it is for shipyard calls. MFSA is not aware that any of these tank ship operators call on the Columbia River carrying petroleum product as cargo.

So far as MFSA is aware, Ecology never contacted MFSA to learn actual costs for the administrative services Ecology's rules will require. As the sole plan holder for covered vessels on the lower Columbia River, MFSA should be the primary source for this information. It seems arbitrary for Ecology to make cost assumptions for compliance with this technical manual requirement (and the many other administrative requirements) without learning the actual costs from the plan holder which has actually incurred these costs in its plan administration with Ecology.

In its last full plan renewal leading to Department of Ecology's approval of the MFSA contingency plan, MFSA contracted much of the plan writing and development work to ECM Hudson, a prominent environmental engineering and contingency planning contractor. The actual hourly rate for ECM planning staff and environmental engineers charged to MFSA was \$125 per hour. The total cost paid out of pocket by MFSA to professional consultants for this plan renewal exceeded \$150,000, not counting MFSA staff time on the project, which MFSA conservatively estimates at another \$125,000. Ecology's CBA is rife with contingency plan revision assumptions as to both hours and costs which do not reflect reality in the marketplace. The total of administrative cost estimated by Ecology for updating, rewriting and adding to an umbrella plan to comply with these regulations comes to \$7,000, which based on MFSA's experience is low by more than an order of magnitude.

Cost Impact Not Appropriately Reflected in CBA:

Finally, MFSA must provide further comments on the CBA that are particularly glaring as to costs of compliance on the Lower Columbia River. Again, the Governor's letter directed Ecology to "minimize potential impacts to discretionary cargo moving through our state, providing protections appropriate to the level of risk posed by different vessels and sectors." So far as MFSA is able to tell, Ecology's rulemaking process has failed to fully analyze the risk to discretionary cargo on the Columbia River.

Notwithstanding what Ecology may assume, vessel traffic to the Columbia River to take or deliver cargo is all discretionary. One need only look at the recent labor unrest at Port of Portland Terminal 6 arising from a work jurisdiction dispute between two labor unions. In June, the dispute slowed service, risking delay and extra cost to ships calling the Terminal. Two major ocean carriers, Hanjin and Hapag Lloyd, immediately suspended service to the Terminal and ordered several ships to skip their port call into the Columbia River. This forced many Washington, Oregon and Idaho shippers to divert their cargoes to other ports or to miss export sales, costing millions of dollars across the shipping and export community. This is a telling example of the close attention paid by the international transportation community to costs impacting vessel operations and shipping at the various ports on the U.S. west coast.

The Columbia River already suffers under high port call costs, reportedly the highest for ship calls on the U.S. west coast. Adding to this very high cost must be supported by a clear and unquestioned need, with benefits that far outweigh the costs. Because Ecology's rules have stuck to a "one size fits all" approach, ignoring economies of scale that exist only in Puget Sound, the rules have a disproportionate cost impact on the Columbia River, attracting the scrutiny of those who direct international trade for the discretionary cargoes flowing through Columbia River ports.

There are many other fundamental flaws in Ecology's CBA. For example, the aerial surveillance rule, WAC 173-182-321 requires six and eight-hour response capability for aerial assets and FLIR capability. This will require at least one appropriately located aircraft maintained under contract in a response readiness mode. Ecology estimates that this will be a \$300,000 to \$700,000 one-time or present value cost.

There is no showing that these resources, if needed, would not be available from existing, public agencies. Ecology assumes, erroneously, that this asset is one which will be shared across all plan holders. MFSA does not have any guarantee that it will have access to this resource unless it goes out and contracts for the service. MFSA can safely assume that Ecology did not arrive at its cost estimate by asking a helicopter or fixed wing aircraft chartering company what it would charge for maintaining this asset on a standby basis, under contract.

It is a matter of public record with the Oregon Board of Maritime Pilots that the Columbia River Bar Pilots ("CRBP") paid 4,830,000 euro, or U.S. \$6,351,979.45 for a helicopter capable of operating in a heavy weather environment. Further, the CRBP has a contract with Rim Aviation for maintenance and manning of that helicopter at a standby cost of \$176,750 per month, or \$2,121,000 annually, plus a charge of \$985 per flight hour. It is fanciful to expect an aerial resource supplier to commit to response on a 6 hour planning standard basis for prices anywhere near the 20-year present value cost of \$300,000 to \$700,000 used by Ecology. It is further unrealistic for Ecology to assume that a PRC will share contractual access to this resource with other PRCs with whom it competes in the marketplace.

A further example is found in CBA § 3.3.2.4 on shoreline cleanup. Ecology assumes it will take five hours of contracting employee time to identify and contract for 100 shoreline cleanup workers and supervisors. Aside from ignoring the employer burden (taxes, benefits, administration and overhead, plus profit for for-profit entities) which should be added to the rates used, this estimate does not consider complexities of entering into manpower contracts and negotiating same, or dealing with the legal, insurance and technical aspects of this type of contracting, all of which are additional costs to a plan holder. These ancillary costs are omitted from the CBA. It is unlikely that this volume of semi-skilled shoreline cleanup workers would come from a single PRC, so the contracting work would have to be multiplied. Moreover, Ecology again ignores the actual situation with MFSA on the Columbia River, where a number of members of MFSA are public entities. Accordingly, MFSA's purchasing practices for volume contracts such as this often parallel the public purchasing practices of its members, this for transparency and accountability. A multiple supplier or public bid process for this type of purchase most assuredly cannot be accomplished in five hours of contracting time.

Finally, Ecology estimates in CBA § 3.3.2.4 it would take the plan holder only four hours to update its contingency plan with the additional shoreline resources. MFSA has experience revising its plan to include new resources or response techniques. Incorporating these resources in the various spill response scenarios and response strategies, would take much more administrative work than could be accomplished in just four hours.

Throughout the CBA, Ecology underestimates the administrative time, lists only the wages rather than all of the other employer costs or contracted costs that would be incurred for plan administration, and fails to consider at all what happens for follow up interaction with Ecology once a plan amendment is submitted. In every reference to plan administration by plan holders, Ecology fails to mention the substantial follow up interaction that occurs with Ecology through the plan amendment and review process. Ecology's CBA counts only initial submittal, assuming that Ecology will accept a plan holder's compliance submittal in every case without question, comment or need for further follow up. MFSA's experience is that this almost never happens, nor should it given Ecology's role in the process. In MFSA's most recent plan renewal interaction with Ecology consumed hundreds of hours of MFSA staff time, involved multiple meetings, revisions and re-submittals. The proposed rules do not give a precise checklist of what must be submitted to meet Ecology's regulatory review and discretion. It is unrealistic to exclude costs to be incurred by plan

holders to manage the ongoing review process which will inevitably result from Ecology's implementation of new rules requiring substantial rewrites to contingency plans.

MFSA welcomes the opportunity to meet with Ecology to work together to modify the proposed rules. Please contact the undersigned or Marisa Chilafoe, by phone at (503) 220-2099 or by email at Chilafoe@mfsa.com.

Regards,
Maritime Fire & Safety Association

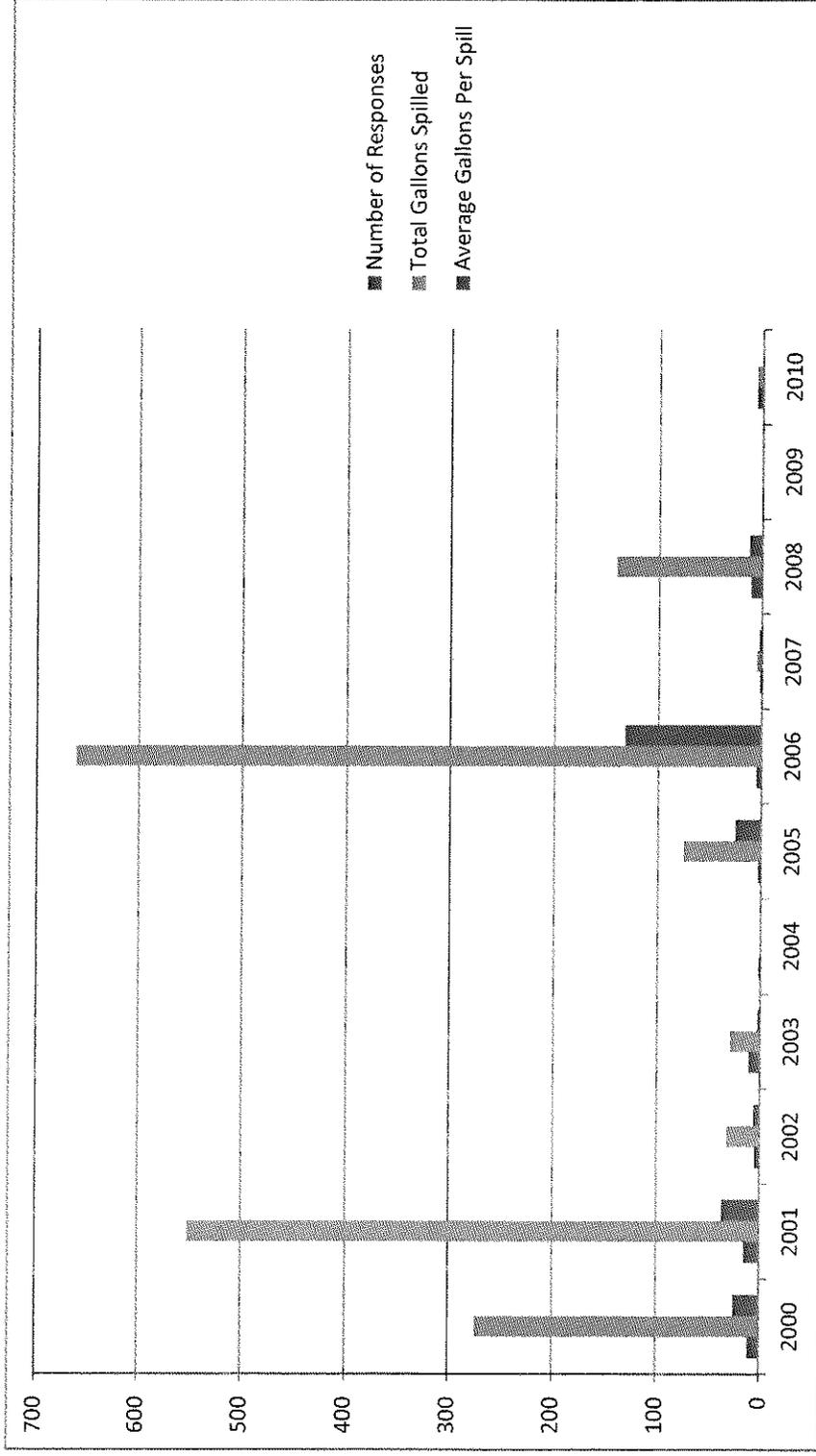


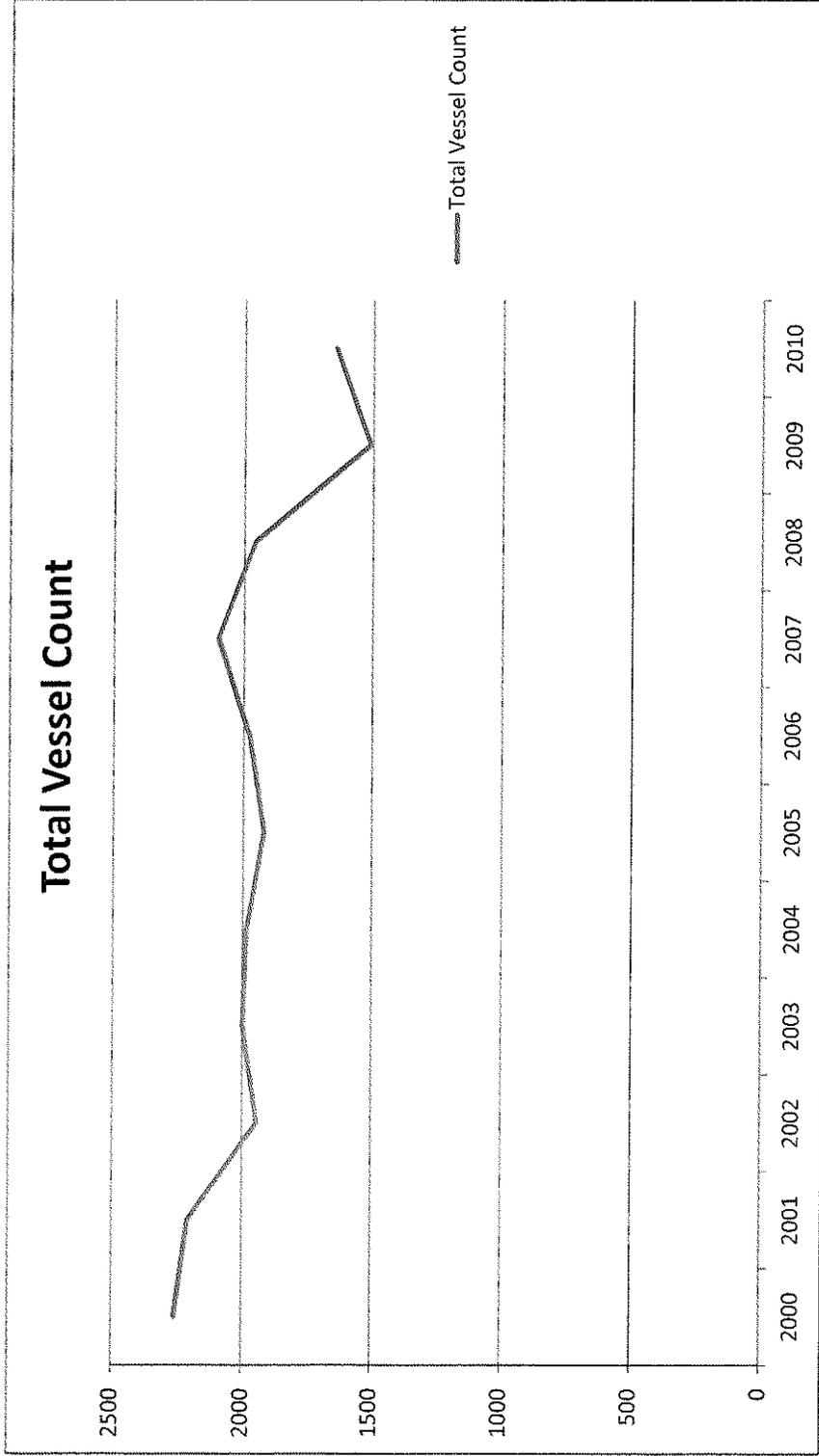
Elizabeth Wainwright
Executive Director

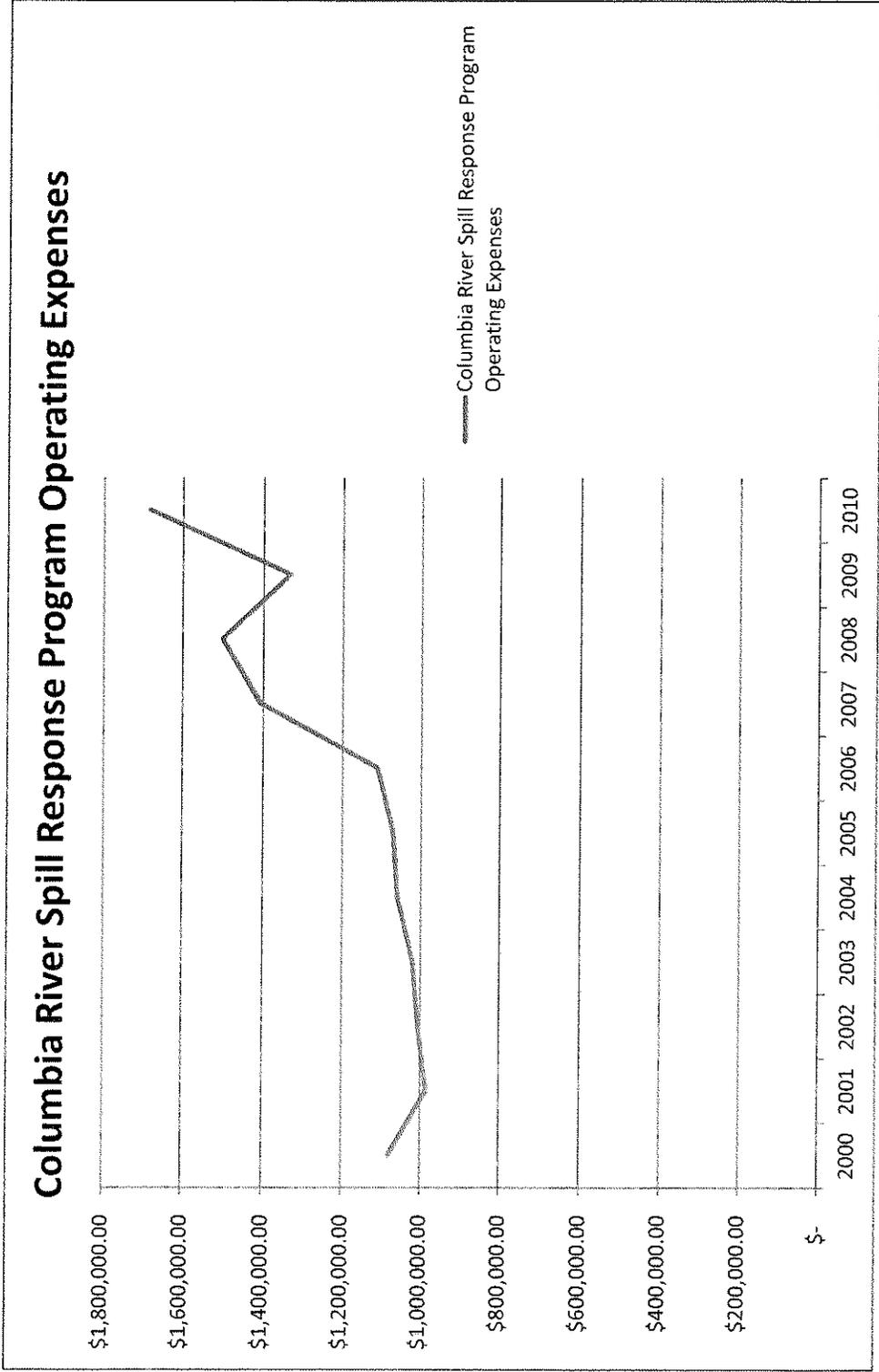
CC: Governor Christine Gregoire
Keith Phillips, Governor's Executive Policy Office
17th District Senator Benton
17th District Representative Probst
17th District Representative Harris
18th District Senator Zarelli
18th District Representative Orcutt
18th District Representative Rivers
19th District Senator Brian Hatfield
19th District Representative Blake
19th District Representative Takko
49th District Senator Pridemore
49th District Representative Moeller
49th District Representative Wylie
Oregon Department of Environmental Quality
U.S. Coast Guard – Sector Columbia River
Maritime Fire & Safety Association Board of Directors
Maritime Fire & Safety Association Members

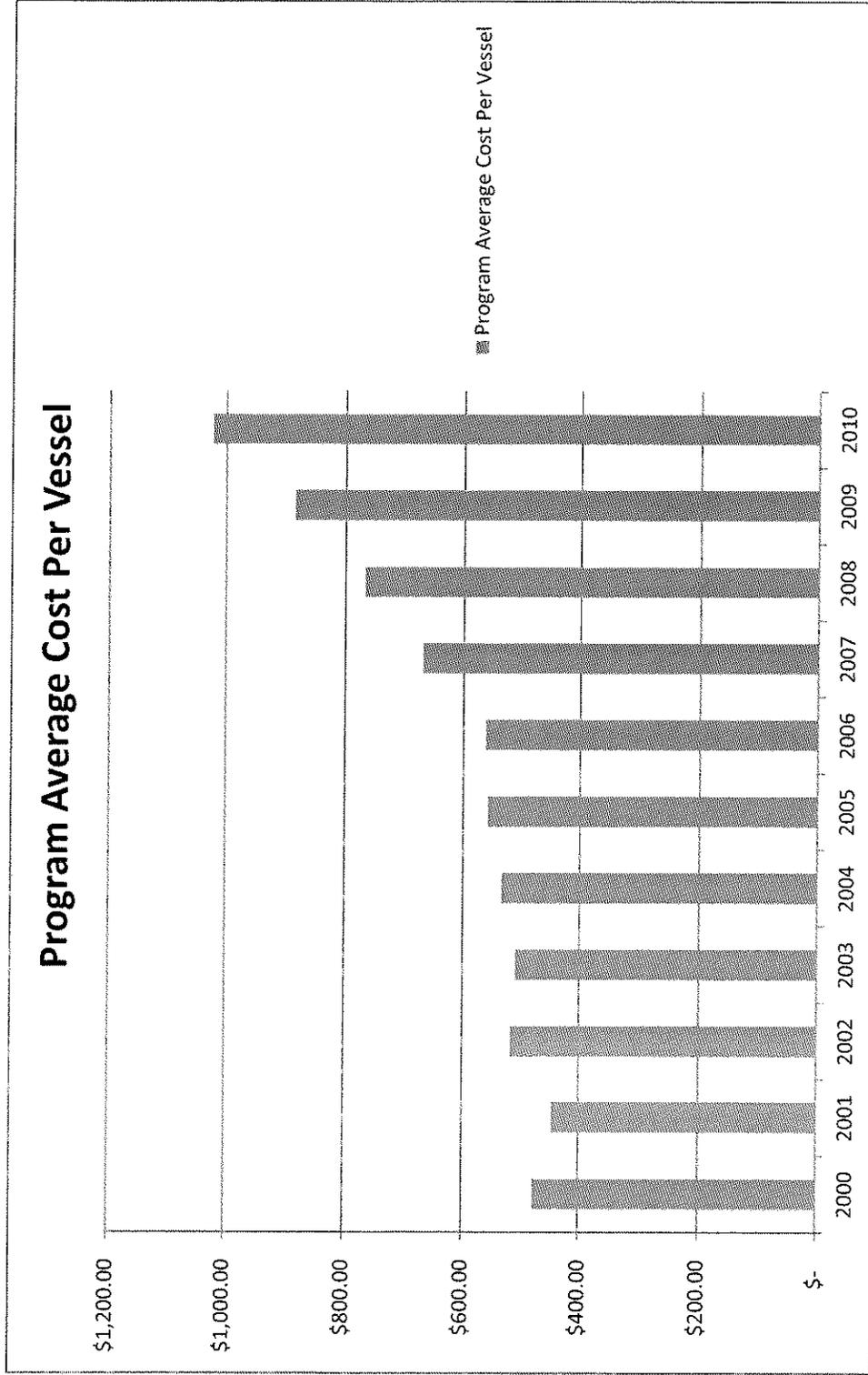
Attached: MFSA Statistics

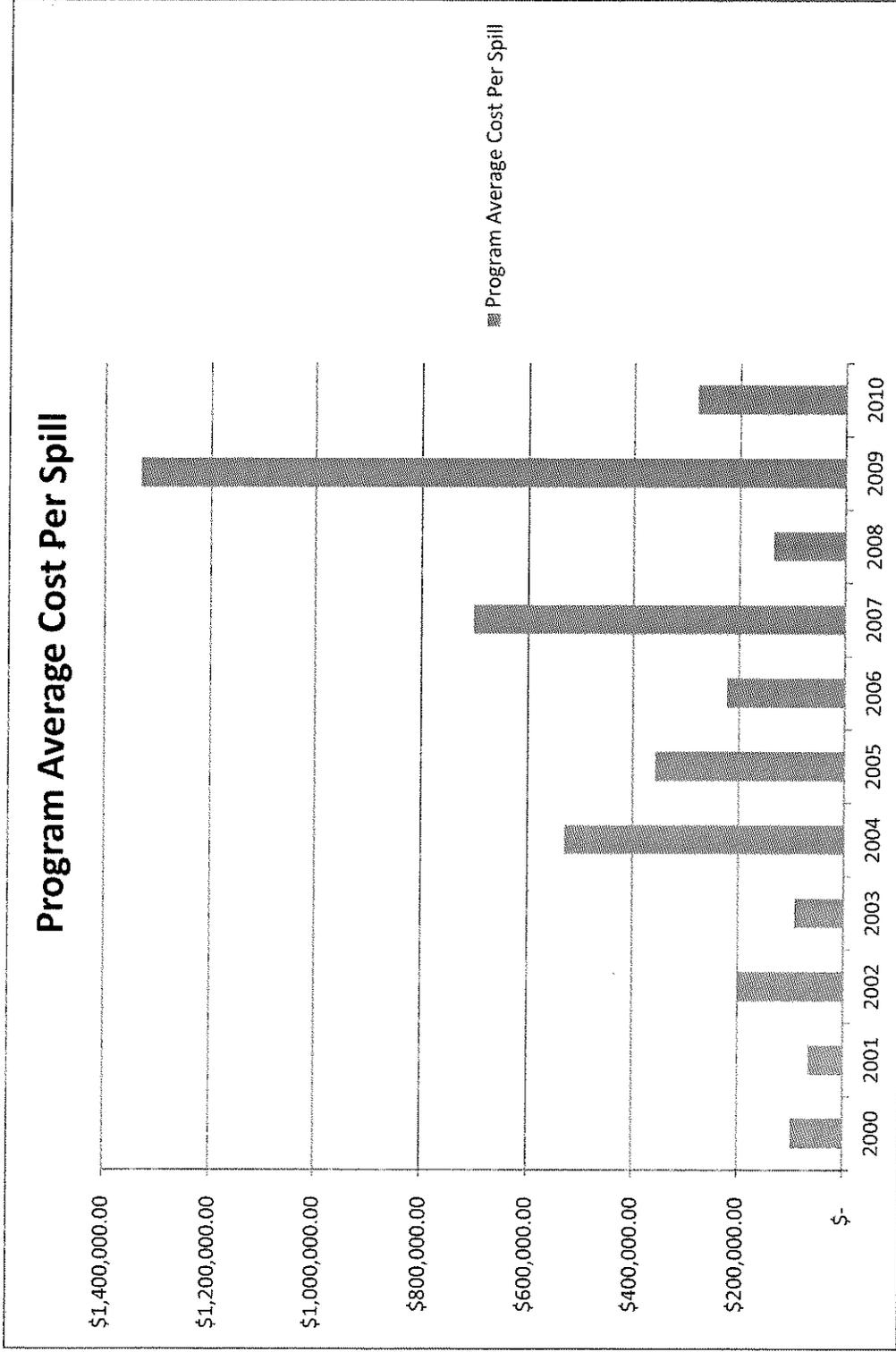
Response Comparison Statistics





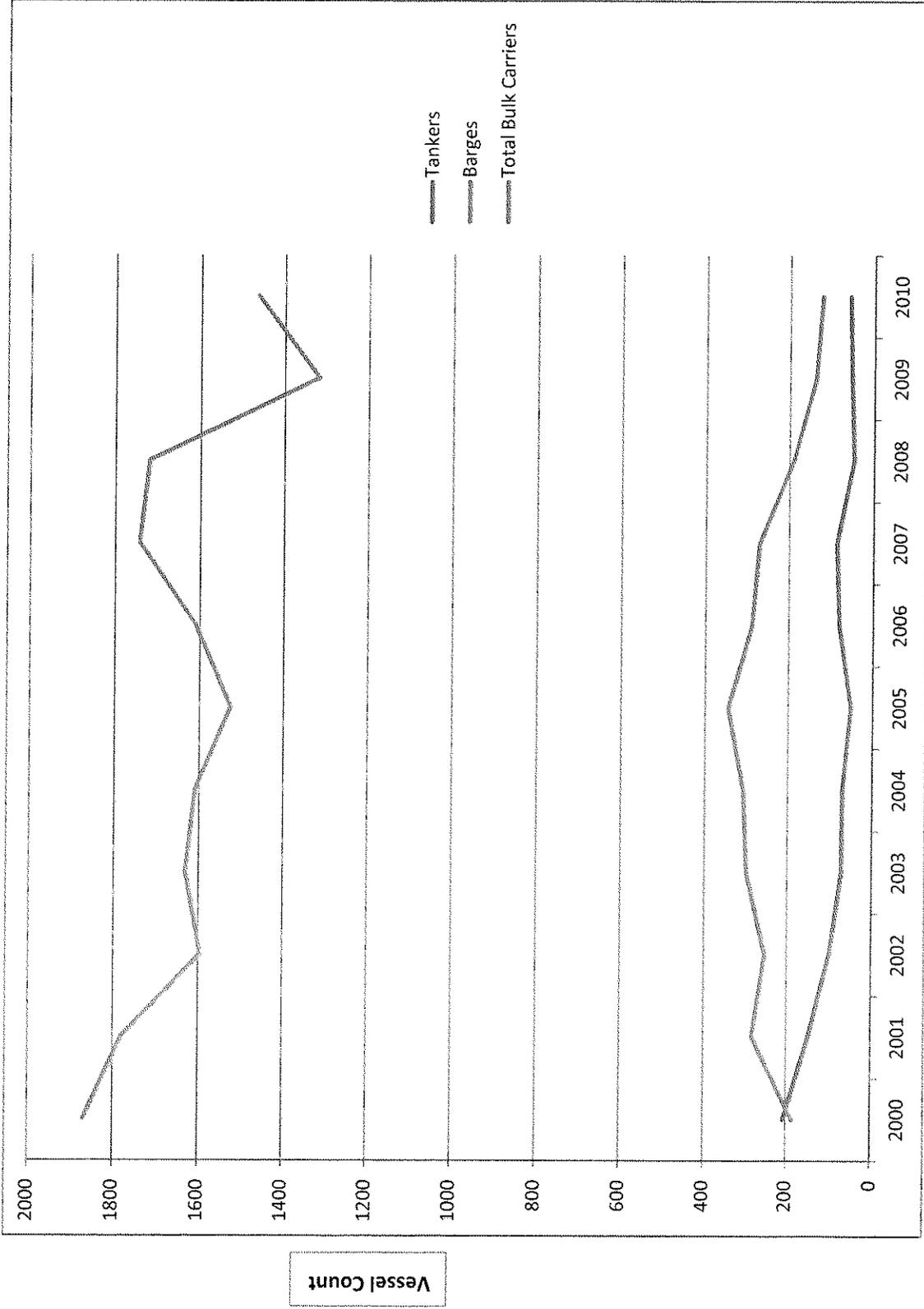






*Based on the per spill average, the one response in 2009 (with no oil spilled to water) would bear the cost of the entire program.

Vessel Count Comparison



MESA State Oil Program
 Statistics: Spills, Ship Count and Program Expenses

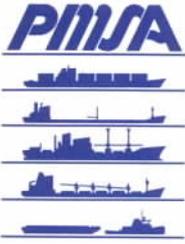
Year	Number of Responses	Total Gallons Spilled	Average Gallons Per Spill	Tankers	Barges	Total Petroleum	Airbus	Combinations	Grain	Logs	Salv	Other	Total Bulk Charters	Total Vessel Count	% of Vessel Count = Tankers & Barges	Columbia River Spill Response Program Operating Expenses	Program Average Cost Per Spill	Program Average Cost Per Vessel
1993	9	108		12	N/A	210	188	254	N/A	N/A	N/A	1442	1894	2113				
1994	17	2722		160	N/A	225	201	288	N/A	N/A	N/A	1288	1778	2007		10.4%		
1995	12	86		7	N/A	189	151	278	N/A	N/A	N/A	1501	1958	2146		11.4%		
1996	6	6		1	N/A	243	192	260	518	167	15	677	1849	2098		9.8%		
1997	11	55		5	N/A	159	218	194	N/A	N/A	N/A	1531	1933	2128		11.9%		
1998	10	21.5		2		213	230	274	340	105	115	811	1878	2091		9.2%		
1999	5	102.5		0	310	392	255	271	445	102	137	655	1898	2008		14.0%		
2000	11	274		25	182	392	255	278	451	103	146	625	1962	2260		17.3%	\$ 98,176.09	477.85
2001	13	551		37	148	438	273	265	432	95	140	675	1780	2210		18.0%	\$ 65,655.00	476.02
2002	5	32		6	99	351	293	187	381	96	130	518	1595	1946		18.0%	\$ 201,739.00	16.89
2003	11	29		3	72	370	255	247	418	86	128	489	1631	2001		18.6%	\$ 92,689.74	58.37
2004	2	1		1	70	307	252	193	470	73	166	455	1609	1846		19.0%	\$ 599,560.00	587.48
2005	3	75		25	51	394	252	93	421	67	166	511	1526	1920		20.5%	\$ 356,718.33	591.67
2006	5	861		132	60	365	343	143	432	62	149	481	1910	1978		18.6%	\$ 222,318.00	587.48
2007	2	5		3	67	357	318	163	497	64	177	524	1743	2100		17.0%	\$ 703,140.00	660.86
2008	11	141		13	47	190	237	127	520	71	189	521	1720	1957		12.1%	\$ 136,033.36	767.26
2009	1	0		0	53	191	159	101	428	74	119	436	1483	1508		12.7%	\$ 1,332,844.00	803.66
2010	6	6		1	57	180	170	87	490	110	167	439	1463	1643		11.0%	\$ 280,288.33	1,023.57
2011	12	1357		113	94	145	131	75	341	115	142	391	1195	1340		10.8%	\$ -	-
													Total Average		18%			

From: Mike Moore <MMoore@pmsaship.com>
Sent: Thursday, October 04, 2012 4:11 PM
To: ECY RE Spills Rule Making
Cc: Larson, Sonja (ECY)
Subject: PMSA Comments on proposed oil spill readiness rule
Attachments: PMSA Oil Spill Rule Comments 100312.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Sonja,
Please find PMSA comments attached.
Regards,
Mike

Captain Michael Moore
Vice President
Pacific Merchant Shipping Association
World Trade Center, 2200 Alaskan Way, Suite 160
Seattle, WA 98121
(206) 441-9700
(206) 441-0183 fax
mmoore@pmsaship.com



October 3, 2012

Ms. Sonja Larson
State of Washington, Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

Re: Amendments to WAC Chapter 173-182, Oil Spill Contingency Plan Rulemaking

Dear Ms. Larson:

I am writing on behalf of the Pacific Merchant Shipping Association (PMSA) which represents the majority of deep draft covered vessels calling on Puget Sound ports. We participated in the HB 1186 bill process and in the rule advisory group. We appreciate being part of the process including this opportunity to comment.

Our members are focused on ensuring they have fully compliant, cost-effective oil spill coverage. Given the economic realities of today, port competition for cargo has never been more intense. As noted by the Governor, discretionary cargo competition must be fully considered especially in light of a recent study by the Washington Council on International Trade that 40% of all jobs in Washington State are dependent on trade. Specifically, in Section 2(2) of HB 1186, it states: "Rule updates for covered non-tank vessels shall minimize potential impacts to discretionary cargo moved through the state."

Additionally, we are committed to operating in a safe, secure and environmentally responsible manner. Although there is no record of cargo vessel oil spills while transiting into or out of Puget Sound ports over the past four decades, we recognize the need for due diligence and continuous improvement.

PMSA members rely upon an umbrella plan system and obtain coverage via enrollment with the Washington State Maritime Cooperative (WSMC). We are aware of the general and specific concerns expressed by the spill response sector including those of WSMC. Our intention here is not to repeat all of these concerns but to express our recommendation that Ecology modify the rule to address the legitimate concerns regarding the VOO system, aerial surveillance, planning standards issues and expectations regarding the sharing of equipment between providers. For example, the VOO system is full of challenges from liability issues to the setting of unreasonable spill response expectations.

Pacific Merchant Shipping Association

World Trade Center 2200 Alaskan Way, Suite 160, Seattle, WA 98121 phone (206) 441-9700 fax (206) 441-0183

It is worth repeating that all rules run the risk of creating unanticipated adverse consequences during implementation. In this case, there continues to be great uncertainty as to what the spill response service provider landscape will look like following rule implementation. One possible adverse consequence is the potential relocation of some personnel and equipment out of this state due to the inability to economically provide overlapping spill response coverage. This would undermine and weaken the overall spill response capability here and we urge you to fully consider this potential when finalizing the rule.

Last but not least is the challenge to ensure that requirements are cost effective and not politically driven to meet the expectations of special interests. Although costs were estimated in your cost benefit assessment, there are a number of concerns regarding the accuracy of the cost estimates. Given the requirement to fully consider impacts on discretionary cargo, it is essential to have accurate cost estimates. We urge you to validate your cost estimate assumptions with the involved stakeholders.

Safe, responsible and cost effective operations are essential and they enhance our competitiveness with other ports. Reliability, cost and certainty are driving factors in cargo routing decisions for discretionary cargo. Ongoing uncertainty regarding oil spill response coverage requirements and cost are not helpful. We look forward to clarification as you address the concerns and comments regarding this draft rule.

PMSA is prepared to provide further information as requested.

Sincerely,

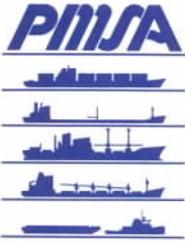
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Captain Michael Moore
Vice President

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Subject: PMSA Comments on proposed oil spill readiness rule
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October 3, 2012

Ms. Sonja Larson
State of Washington, Department of Ecology
P.O. Box 47600
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PMSA is prepared to provide further information as requested.

Sincerely,

A handwritten signature in blue ink that reads "MR Moore". The letters are cursive and connected.

Captain Michael Moore
Vice President

From: Charlie Costanzo <ccostanzo@vesselalliance.com>
Sent: Thursday, October 04, 2012 4:06 PM
To: ECY RE Spills Rule Making
Subject: AWO ECY Oil Spill Rule Comments
Attachments: AWO ECY Oil Spill Rule Comments.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Attached please find the comments of The American Waterways Operators on the proposed amendments to the Oil Spill Contingency Planning rule (Chapter 173-182 WAC).

Thank you for the opportunity to submit comments.

- Charlie

Charles P. Costanzo
Vice President - Pacific Region
The American Waterways Operators 
5315 22nd Ave. NW
Seattle, WA 98107
www.americanwaterways.com
(206) 257-4723 (Office)
(203) 980-3051 (Mobile)
(866) 954-8481 (Fax)



The American Waterways Operators

www.americanwaterways.com

Pacific Region
5315 22nd Avenue NW
Seattle, WA 98107

Charles P. Costanzo
Vice President - Pacific Region

PHONE: (206) 257-4723
Cell: (203) 980-3051
FAX: (866) 954-8481
EMAIL: ccostanzo@vesselalliance.com

October 4, 2012

Ms. Sonja Larson
State of Washington, Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

Re: Amendments to WAC Chapter
173-182, Oil Spill
Contingency Plan Rulemaking

Dear Ms. Larson:

The American Waterways Operators is the national trade association for the U.S. tugboat, towboat and barge industry, which is a vital segment of America's transportation system. The industry safely and efficiently moves over 800 million tons of cargo each year, including more than 60 percent of U.S. export grain, energy sources such as coal and petroleum, and other bulk commodities that are the building blocks of the U.S. economy. The fleet consists of more than 4,000 tugboats and towboats, and over 27,000 barges of all types. Tugboats also provide essential harbor services in ports and harbors around the country. The tugboat, towboat and barge industry provides the nation with a safe, secure, low-cost, environmentally friendly means of transportation for America's domestic commerce.

Sixteen AWO member companies are headquartered in Washington, and many more operate tugboats, tank barges, and deck barges in Washington waters. The tugboat and barge industry provides the means to transport agricultural commodities out of southern Washington on the Columbia River and is integral in the oil, gas, mining, timber products, and fishing trades between Washington and Alaska. These vessels help to move tens of millions of tons of freight every year on Washington waterways, reducing congestion on the state's highways and railroads while producing fewer pollutants than trucks and trains. In addition, harbor and ship assist tugboats perform shipdocking, tanker escort, and fueling services in Washington's harbors and ports.

AWO welcomed the opportunity to sit on the Washington State Oil Spill Contingency Plan Rulemaking Advisory Committee and to work with the wide variety of stakeholders that were convened by the Department of Ecology (Ecology) to provide input on the rulemaking.

We appreciate the opportunity to comment here on the proposed amendments to the rule to modify WAC Chapter 173-182. Although some issues have been addressed through the Advisory Committee, there remain elements of the proposed amendments to the rule that are of serious concern to AWO.

At the most general level, the proposed amendments to the rule do not address the threat of marine oil spills in a manner that proportionately matches the risks of oil spills with careful prevention strategies and the deliberate allocation of viable spill response resources. The rule shows little regard to the good work done by regional umbrella plan providers, who under the amended proposal will be forced to provide spill response resources that, in many instances, are not commensurate with the risks posed by oil spills, and to deploy those resources in regions where oil spills are unlikely to occur. Under the proposed rule, the costs of these resources will be borne by maritime operators that are increasingly sensitive to costs in a period of economic uncertainty. AWO believes that the proposed rule undermines Governor Gregoire's signing statement of April 20, 2011, which suggests that citizens of Washington want their state to be "a leader in international trade." Ecology has not demonstrated why measures that increase economic burdens on vessel owners and operators in Washington, and ultimately undermine Washington's international competitiveness, are necessary to mitigate oil spill risks. AWO regrets that Ecology did not undertake, with the assistance of the U.S. Coast Guard, a thorough evaluation of marine operations and vessels in Washington to determine how best to efficiently allocate existing prevention and response resources prior to the drafting of the rule.

Concerns Relating to Contracting with Vessels of Opportunity

While AWO recognizes the potential value of enhanced oil spill response systems in Washington State, it has deep reservations about the efficacy and utility of the Vessel of Opportunity System (VOO) contemplated by the rule in 173-182-317. Although Ecology has obviously relied on the June 2005 Glostien Associates study to support the implementation of a non-dedicated VOO in Washington State, it has not provided the requisite framework to planholders or their primary response contractor (PRC) to effectively contract with vessels of opportunity. The basic premise of the proposed VOO is that vessels would be retained by "contract" but remain "nondedicated" and, in the event of an oil spill, these resources, "if available," would be held to a planning standard with no expectation of being needed on-scene to participate in an actual spill response at all. The proposed standards seem to provide no guarantee of enhanced oil spill response capabilities through a VOO. The result is a VOO that exists as a "contract" on paper, but in reality, the vessels of opportunity have no contractual obligations whatsoever.

Ecology needs to provide greater clarity and additional details on the process of contracting with a VOO in each geographic region as required by the rule. Without such guidance, Ecology, planholders, and PRCs will have difficulties vetting, hiring, and retaining vessels for the VOO and ensuring VOO performance, to the extent that that is even possible. Vetting third-party service providers can be a time-consuming process that can include obtaining minimum levels of insurance, marine survey reports, Coast Guard inspection reports, and background checks on personnel. It is likely that the due diligence required to

find and retain suitable vessels of opportunity will be expensive and difficult, and it is not clear how Ecology will conduct that due diligence through the self-registration process. Furthermore, if Ecology fails to perform effective due diligence in vetting vessels that apply to participate in the VOO, there is a serious risk of a marine casualty. It is not reasonable to expect Ecology to make vessel safety determinations for the VOO or to safely match vessels, crews, and equipment with the many possible tasks that participants in the VOO may be asked to perform. The self-registration program proposed in the rule provides no assurance that only appropriate vessels with properly trained crew are assigned to particular oil spill response duties.

While the rule states that vessels of opportunity may have no obligation to perform oil spill response activities under the contract, the rule says very little about what rights a vessel of opportunity may have under that same contract. If a spill occurs and a planholder or its PRC determines that one contracted vessel is better suited to perform oil spill response operations than another contracted vessel, then it is reasonable to assert that the unutilized vessel would have an action against Ecology, a planholder or a PRC for expectation damages – that is, a legal claim to recover fees that the vessel was *expected* to receive by participating in the oil spill response. This is only one of many serious and unanticipated problems posed by the “one-way contract” inherent in the proposed VOO portion of the rule.

AWO is also concerned that the state-wide scope of the proposed VOO requirements could lead to the development of a monopoly on VOO services required for contingency plan approval in sparsely populated areas. There is no mechanism in the proposed rule that would prevent the only available vessels of opportunity in a given region to consolidate into a single operation and essentially hold up planholders for a favorable deal for their services. The choices of oil spill response organizations are already limited to a few vendors in Washington State, but this aspect of the proposed VOO adds the possibility of potentially anti-competitive practices.

Concerns Relating to VOO Mariners

Another unresolved and highly problematic detail of the VOO relates to the status of the mariners who participate in the VOO. It is not clear whether they are volunteers, employees of the State, employees of the planholder, employees of the PRC or independent contractors. Nor is it clear whether they are Jones Act seamen for purposes of legal liability or whether they are subject to protections from federal workplace safety laws. Indeed, it is not clear whether Ecology contemplated their status at all. AWO asserts that their legal status is essentially unknowable and their participation in the VOO creates an unacceptable “blind spot” of liability for planholders and their PRCs. AWO is concerned that this legal blind spot could result in a host of potential personal injury claimants litigating outside of the strictures of OPA 90 recovery rules, particularly since the VOO could be mobilized in a drill setting. This uncertainty could paralyze the effective use of a VOO and severely limit the use of vessels of opportunity in a situation requiring an urgent oil spill response.

In addition to its questions relating to the status of the VOO mariners, AWO is concerned about the “pretraining” requirement in the proposed rule. VOO mariners are expected to

place and tow oil spill boom, participate in on-water oil recovery, and provide logistical on-water support. These personnel are expected to be “pretrained” in various forms of oil spill response, but Ecology does not specify how these personnel will be trained, by whom they will be trained and who is ultimately responsible for the performance of VOO personnel. Ecology needs to clearly specify its training and performance standards for the mariners crewing the vessels of opportunity. The absence of clarity could result in improperly trained VOO mariners and increase the likelihood of an injury or death if VOO crew members are not adequately trained to participate in oil spill response.

VOO and Aerial Surveillance Standards for the Columbia River

AWO represents several companies that operate on the Columbia/Snake River system moving refined petroleum products and bio-blends in double-hulled tank barges. While AWO appreciates that Ecology eliminated VOO planning standards for the Upper Columbia River during the informal rulemaking process, we believe that the proposed VOO planning standards for the Lower Columbia River are also highly problematic. A Lower Columbia River VOO is impractical because there is only a small commercial fishing fleet that could serve as a VOO in that area. Even if a VOO was assembled near the mouth of the Columbia River where more fishing vessels could be procured, these vessels would be ineffective in their response to a refined product spill near Longview or Vancouver because of the nature of the petroleum product on the river and the time required to transit to the spill. This renders the planning standard meaningless. Furthermore, the proposed rule does not account for the existing dedicated vessels of opportunity already in place on the Lower Columbia River through the Clean Rivers Cooperative, a PRC that maintains its own fleet of appropriate spill response vessels and properly trained crew. While AWO maintains the concerns raised in preceding sections about the proposed VOO as applied to Washington generally, it suggests that Columbia River operators should be exempted from the requirements of WAC 173-182-317 entirely.

AWO also opposes the application of proposed aerial surveillance standards contained in Sections 173-182-320 and 321 to the Columbia River. While AWO supports the use of aerial technology to detect and track oil, there is serious doubt that multispectral imaging techniques would be effective at detecting the non-persistent petroleum products that our members transport on the Columbia River. Furthermore, the windy, narrow, and remote conditions on the Columbia River create a safety concern for aerial resources. AWO has serious concerns about small aircraft flying in these conditions to deploy surveillance technology that may not be effective to detect the spilled petroleum product. There is also a question of whether a six-hour planning standard for aerial surveillance resources is reasonable for Columbia River planholders, given the size of the river and the remote country that would need to be accessed in six hours. AWO believes that even if the aerial surveillance requirement is retained for other areas, vessels on the Columbia River should be exempted from the requirement. Because there is no crude oil transported on the Columbia River, rendering aerial multispectral imaging surveillance largely ineffective, this requirement would place an unjustifiable financial burden on Columbia River planholders.

Conclusion

AWO supports a robust oil spill response apparatus in Washington that matches a risk-based analysis of the threat of oil spills with the responsible allocation of viable spill response resources. AWO believes that Ecology did not undertake a thorough inventory of existing spill response resources before drafting this rule. Without this fundamental risk-based analysis and a careful evaluation of existing spill response resources, AWO cannot support enhancements that may not provide tangible benefits for Washington waters and may inhibit the ability of tugboat and barge operators to safely and effectively conduct operations in Washington waters.

The VOO section of the proposed rule is unacceptably vague and may lead to wide range of unintended consequences. AWO's leadership in marine safety is evinced by its award-winning Responsible Carrier Program and its long-standing partnership with the Coast Guard to enhance safety in the tugboat and barge industry. The VOO as contemplated by the proposed rule presents serious safety concerns that Ecology has not sufficiently addressed. In particular, the VOO and the provisions relating to aerial surveillance are ill-suited to the environment on the Columbia/Snake River system. Ecology has not demonstrated an oil spill risk in that environment that is commensurate with the modifications proposed by the rule, nor has Ecology been able to demonstrate that the proposed enhancements would be effective on the Columbia/Snake River.

Thank you for the opportunity to comment on the proposed amendments to WAC Chapter 173-182. We would be pleased to answer any questions or provide further information as Ecology sees fit.

Sincerely,



Charles Costanzo

From: Katelyn Kinn <katelyn@pugetsoundkeeper.org>
Sent: Thursday, October 04, 2012 4:04 PM
To: Larson, Sonja (ECY)
Attachments: Soundkeeper Comments on Oil Spill Contingency Plan Rule 10_4_12.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Ms. Larson,

Please accept the attached comments on the Oil Spill Contingency Plan Rule.

Thank you for the opportunity to provide input.

Sincerely,

Katelyn Kinn
Legal Affairs Manager
Puget Soundkeeper Alliance
5305 Shilshole Ave NW Suite 150
Seattle WA 98107
P. 206.297.7002
F. 206.297.0409



October 4, 2012

Via U.S. Mail/ Email

Sonja Larson
Washington Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600
Email: sonja.larson@ecy.wa.gov

*Protecting and
Preserving
Puget Sound*

5305 Shilshole Avenue NW
Suite 150
Seattle, Washington
98107

P 206.297.7002
F 206.297.0409

www.pugetsoundkeeper.org

Re: Draft Oil Spill Contingency Plan Rule

Dear Ms. Larson,

Thank you for the opportunity to comment on the revisions of WAC 173-182 made in response to the passage and signing of HB 1186 regarding Oil Spill preparedness and response.

Overall, Puget Soundkeeper Alliance (Soundkeeper) believes that the updated rule will be a significant step forward in regional preparedness. However, in the unfortunate event of a spill, there will only be one chance to get it right. Experience tells us that every past spill comes with significant lessons learned that are unfortunately memorialized in destruction of valuable resources, aquatic life and important habitat.

Soundkeeper believes a robust oil spill preparedness and response plan takes on even greater urgency given the recent expansion of oil export from our region and the proposed expansion of coal and tar sand derived exports through Washington waters which will significantly increase the risk of a major spill north of Admiralty Inlet.

Soundkeeper supports the comments of Jerry Joyce, Advisor to the Audubon Society and Fred Felleman, Advisor to the Makah Nation.

Our specific comments are as follows.

Soundkeeper concurs that the proposed requirements to use the “best available technology” in order to achieve the best achievable protection (BAP), to be reviewed on a five-year cycle are a significant step forward. This allows for improvements in capabilities over time, based on technology, without revisiting the entire rulemaking process. In addition, the 4-hour standard, aerial surveillance requirements, the vessel of opportunity (VOO) program, improved requirements for shoreline preparedness and response, requirements for the primary response contractors (PRCs), improved drill requirements, and the implementation of a technical manual all increase our regional spill response capability. We would add that the rule should include a 4-hour standard for aerial surveillance equipment, not a 6-hour standard as currently drafted.



Soundkeeper supports language calling for listing the type of all dispersants, their quantity and storage location to provide transparency and an opportunity in the next plan update to initiate a review of the overall dispersant strategy to ensure we have selected the least toxic products and have thoroughly reviewed other available options to this last-resort method of spill response. However, Soundkeeper also recommends that references to in-situ burning and chemical dispersants should include noting the areas where they can never be used. In addition, Soundkeeper recommends that there should be substantial penalties for unauthorized use of either of these techniques. Otherwise there is a strong incentive on the part of the responsible party to over-use these techniques, because the damage is then hidden from view and/or spread over wider and under-monitored areas. As evidenced in the BP 2010 Gulf Oil Disaster, cover-up, secrecy, denial and massive use of dispersants without approval must be made unprofitable, or it is likely to happen here. The Gulf region is still paying the price for this oversight.

On page 6 (40): We suggest deleting “to mitigate...shorelines”. It is recovery, not mitigation that is the goal, and we note that the necessary action may not immediately involve shorelines.

Due to the international nature of some waterways covered by this rule, and the significant heavy vessel traffic coming from Canada to waters in or adjacent to the U.S., international response coordination needs to be at the maximum level feasible to avoid a potential disaster exacerbated by cross-border issues. Although adding specific requirements for international coordination of PRCs could be difficult to include in a state WAC rule, Soundkeeper encourages including systems to encourage maximum coordination with Canadian response assets where possible.

We are puzzled by the removal of the “best available technology” language from the 173-182-335 section on storage equipment. We note that under HB 1186, the state is required to ensure that contingency plans require that equipment meets “best available technology” to ensure safe and effective temporary storage operation in various conditions. Specifically, the use of bladders poses a serious risk in high energy environments. At least 50% of the storage vessels should meet Best Achievable Protection (BAP) standards thereby eliminating the use of bladders. We also do not agree with allowing 75% of the recovered oil storage requirement for vessels to be achieved utilizing upland facilities rather than barges.

We also note that under HB 1186, the state is required to ensure that contingency plans require “continuous operation” of spill response during a worst-case spill. Currently, plan holders do not have enough storage equipment strategically located around Puget Sound and the outer coast to meet this requirement. This remains a weak link in the whole response network and should have been addressed in this rulemaking.

As the other commenters note, the Vessel of Opportunity (VOO) program is still inadequate to ensure prompt response throughout the region. Overall, there needs to be more VOOs distributed throughout the region. The regions requiring VOOs are too large and the number of VOOs is too small. As an additional consideration we note that region three is to have 12 vessels. Since only half are required to have boom deployment or oil recovery capability and only half are presumed to be available at a given time, this really means only about 3 VOOs would be available to help recovery at any given time and these vessels could be located anywhere between Olympia and Everett, potentially increasing deployment time.

An additional consideration might be having a Tier 3 VOO program that consists of minimal training and paperwork and is job specific as part of a Geographic Response Plan (GRP): e.g. a local club or individual trained to boom off a specific bay with stationed boom.

San Juan County needs to be designated a staging area, like Neah Bay, requiring dedicated gear, storage barges, to cover up to the 6-hour planning standard.

With the difficulties of logistics, the San Juan Islands and outer coast need more staged equipment and storage. Soundkeeper believes that inaccessible areas of high biological and cultural value associated with high traffic volumes such as Neah Bay and the San Juan Islands need to be able to initiate a full response until additional equipment can cascade into the region. This must include, at minimum, a dedicated mini-barge and 2 resident workboats and VOOs.

Finally, given the increasing export of tar-sand-derived oil from Vancouver, BC, with further expansion planned, we urge Ecology to specify that diluted bitumen (dilbit) or synthetic crude is subject to this rule.

Thank you for considering these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Wilke". The signature is fluid and cursive, with a horizontal line underneath the name.

Chris Wilke
Puget Soundkeeper

From: Cale Karrick <portland@transmarine.com>
Sent: Thursday, October 04, 2012 3:32 PM
To: ECY RE Spills Rule Making
Cc: tim.probst@leg.wa.gov; Harris, Paul; Rivers, Ann; Brian.blake@leg.wa.gov;
Dean.takko@leg.wa.gov; Jim.moeller@leg.wa.gov; Wylie, Sharon
Subject: Comments to proposed WA House Bill E2SHB 1186

Importance: High

Follow Up Flag: Follow up
Flag Status: Completed

To: WA Dept. of Ecology
Attn: Director Ted Sturdevant
Fm: Transmarine Navigation Corp. Portland, OR

Good Day,

Please find as follows our official comment to the proposed amendments to the WA state Oil Spill Contingency Plan Rule (Ch. 173-182 WAC) as outlined in Ch. 122, 2011 Laws (E2SHB 1186).

Firstly, I would like to thank your department for the opportunity to comment on the proposed rules. Our organization takes great pride in not only meeting, but exceeding the reporting and advisory standards as they have been defined by your department to date.

Transmarine Navigation Corporation is a steamship agency, it is our profession to knowledgeable operate all aspects of a cargo vessel call to the Columbia River including local, state and federal regulations. Currently our organization represents approximately twenty to twenty five percent of all discretionary cargo vessel river traffic in the Columbia River system, which includes a wide range of cargo types and fixtures. In addition to our primary function of vessel operation we are actively involved in the Columbia River Steamship Operator Association (CRSOA) and the Marine Fire and Safety Administration (MFSA).

We believe that the proposed amendments will have a negative impact on the commercial success of our river system as well as the ongoing viability of our currently operating and successful oil spill response program (MFSA), which is uniquely tailored to the marine environment in which we operate. We would address the following points specifically:

- 1) The Columbia River is inherently more expensive for ship owners and charterers to operate in than other comparable US West Coast ports. The proposed rule change will place an added financial burden on ship owners and charterers, which will necessarily result in diverted cargo and reduce the amount of vessel traffic to the ports of the Columbia River. This translates to lost jobs and wages for working families in our region of the Pacific Northwest.

- 2) The Columbia River provides a transportation resource as an interstate marine highway, the actions of the State of Washington will impact the states of Oregon and Idaho, as well as their residents.
- 3) The proposed rules do not take into account the nature of a river system such as the Columbia River. We believe they were specifically constructed to address a large open water environment, such as the Puget Sound. The cited spill examples do not factor the type of petroleum cargo traded on the Columbia River, nor does it account for the narrow and predetermined course of a river system environment.
- 4) The quoted technology and resource reserves required under the current rule would effectively increase cost of vessel spill program enrollment over 200%, as well as mandate untested assets and non-useful overhead to a successful and proven spill response program (MFSA).

We thank you again for your time and consideration and hope to provide further input going forward. Copies of this letter will be sent to the following distribution:

Governor's Office:
The Honorable Christine Gregoire

Keith Phillips
Governor's Executive Policy Office

17th Legislative District: Clark County
Senator Don Benton

Representative Tim Probst

Representative Paul Harris

18th Legislative District: Clark/Cowlitz Counties
Senator Joe Zarelli

Representative Ann Rivers

Representative Ed Orcutt

19th Legislative District: Cowlitz, Lower SW Washington
Senator Brian Hatfield

Representative Brian Blake

Representative Dean Takko

49th Legislative District: Vancouver
Senator Craig Pridemore

Representative Jim Moeller

Representative Sharon Wylie

Thanks and Best Regards,

Cale Karrick
District Manager
TRANSMARINE NAVIGATION CORPORATION
As Agents Only
1200 NW Naito Pkwy., Suite 470
Portland, Oregon 97209
Tel: (503) 242-3864
Fax: (503) 241-4075
Telex: 48119277
E-mail: portland@transmarine.com

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The contents of this email and any attachments are strictly confidential and they may not be used or disclosed by someone who is not named a recipient. If you have received this email in error please notify the sender by replying to this email inserting the word 'misdirected' in the subject line.

From: Carol Bua <carol@tidewater.com>
Sent: Thursday, October 04, 2012 3:12 PM
To: ECY RE Spills Rule Making
Cc: Bill Collins
Subject: Comment Letter - sent on behalf of Bill Collins
Attachments: Tidewater Comment Letter - 10-4-12.docx

Follow Up Flag: Follow up
Flag Status: Completed

Please find attached a comment letter from Bill Collins/Tidewater regarding Proposed Amendments to the Oil Spill Contingency Planning rule (Chapter 173-182 WAC) in response to the comment period deadline of 10/4/12.

Thank you.

*Carol Bua
Communications Manager
Tidewater
(360) 759-0310*

T I D E W A T E R

October 4, 2012

Washington Dept. of Ecology
Attn: Sonja Larson
PO Box 47600
Olympia, WA 98504-7600

Re: Comments regarding Proposed Amendments to the Oil Spill Contingency Planning rule
(Chapter 173-182 WAC)

Thank you for opportunity to participate in the public hearing on September 27th in Vancouver, WA regarding Ecology's proposed revisions to WAC 173-182. I am hereby following up my oral testimony by submitting my comments in writing.

I want to start off by stating that Tidewater remains committed to protecting the environment in which we work and to our spill prevention and response programs. As you know, one of the commodities that Tidewater transports on the Columbia River is non-persistent oils (gasoline and No. 2 diesel fuel). We move these petroleum products on the Columbia River between the Portland/Vancouver metro area up through Pasco, WA, using double-hulled petroleum barges, from which we have never had a spill.

While we are generally in favor of and support regulations to further environmental protection, we are concerned that some aspects of the proposed rules are focused more so on ocean and Puget Sound-based traffic, rather than the river transport of non-persistent fuels that we move here on the Columbia River. Because of the unique nature of the Columbia River and Tidewater's specific business operations, we feel that portions of this rule improperly apply to and impact Tidewater.

1. Aerial Surveillance Requirements (WAC 173-182-321) : Requires resources within a six-hour response time and with specific imaging technology.

Issues:

a) The Aerial Surveillance requirement should not apply to non-persistent oils on the Columbia River as the proposed technology may not be effective for spotting non-persistent oils on a river system.

b) Aerial surveillance technologies are unnecessary on a river where oil travels at a consistent rate in the predictable direction of river flow as opposed to fanning out based on currents and wind speed as in the sound or ocean.

c) And although not certain, Tidewater may be solely responsible for implementing the aerial surveillance program given that we are the only Upriver operator that transports petroleum

TIDEWATER BARGE LINES, INC.

P.O. Box 1210 • Vancouver, WA 98666-1210 • (360) 693-1491 • (503) 281-0081 • (800) 562-1607

T I D E W A T E R

fuels in this area. It is not economically feasible for us to provide and maintain these resources on our own.

Requests:

a) Exclude Tankers carrying Group I (non-persistent) oils on the Columbia River from aerial surveillance amendments.

-OR-

b). Exclude the Upper Columbia River from the aerial surveillance amendments (for example, use the “Regions” in VOO requirements).

2. Vessels of Opportunity (WAC 173-182-317) : VOO rule establishes requirements to establish a vessel of opportunity program for various regions in Washington.

Issues:

a) There is not a commercial fishing fleet on the upper Columbia River, or in the upper reach of the Lower Columbia River (Portland/Vancouver area). It is doubtful that we would have access to the required number of qualified vessels and operating personnel.

b) Even if a commercial fishing fleet-based VOO program was able to be established using downriver resources (e.g., in Astoria, OR), the vessels may not be able to respond to the Lower Columbia River region where Tidewater transports petroleum products (from the Vancouver/Portland metro area and continuing east) in time. It could take several days to arrive on scene.

c) Contracting with members of a commercial fishing fleet, or recreational boaters in the absence of a commercial fishing fleet, is problematic. Questions remain regarding safety, suitability of boats, spill response training, insurance requirements, drug-testing, and related liability, all of which would have to be resolved prior to contracting with Tidewater or any PRC.

d) Ecology’s proposed rules do not consider the VOO program already provided through membership in CRC which, together with its membership, maintains a fleet of appropriate spill response vessels and an extensively trained membership.

Requests:

a) We would like confirmation that the Upper Columbia River area is excluded from the VOO rule. The proposed rules do not include it, so we are making that assumption.

b) We would like a definition of what constitutes the geographical area of the Lower Columbia River.

TIDEWATER BARGE LINES, INC.

P.O. Box 1210 • Vancouver, WA 98666-1210 • (360) 693-1491 • (503) 281-0081 • (800) 562-1607

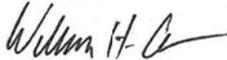
T I D E W A T E R

c) Exclude the Portland/Vancouver metro area of the Lower Columbia River region from the VOO program.

I want to again stress Tidewater's commitment to spill response and prevention programs and to maintaining our excellent record of environmental stewardship on the Columbia Snake River system. We value our good working relationships with the Department of Ecology and our other spill preparedness and response partners and we will continue to work to ensure that we keep the Columbia Snake River system a clean and safe environment for all users of the river system.

Please feel free to contact me at (360) 693-1491 if you have any questions concerning the comments provided in this letter. Thank you.

Sincerely,



William H. Collins
Director, EHS&S

From: Campbell, Laura <Laura.Campbell@portofportland.com>
Sent: Thursday, October 04, 2012 3:09 PM
To: Larson, Sonja (ECY)
Subject: FW: Port of Portland Signed DOE Comments
Attachments: Port - WADOE Letter.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Sonja:

Sending this to your other e-mail address just to make sure you received this document from the Port. Can you confirm receipt at your earliest convenience?

Thank you,

Laura Campbell
Administrative Coordinator
Marine Operations
Port of Portland
P: (503) 415-6234
F: (503) 548-5601
C: (503) 949-2353

From: Campbell, Laura
Sent: Thursday, October 04, 2012 1:50 PM
To: 'spillsrulemaking@ecy.wa.gov'
Cc: Vincent, Richard
Subject: Port of Portland Signed DOE Comments

Sonja:

See the attached for your comment collection. I am also faxing you a copy in the next few minutes. Can you please confirm via e-mail that you have received the fax as well as this PDF version?

Thank you,

Laura Campbell
Administrative Coordinator
Marine Operations
Port of Portland
P: (503) 415-6234
F: (503) 548-5601
C: (503) 949-2353



October 4, 2012

Ted Sturdevant, Director
Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

RE: Oil Spill Contingency Plan Rule Update

Dear Mr. Sturdevant:

The Port of Portland would like to thank you for this opportunity to provide comments on draft rules concerning oil spill contingency planning. The Port of Portland is a municipal corporation operating four public marine terminal facilities on the lower Columbia/Willamette/Snake River system. Our tenants, as well as private terminal operators on the Oregon side of the Columbia and in the Portland harbor of the Willamette River, rely on cost effective methods of shipping to both import and export products using the Columbia River system. The eight Washington ports along the Columbia River also rely on cost effective transit of goods.

In an April 20, 2011 memo to the Washington Department of Ecology (DOE), Washington Governor Gregoire asked that the Department "ensure that rules addressing cargo ship spill response requirements minimize potential impacts to discretionary cargo moving through our state, providing protections appropriate to the level of risk posed by different vessels and sectors." The Port of Portland shares this interest.

Unfortunately, we do not believe this balance has been achieved in the Washington Department of Ecology's proposed Oil Spill Contingency Plan. Our specific concerns are:

- The Columbia/Willamette/Snake River system is inherently different than the Puget Sound open water environment and this difference is not reflected in the proposed rulemaking. In addition, the type and volume of petroleum product transiting the Columbia River system is different. Any new rules should reflect these differences by providing alternate standards appropriate to the Columbia River system.
- The environmental interests which the Department is attempting to preserve could be achieved by more appropriate and cost-effective measures.
- The current draft rules are estimated to double costs to \$1,100 for cargo vessels carrying discretionary cargo on the Lower Columbia River, a 200% cost increase. In addition, the per day fee charged to contracted U.S. Army Corps of Engineer dredges on the river is expected to increase from \$272 per day to \$544, and may result in less dredging availability unless budgets increase to deal with the additional fees.

- Agricultural operations east of the Cascades, in both Eastern Oregon and Washington, work with extremely thin margins in order to be profitable and rely on cost competitive methods of getting their export products to foreign markets. Any additional cost will negatively affect these agricultural exports and potentially affect the jobs that they provide.
- Relative to Puget Sound, the Columbia/Willamette/Snake River system has significant challenges comparatively in pilotage, price of bunkers, and possibly now in unnecessary increased regulatory costs. This places the Columbia River system at a competitive disadvantage relative to Puget Sound.
- The increase in costs to shippers and the potential subsequent loss of ship calls risks the money invested in both the channel deepening and Columbia River lock improvements.
- Marine activities on our “river highways” are vital to our economy, supporting jobs and access to international markets for trade – it is this region’s gateway to the globe. Over 1,000 businesses count on the Port of Portland’s marine facilities to get their goods to market. Portland’s seaport and marine activities support \$921 million in total income, \$776 million in business revenues, and a healthy mix of over 20,000 valuable family wage jobs located in the Portland metropolitan area and southwest Washington.

The Port of Portland is an active member of the Maritime Fire & Safety Association (MFSA) and has been following the proposed rulemaking since House Bill 1186’s passage in the 2011 Washington Legislative session. The Port fully supports MFSA’s position on this rulemaking and encourages you to address the concerns that MFSA has expressed during this public comment period. Of particular concern are the following requirements identified in the draft rule:

- Aerial Surveillance – The use of this type of equipment in a river environment vs. the open-water of Puget Sound appears unwarranted. Furthermore, the use of FLIR type equipment in aircraft to detect/track the refined petroleum product transiting the Columbia River system has not been fully tested to determine if it will work under the circumstances of a spill to a river environment.
- 4-hour Planning Standard (Current Buster Technology) – The use of this technology in a river system with a narrow navigational channel is unproven and should not be required without additional testing and an analysis of whether existing equipment/procedures will achieve the same or better results.
- Vessel of Opportunity (VOO) program – MFSA and their partner organization Clean Rivers Cooperative already has boats, equipment and trained staff in place along the Columbia River from the Portland/Vancouver harbor all the way to the mouth of the River at Astoria. In addition, MFSA has already established a unique relationship with member Fire Agencies on the Lower Columbia River which adds another layer of trained personnel to provide appropriate coordinated response in the case of a spill.

The Port respectfully requests the following:

- That DOE modify the rulemaking to incorporate alternate planning standards for the Columbia River that are appropriate to a riverine environment, the level of risk, and cost effectiveness, and that support the continuation of discretionary cargo movement on the Columbia River and its regional multi-state transportation system.
- That DOE address MFSA's concerns expressed in their comments regarding this rulemaking.
- That DOE complete further economic analysis on the rules as the analysis to date appears inadequate.
- There appears to have been little coordination with the Oregon Department of Environmental Quality (ODEQ), the Port asks that additional discussions and coordination with ODEQ be conducted before this rule is made final.

This rulemaking has significant consequences for Oregon and Washington shippers, growers, and other businesses that rely on maritime transit on the Columbia/Willamette/Snake River System to international markets. It is critical that these proposed regulations be fully vetted to account for the unique nature of the river system and that the costs and true benefits are fully understood.

Sincerely,



Bill Wyatt
Executive Director

- c: Governor Chris Gregoire, State of Washington
Governor John Kitzhaber, State of Oregon
Sonja Larsen, Washington Department of Ecology
Todd Coleman, Port of Vancouver
Lanny Cawley, Port of Kalama
Geir-Eilif Kalhagen, Port of Longview
Tim Arntzen, Port of Kennewick
Scott Keller, Port of Richland
Jim Toomey, Port of Pasco
Wanda Keefer, Port of Clarkston

From: Bryan Graham <bgraham@schn.com>
Sent: Thursday, October 04, 2012 2:24 PM
To: ECY RE Spills Rule Making
Cc: Scott Sloan; Jim Jakubiak; Louise Bray
Subject: WAC 173-182 Oil Spill Contingency Plan Comments
Attachments: 20121004141632366.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Please find attached a copy of our comments on the Oil Spill Contingency Plan Rulemaking. A hard copy will follow in the mail.

Schnitzer Steel

Bryan Graham, RG, L.HG.

NNW Regional Environmental Manager

Metals Recycling Business

1902 Marine View Drive

Tacoma, Washington 98422

Direct: 253-404-6686

Cell: 253-254-4310

Fax: 253-572-4049

bgraham@schn.com

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October 4, 2012

Ted Sturdevant, Director
Washington Department of Ecology
P.O. Box 47600
Olympia, Washington 98504-7600

RE: Oil Spill Contingency Plan Rulemaking (Administrative Code (WAC) regulatory chapter 173-182 - Oil Spill Contingency Plans)

Dear Mr. Sturdevant:

Schnitzer Steel Industries, Inc. is a metals recycling business, headquartered in Portland, Oregon. Our seven deep draft marine terminals include marine terminals in the Puget Sound and on the Willamette River in Oregon. We are an active member of the maritime community and use the marine waterways for import and export of our scrap metal commodity in both Oregon and Washington. We support the efforts of the U.S. Coast Guard, the Oregon Department of Environmental Quality (DEQ), and the Washington Department of Ecology (Ecology) in protecting the waterways and estuaries of the Northwest from oil pollution.

Schnitzer Steel believes the draft rules as currently proposed are over-reaching and unnecessarily add to the global shipping costs without achieving any practical added environmental protectiveness. The pending Ecology rules needlessly increase the cost of doing business in the Northwest while making Northwest business less competitive. We believe the economic analysis provided by Ecology underestimates the added costs to the maritime industry and overstates the benefits for spill responses. We also believe that equipment, techniques, and methods used in responding to oil spills in the Gulf of Mexico and Puget Sound are not what is needed in the Columbia and Willamette Rivers. We also believe the current safeguards in place in Puget Sound are adequate. Spill volumes and frequencies within both Puget Sound and the Columbia and Willamette River systems have been consistently low. Adding yet more regulations is ill-advised and creates redundancies.

It's clear in reading the Preliminary Cost-Benefit Analysis and Least Burdensome Analysis (August 2012) that Ecology's rationale for adding oil spill requirements at this time are based on lessons learned from oil spills that occurred in San Francisco Bay and the Gulf of Mexico (Executive Summary). Oregon and Washington was well ahead of the curve with the creation of the voluntary bi-state Maritime Fire and Safety Association, providing effective spill response capability on the Willamette and Columbia Rivers since 1992. Unfortunately what may make sense for a spill response in the Gulf of Mexico or Puget Sound is not what is needed for spills in the Columbia or Willamette Rivers. MFSA currently has highly trained staff and over \$3,300,000 worth of boom and equipment spread strategically throughout the river systems for oil spill

protection in the event of a spill. Adding an expensive "current buster" boom system as part of the 4-Hour Planning Standard to the oil spill capability within the river systems will have small to no benefit, yet at significant additional cost.

At the most recent October 2, 2012 MFSA meeting, the U.S. Coast Guard notified our members they planned to do weekly river fly-overs as part of the Washington and Oregon derelict vessel program. Given these existing federal resources already available, it seems redundant that the oil spill plan holders would now be asked to provide expensive aerial surveillance capability, when federal resources already exist.

In reviewing Ecology's WAC 197-11-960 Environmental Checklist for its proposed rules and Ecology's Cost Benefit Analysis document referenced above, it is surprising and disturbing to see Ecology's lack of inclusion of the potential economic impacts to Oregon businesses and Ports in the rule analysis. Increased shipping fees during our current tough economic times, let alone anytime, will not only impact Washington facilities, but Oregon's as well and could divert cargos to other port regions.

DOE collaboration with DEQ on these important draft rules is not evident and apparently has not occurred. The maritime industry and the general public has been well served by past cooperative and collaborative efforts of the two states agencies on various important projects, such as the Columbia River channel deepening project and the Derelict Vessel program. We were disappointed that collaboration didn't happen with these draft regulations.

We encourage Ecology to go back to the drawing board, revisit the draft oil spill rules and make serious revisions. Please work with your partners to the south, such as MFSA and the DEQ, to come up with common sense, practical, and cost effective rules. Such an effort would be well worth it, benefitting all of the Washington and Oregon regions affected by the rules.

We appreciate the opportunity for submitting comments on these rules and stand ready to be fully engaged in development of rules which meet the concerns identified above.

Sincerely



Bryan S. Graham, LG, LHg.
Regional Environmental Manager

Attachment

cc: Matthew Parker
Andy Marcelynas
Scott Sloan
Louise Bray

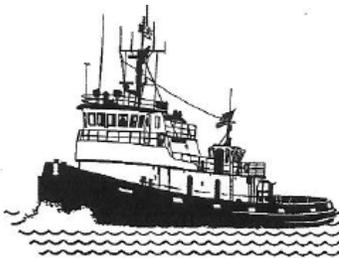
From: Lauer, Dick <DickL@Sause.com>
Sent: Thursday, October 04, 2012 2:00 PM
To: ECY RE Spills Rule Making
Subject: Sause Bros WAC 173-182
Attachments: Sause Ltr 4Oct12.docx

Follow Up Flag: Follow up
Flag Status: Completed

Sonja,
Attached my comments on the proposed rule. If you have any questions, please call.
Regards,
Dick

Richard H. Lauer
Sause Bros. Inc.
Manager Bulk Products QI/CSO
Office Phone: 503.222.1811 Ext 1010
Cell Phone: 503.784.2613 (24/7)
Email: dickl@sause.com

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SAUSE BROS.

3710 N.W. FRONT AVE. • PORTLAND, OREGON 97210
TELEPHONE: (503) 222-1811 • FAX: (503) 222-2010

October 4, 2012

Sonja Larson
Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600
Email: spillsrulemaking@ecy.wa.gov

Dear Ms. Larson,

Sause Bros. Inc. is closely held tug and barge operator based in Oregon. We operate both tank barges and dry cargo barges on the Columbia River and tank barges in Puget Sound. We operate in the ocean trades serving the US West Coast and Hawaii. The purpose of this letter is to ask the Department of Ecology to amend their current proposed amendments to the Oil Spill Contingency Plan Rule (WAC 173-182) to incorporate planning standards that are appropriate for the size of our vessels and the operating areas in which we operate, and are cost effective.

We specifically would like to point out the following issues:

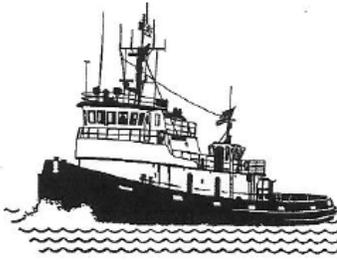
1. Per HB1186 Section 2 (2) the Washington Legislature directed that "rule updates to cover non-tank vessels shall minimize potential impacts to discretionary cargo moved through the state" and Gov. Gregoire letter to you dated April 20th, 2012 she points out the importance of protecting the environment, but also the state's economy, and specifically on page 2 asks that the rule making, "minimize potential impacts to discretionary cargo moving through our state, providing protections appropriate to the level of risk posed by different vessels and sectors."
2. In three significant areas, the rules are aimed at the worst case spill of a crude oil tanker transporting 125,000 tons of crude oil transiting the Straits of Juan de Fuca.
3. We operate tank barges that carry approximately 15,000 tons (a factor of eight smaller) of refined petroleum products, and we operate on Pacific Ocean, Puget Sound, the Straits and the Columbia River.
4. As a small operator, we depend heavily on the umbrella contingency plans of the Washington State Maritime Cooperative (WSMC) and the Maritime Fire and Safety Association (MFSA).
5. As an experienced Incident Commander, the response equipment and personnel must be appropriate for the operating environment to be effective. Put another way, what may have worked in the Gulf of Mexico on a crude oil spill that continued to flow for months, does not necessarily work effectively on a refined oil spill on the Columbia River.

We would like the Department of Ecology to consider revising the rules to allow the flexibility of the Umbrella Plan holders to position, train and equip their response organization to be



SAUSE BROS. OCEAN TOWING CO., INC. • SAUSE BROS., INC. • SOUTHERN OREGON MARINE, INC.





SAUSE BROS.

3710 N.W. FRONT AVE. • PORTLAND, OREGON 97210
TELEPHONE: (503) 222-1811 • FAX: (503) 222-2010

effective in the relevant areas of operations based on the type of vessels, the type of oil, and the type of water body. This is particularly noticed in the following three areas:

Vessel of Opportunity Requirements (WAC 173-182-317):

1. The Tier 1 requirements are problematic in terms of finding suitable vessels for Regions 2 thru 6. In addition, these vessels that may not even be in the region for months. In order to achieve the annual deployment exercise requirement, the Plan holders will be forced to schedule additional exercise just to cover the VOO program. The recurring cost of training vessels and crews is excessive (current estimates are in excess of \$6,000 per vessel per year).
2. The requirements do not allow recognition of alternate sources of response personnel and equipment, for example the "First Responders Program" used by MFSA.

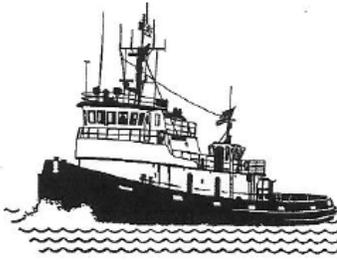
Aerial Surveillance (WAS 173-182-321):

1. The requirement for multi-spectral may not be technically achievable. At least one of the potential vendors mentions a requirement to achieve a minimum altitude of 1,800 feet clear of clouds. On the Columbia River, weather ceilings are frequently below this restriction. In addition on the Columbia River, the estimated annual costs of \$750,000 for this capability is excessive given to operational constraints, and the goal can be more effectively and economically achieved by hand held FLIR units both on response boats and from helicopters.
2. On the Columbia River where the current is frequently in excess of 3 knots and oil is constantly moving in and out of the main current with eddies, the information would be timelier if it came from a helicopter or vessel using hand held FLIR units and transmitted to a command post operations section.

Current Busters Planning standard (WAC 173-182-415) Cathlamet Staging Area:

1. This is an example of a planning standard being imposed where the equipment is marginally, if at all suitable for the environment.
2. The specific requirement for "196 barrels" and advancing speed requirement for "2 knots in waves" dictates an Ocean Buster 4 which the manufacturer states is developed for ocean currents.
3. In addition, the USCG testing of the unit states that the Ocean Buster 4 performed in waves of 6" to 12".
 - a. Wave is not defined.
 - b. The Ocean Buster 4 is a larger unit and requires larger vessels to tow. The draft of the towing vessels may limit operation outside of the channel on the Columbia River.





SAUSE BROS.

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- c. There are existing methods utilizing more efficient skimmers and different types of boom that will achieve better results in the Columbia River operating environment.
- d. Because the standard is so specific, the capital cost of this type of equipment is estimated to be in excess of \$275,000 per unit, draining capital that could be spent on more appropriate equipment for the area of operations.

The above changes are most needed to maintain an effective and efficient response system over the diverse geographical area of operations and types of vessels they are meant to cover. To support this request, I will point out the Cost Benefit Analysis used by the Department Of Ecology in Appendix B. The appendix uses a Socioeconomic Daily Benefits of Reduced Clean Up Duration based on a 25,000 barrel bunker C spill for the Columbia River vs. a 250,000 barrel crude oil spill in the Straits of Juan de Fuca. The Strait of Juan de Fuca daily benefit is for a spill that is 10 times larger by volume, and approximately 160 times larger by impact than the Columbia River, but the only difference in the planning standards is a requirement for 6 more VOO's.

Sincerely,

SAUSE BROS. INC.

Richard H. Lauer
Manager Bulk Products OI/CSO

Cc: Governor Christine Gregoire
Keith Phillips, Governor's Executive Policy Office
17th District Senator Benton
17th District Representative Probst
17th District Representative Harris
18th District Senator Zarelli
18th District Representative Orcutt
18th District Representative Rivers
19th District Senator Brian Hatfield
19th District Representative Blake
19th District Representative Takko
49th District Senator Pridemore
49th District Representative Moeller
49th District Representative Wylie



SAUSE BROS. OCEAN TOWING CO., INC. • SAUSE BROS., INC. • SOUTHERN OREGON MARINE, INC.



From: Thomas Callahan <tcallahan@wsmcoop.org>
Sent: Thursday, October 04, 2012 1:51 PM
To: Larson, Sonja (ECY)
Cc: Loesch, Marty (GOV); frank.chopp@leg.wa.gov; Richard.debolt@leg.wa.gov; Tracey.eide@leg.wa.gov; Van De Wege, Kevin; Tharinger, Steve; Jim.Hargrove@leg.wa.gov; gnelson@portgrays.org; Roger Mowery
Subject: WSMC Comments to Proposed Amendments to WAC 173-182
Attachments: WSMC Comments to ECY on Proposed Amendments to WAC 173-182_04 Oct 2012.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Ms. Larson,

On behalf of the Executive Director, attached are the formal comments from the Washington State Maritime Cooperative on the proposed amendments to Chapter 173-182 WAC, Oil Spill Contingency Plan. We appreciate the opportunity to provide these comments. Due to the nature and extent of the proposed rules, and their potential for negative impacts throughout the maritime industry in the state, we hope the Department of Ecology will consider and adopt the recommendations contained in our comments.

Respectfully,
Thomas Callahan

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Thomas Callahan
Response Manager
Washington State Maritime Cooperative
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Washington State Maritime Cooperative

October 4, 2012

Washington State Department of Ecology
Attn: Sonja Larson
PO Box 47600
Olympia, WA 98504-7600

Subj: Comments on Proposed Amendments to Chapter 173-182 WAC, Oil
Spill Contingency Plan

Dear Ms. Larson:

The Washington State Maritime Cooperative (WSMC) is an umbrella oil spill contingency plan holder in the state of Washington and provides oil spill contingency plan coverage for over 90% of the commercial ship traffic in the Strait of Juan de Fuca and Puget Sound and 100% of the ship traffic in Grays Harbor. The vessels we cover include tankers, tank barges, and non-tank vessels, including cargo vessels, ferries, fishing vessels, and tugs. A list of WSMC members is enclosed with this letter. WSMC is committed to providing the most effective and robust oil spill response capability in support of member vessels through the WSMC umbrella contingency plan. This commitment includes providing effective, practical and efficient oil spill contingency plan coverage to these members. However, the proposed amendments to WAC 173-182 compromise this commitment. The proposed amendments will negatively impact all WSMC member vessels and all segments of the shipping industry in Washington, and as a contingency plan holder, WSMC did not support the originating legislation (House Bill 1186) nor does WSMC support the proposed amendments to the Oil Spill Contingency Plan rule, WAC 173-182. Even though WSMC did not support the originating legislation, WSMC appreciates the efforts by WA Department of Ecology to arrive at a more informed and effective rule during the rule drafting process and through this public comment period.

WSMC has serious concerns with the additional response requirements under the proposed rules because they provide marginal improvement to response capability at very high costs with little actual effectiveness. The additional measures called for in these proposed rules provide only a slight increase to the already robust response capability in the region and yet will result in disproportionate increased costs. This will result in significant increases to WSMC's costs to retain an oil spill Primary Response Contractor (PRC) and consequently tremendous increases to the WSMC annual operating budget. In order to survive, these costs will have to be passed along to WSMC's members, resulting in increased operating costs for all segments of the shipping and marine industry in Washington. This will undoubtedly have negative impacts to the discretionary cargo that moves through Washington ports, with subsequent negative impacts to jobs and the region's economy. While continuous improvement is always a focus of the spill response community, the nominal added benefit of the measures called for in the proposed

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rules and the marginal increased environmental protection, in light of all the prevention and preparedness measures already existing in the region, do not warrant the implementation costs of the proposed rules. The proposed rules fail the cost benefit analysis.

Primarily WSMC is concerned with the currently proposed regulations which place requirements on a plan holder for: (i) the Vessel of Opportunity System, (ii) aerial surveillance, (iii) 4 hour planning standard requirements, and (iv) the 24 hour storage requirement. The following comments outline the concerns and recommended modifications to the proposed rules, which modifications we believe will make the rules more cost effective. In addition to the four areas noted above, there are other specific subjects within the proposed rules which warrant closer review and revision, and we have commented below. Finally, WSMC is further concerned with the cost benefit analysis accompanying the proposed rules, which is severely flawed through completely unrealistic assumptions and as a consequence significantly understates the true implementation costs of the proposed rules.

Vessel of Opportunity System – WAC 173-182-317

The scope and scale of the Vessel of Opportunity (VOO) System requirements currently proposed do not justify the benefits and are overly prescriptive. To set a specific number of VOO for so many different regions, when there is total uncertainty and lack of supporting evidence as to how many are needed, or even if there will be sufficient private vessels interested in such a program, is unrealistic and overly burdensome on plan holders. It is indicative of the likely low interest in the part of the majority of local fishing vessel operators when the fishing vessel representative on the Rule Advisory Committee stopped attending meetings when he learned of the additional insurance requirements, vessel requirements and other implications of being involved with oil spill response. Until there is a better understanding and confirmation of the realistic prospects of attracting local fishing vessel to the VOO program, it makes little sense to dictate specific number requirements, without knowing whether there exists a sufficient pool of interested fishing vessel owners.

Another area of concern with implementation of a VOO program involves insurance and liability. It has been made clear to Ecology that WSMC's primary response contractor would not insure nor supervise VOO due to liability concerns. It is unrealistic, and likely exceeds the scope of Ecology's authority, to require through regulation a private corporation to take on such risk and liability, including the risk of third party property damage or personal injury claims.

It is recommended that a VOO program be implemented through a thoughtful, rational approach, an approach where there is a match between actual vessel availability, actual need and expected benefit. A program that initially establishes a single VOO system for Washington rather than the six regions, without specific number of vessels, should be pursued through these proposed rules. The number of VOO vessels established would then be cooperatively developed between Ecology and plan holders, based on availability (including seasonal availability), capability, crew size, and location. As Ecology gains a better understanding of the vessels that may be interested, capable and available to participate in a VOO program, along

with their geographic location, and PRCs and plan holders gain more experience working with the VOO operators, and insurance and liability issues are addressed, then plan holders and Ecology would be able to work cooperatively to establish realistic and workable specific VOO levels.

The implementation timeline for a VOO system should not be set on an arbitrary number of months based on the date of passage of the regulations. Rather, realistic implementation schedules should be developed by Ecology and plan holders working together, after Ecology has established the VOO registration program and private vessels have actually enrolled in the program, been properly vetted and are available for contract. Mandating an arbitrary timeline, without taking into account the complexity of the task and the lead time to accomplish it, is doomed to failure.

To ensure the broadest possible participation from VOOs, Ecology should reinsert the text in section WAC 173-182-317(2)(r) that states a VOO may contract with multiple PRCs. This text was a part of the second version of the rules circulated to the Rules Advisory Committee, yet does not appear in the version published for public comment. The specific inclusion of this text will help private vessel owners better understand the scope of their potential involvement in a VOO program; will maximize the benefit of VOO training of fishing vessel owners and crews; will most effectively utilize what may be a limited pool of participating fishing vessels; and, will increase the incentive for owners to participate in the VOO program, by increasing the owners' revenues.

The opportunity to establish a VOO program with specific number of vessels in specific regions, in a systematic, purposeful manner, when more is known about the potential for this to be a viable part of contingency plans in Washington, should then be developed as part of the 5 year review of the regulations, the same as is proposed for the assessment of Best Available Practice/Best Available Technology (BAP/BAT).

Aerial Surveillance – WAC 173-182-321

The infrared (IR) camera equipment described in the proposed rule is very specialized and to require plan holders to have this equipment within 8 hours would necessitate acquisition of this equipment. Considering that IR camera equipment is readily available to a responsible party from public sources makes this costly requirement especially burdensome and onerous to plan holders; particularly, given the low likelihood that this equipment would be needed and the limited purpose for which it would be used.

This IR capability currently resides with state and federal resources. In previous spills around the country, when the scope and scale of the incident necessitated IR capability (this capability is not needed in the vast majority of oil spill responses), these public assets were readily called up by the spiller and put into operation to support the response, with all costs paid by the responsible party. The same would take place in Washington. As noted in the Ecology cost benefit analysis, the cost of the system could be on the order of \$700,000. To require this of all plan holders when other less costly and equally effective options are available is not only overly burdensome and wasteful, but also greatly increases a plan holder's cost with no increased value to show for it in terms of spill preparedness or response. Devoting scarce resources to "invest" in a plan holder's IR capability will only result in a reduction of all plan holders' ability to

invest in more effective spill response measures. We strongly, but respectfully, recommend that Ecology recognize the capability for IR that already exists in the State of Washington and which is available to plan holders, if needed. We request the rules allow plan holders to meet this requirement through reliance on these publicly available resources, recognizing the responsible party will pay for the full costs of their activation and use in the event of a spill incident that calls for IR capability.

Storage Requirement – WAC 173-182-335

First we seek clarification of the rule requirement that at least 25% of the total worst case discharge be dedicated equipment is meant to apply to the 24-hour planning standard. The version of the rules published for public comment does not specify a specific planning standard hour threshold. However, discussions between Ecology and plan holders during the September 27, 2012 public hearing meeting indicated this does indeed apply to the 24 hour standard. Please confirm.

Assuming the proposed rule does apply to the 24-hour standard, this requirement is overly burdensome and does not recognize the amount of on water storage that would be available from barges within 24 hours of the start of an oil spill incident. WSMC currently holds letters of intent from barge operators that could readily provide this necessary storage. Should an oil spill incident occur, such that on water storage from barges is needed, these barge companies would be called upon to provide on-water storage. In all likelihood, the port would be shut down due to the spill incident, freeing up even more barges for on-water storage, far exceeding the 24 hour requirement. We have confirmed just such barge availability as part of our response equipment drill exercises in the past.

There are already planning standard requirements that require plan holders to list in their plan their access to appropriate quantities of storage. Rather than require the procurement of dedicated barges to meet the 24 hour requirement, the rule should allow plan holders to make use of the large barge fleet in Puget Sound, which would provide ample capacity to meet the 24 hour storage requirement. We recommend that Ecology not require dedicated storage levels at the 24 hour period, but rather require plan holders confirm and document sufficient barge availability during equipment deployment exercises. This would provide Ecology assurance that plan holders can indeed provide the level of storage required by the 24 hour planning standard.

Four Hour Planning Standard – WAC 173-182-370, -380, -395, -405

The proposed requirement in effect requires as many as 4 separate Current Buster boom systems, positioned around the region, to be listed in the WSMC plan. A much more practical approach would be to have a single system, centrally staged in Puget Sound. Such a system would be rigged and ready for transport where needed anywhere in the WSMC coverage area. This system would meet a planning standard of 12 hours, recognizing it would arrive in many areas well before 12 hours. The cost of each system, including the necessary transport and deployment support, would be on the order of \$650,000 each. Therefore, this single requirement could equate to a total expenditure of \$2,600,000. While this type of system may

enhance spill response capability under the right site conditions, the number of units and their actual costs should be considered in the proposed rule, in evaluating a cost effective response capability. Therefore a single, mobile Current Buster system is recommended as the requirement for the rule in regards to this technology.

Cost of Implementation

The cost benefit analysis prepared by Ecology contains incorrect assumptions and flawed conclusions which seriously underestimate the cost of implementing the rules as proposed, and thereby undermine the assumptions which support the proposed rules. The most significant erroneous assumption is that PRCs will coordinate and share in the cost of the implementation of these rules. The track record of PRCs implementing oil spill contingency plan requirements clearly shows exactly the opposite. It is well known to Ecology that the region's PRCs are separate business entities with independent business plans and, as such, operate separately and, at times, competitively. To assume that regulations could force this cooperative cost sharing in disregard of the history and institutional competitiveness is completely erroneous and naive. There can be no expectation of cost sharing among the PRCs in the implementation of these rules. If there is no cost sharing among the PRCs, then the cost for each of the PRCs increases dramatically and this cost is ultimately passed on to the end user, making Washington ports a much less attractive place to call for commercial vessels that have a choice on where to load or discharge cargo.

Further, Ecology's cost benefit analysis allocates the rule implementation costs by those costs to be borne by plan holders and those to be borne by PRCs. This allocation is erroneous. All private sector costs of implementation will fall to the plan holder alone. It is a straightforward business practice that any company, such as a PRC, would only incur a business expense when they had a customer/client to pay for it. Therefore, all of the PRC implementation costs listed in the cost benefit analysis must be considered to be plan holder costs. The implementation costs of the proposed rules, as written, will be extremely high and will increase the costs of WSMC contracting a PRC by millions of dollars. In fact, these additional projected additional costs may be of such a magnitude as to jeopardize WSMC's continued existence and ability to continue to provide its umbrella contingency plan.

The costs of implementing the proposed rules will be passed along to WSMC's membership. Imposing such cost increases at time when the shipping industry is already reeling under severe economic strain, with many companies experiencing operating losses, while at the same time operating in an extremely competitive environment against other west coast ports will not be without its negative consequences. It does not appear that the reduction of shipping through Washington ports, loss of jobs, and negative impact to the region's economy has been properly recognized or accounted for in the development of the proposed rules.

The House Bill 1186 specified the rules, "...shall minimize potential impacts to discretionary cargo moved through the state." Further, the Governor's letter directing Ecology to implement rules specifically noted the rule requirements must "... minimize potential impacts to discretionary cargo moving through our state, providing protections appropriate to the level of risk posed by different vessels and sectors." As far as we can tell, the consequence of increased costs and loss of shipping in the state was not linked or acknowledged in the development of the proposed rules. Unfortunately, there were no correlations or links made by

Ecology between the risk of a spill from the different types of vessels from the various marine industry sectors and the need for more spill response preparedness in the formulation of the specifics of these proposed rules. Further, with no weight or consideration given for the regional marine industry's excellent record to date and the effectiveness of the prevention measures already in place, it is impossible to justify all the requirements of the proposed rules, given the very high cost with very little benefit to be gained in the way of spill preparedness.

The cost benefit analysis did not, but should, specifically address the port area of Grays Harbor and the disproportionate impact of the proposed rules on Grays Harbor. This area is isolated from both the Puget Sound Region and the Columbia River and therefore will need to meet many of the planning standard requirements on its own, without benefit of any economies of scale. As a smaller and isolated port area with far fewer vessel transits than the other port areas, the high cost of the proposed rules will be even more economically burdensome and could even be impossible for the local maritime businesses to bear (as already illustrated by the existing rules that have not yet been met for storage capacity in the area). Ecology's analysis does not take into account the impact of the proposed rules on Grays Harbor or the very likely potential "cost" of putting local companies and employers out of business, if the rules are adopted as proposed. Also, it is noted that there was not a public hearing held in the Grays Harbor area. It will be important, if not already done, to specifically provide Grays Harbor shipping businesses and port representatives a briefing and opportunity to comment.

Notifications – WAC 173-182-262

The first sentence of paragraph (1) currently requires that a report of a discharge or threat of a discharge be reported by the vessel owner or operator. This paragraph should be revised to include the provision that a report of a discharge or substantial threat of discharge may also be made by an umbrella plan holder on behalf of the vessel owner or operator.

In paragraph (2) of this section, the second sentence should be revised with the following text added to the sentence, "... unless the state has already been notified by the umbrella plan holder on behalf of the vessel owner or operator."

These changes will more accurately depict the current notification process which takes place when there is a discharge or threat of discharge from a vessel which is covered through an umbrella contingency plan.

WSMC respectfully requests that Ecology consider and incorporate into the proposed rules the recommendations presented here. Beyond this current rulemaking process, WSMC would welcome the opportunity to work with Ecology to look carefully at the actual risks posed by WSMC member vessels and, through careful assessment of current capabilities, develop what,

if any, response readiness improvements may be needed through future rulemaking. If you have any questions regarding these comments and recommendations, please feel free to reach me via phone at 206-448-7557, or via email at admin@wsmcoop.org.

Signed,



Roger Mowery
Executive Director

Enclosure: List of Washington State Maritime Cooperative Members

CC: Chris Gregoire, Governor
Marty Loesh, Chief of Staff, Office of the Governor
Keith Phillips, Executive Policy Advisor, Office of the Governor
Tracey Eide, 30th District Senator, Majority Floor Leader
Frank Chop, 43rd District Representative, House Speaker
Richard DeBolt, 20th District Representative, House Minority Leader
James Hargrove, 24th District Senator
Kevin Van De Wege, 24th District Representative
Steve Tharinger, 24th District Representative
Gary Nelson, Executive Director, The Port of Grays Harbor

Enclosure: WA State Maritime Cooperative Member List

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Enclosure: WA State Maritime Cooperative Member List

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CONTI 17 CONTAINER SCHIFFAHRTS - GMBH & CO. KG
CONTI 33 CONTAINER SCHIFFAHRTS-GMBH & CO KG
CONTI CARRON SCHIFFAHRTS MBH "CONTI DARWIN"
CONTINENT MARITIME SA C/O ALFA SHIP MANAGERS PTE L
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EUKOR
EUKOR CAR CARRIERS
EUPHONY MARITIMA S.A.
EUROBULK LTD
EURONAV N.V. C/O EURONAVSHIP MANAGEMENT HELLAS LTD
EVALEND SHIPPING CO. SA
EVENING STAR INC.
EVER ROCK NAVIGATION S.A.
EVER VIEW SHIPPING LTD/COSCO (H.K.) SHPG CO LTD
EVEREST SPIRIT LLC/TEEKAY SHIPPING LTD
EVERGREEN MARINE (SINGAPORE) PTE LTD
EVERGREEN MARINE (TAIWAN) LTD
EVERGREEN MARINE (UK) LIMITED
EWING STREET FISHERIES
EXCEL MARINE CO LTD
EXCEL MARINE COMPANY LTD.

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EXECUTIVE SHIP MANAGEMENT PTE LTD
FAIR WIND NAV. S.A. C/O WORLD MARINE CO LTD
FAIR WIND PANAMA S.A.
FALMOUTH MARITIME ENE
FAR-EAST TRANSPORT CO. LTD
FAR-EASTERN SHIPPING CO., PLC
FAVEL SHIP HOLDING INC MONROVIA
FCN MANAGEMENT INC OPERATOR
FEARN LIMITED
FEDERAL CORNWALLIS LTD
FENGLI GROUP SHANGHAI LOGISTICS CO. LTD
FERNLEY INTERNATIONAL INC C/O TARGET MARINE SA
FGL MIMOS PANAMA S.A.
FHH FONDS NR 36 MS MONZA GMBH & CO KG
FHH FONDS NR.23 "CORAL BAY" GMBH & CO.CONTAINERSCH
FIDELITAS MARITIME CORP/COSCO (HK) SHPG CO LTD
FIR SHIPPING SA
FIRST LINK SHIPPING LIMITED/COSCO (H.K.) SHPG CO.
FIRST STEAMSHIP S.A
FISHING VESSEL NORTHWIND INC
FIVE STAR SHIPPING CO. PVT LTD
FLEET SHIP MANAGEMENT PTE LIMITED
FLEET6 MANAGEMENT LIMITED
FLINTER MANAGEMENT BV
FLORUM NAVIGATION SHIPPING INC
FLOW SHIPPING CO S.A.
FOREMOST GROUP
FORNAX LINE SHIPPING S.A.
FORZA SHIPPING S.A
FOSS MARITIME COMPANY
FOUNTAIN NAVIGATION LTD
FRANCIS MARITIMA S.A.
FRANCO COMPANIA NAVIERA S.A
FRATELLI D'AMICO ARMATORI S.P.A.
FREEPORT DOMINION S.A/TSAKOS COLUMBIA
FRIENDSHIP TWO SHIPPING LIMITED/SINOTRANS SHIP MAN
FROSTI FISHING LIMITED
FU MAY MARITIME LLC C/O FOREMOST GROUP
FUKUNAGA KAIUN CO. LTD
FUYOH SHIPPING COMPANY
GALATEIA MARITIME CORPORATION C/O E NOMIKOS CORP
GALVESTON NAVIGATION INC/V.SHIPS (UK) LTD
GAS LLC LLC
GBLT MARINA PARAWATI SHIPPING
GEARBULK NORWAY A/S
GENCO WISDOM LIMITED
GENOA MARITIME S.A

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GLACIER FISH CO LLC
GLAUCOUS FINANCE INC
GLENDA INTERNATIONAL SHIPPING LIMITED
GLOBAL KINGS S.A./CO RAINBOW MARITIME CO LTD
GLOBAL MARINE TRANSPORTATION INC
GLORIOUS WAVES/AEGEAN BULK CO INC
GLORY MARINE PTE LTD / DAN SIN SHIPPING PTE LTD
GMR GEORGE T LLC., C/O GENMAR MARINE MANAGEMENT LL
GOLD MARK SHIPPING LTD
golden flame shipping
GOLDEN SEA INVESTMENTS LTD
GOLDEN SHIPHOLDING MARINE S.A
GOURDOMICHALIS MARITIME S.A.
GRACE ROCK NAVIGATION S.A.
GRAM CAR CARRIERS PTE LTD II SINGAPORE
GRANDSLAM ENTERPRISE CORP C/O SANKO STEAMSHIP CO
GREAT EASTERN SHIPPING CO
GREAT GAIN SHIPPING LIMITED
GREAT PRAISE SHIPPING LIMITED/SINOTRANS SHIP MANAG
GREEBA NAVIGATION LIMITED
GREEN COMPASS MARINE S.A.
GREEN SPANKER SHIPPING S.A./KYOWA KISEN CO LTD
GREEN WAVE SHIPPING PTE LTD
GREENCOMPASS MARINE S.A.
GREENSTAR STEAMSHIP COMPANY GMBH
GREGALE MARITIME LTD/UNISEA SHIPPING
GRIEG SHIPPING A.S
GULF ENERGY MARITIME (GEM) AISC
GULF MIST INC
H.ISMAIL KAPTANOGLU SHIPMANAGEMENT TRADING CO
HACHIUMA STEAMSHIP CO. LTD
HAL ANTILLEN NV.HOLLAND AMERICA LINE NV
HALIFAX LEASING LTD
HAMMONIA REEDEREI GMBH & CO KG
HANARO SHIPPING CO. LTD
HANDYVENTURE SINGAPORE PTE LTD
HANJIN SHIPPING CO LTD
HANSEATIC LLOYD SCHIFFAHRT GMBH & CO. KG
HAPAG LLOYD AG
HAPPINESS E.N.E
HARBOR SHIPPING & TRADING S.A.
HARMONY MARITIME CO. LTD
HARPER MARITIME ENE
HARTMAN SEATRADE
HARTMAN SHIPPING 1 BV D HARTMAN
HARTMANN SCHIFFAHRTS GMBH & CO KG
HARVEST WISE LTD

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HARVEY EXPLORER LLC C/O HARVEY GULF INTERNATIONAL
HARVEY HAULER LLC C/O HARVEY GULF INTERNATIONAL
HARVEY SPIRIT LLC C/O HARVEY GULF INTERNATIONAL
HELGA SPIRIT LLC/TEEKAY SHIPPING
HELLENIC SHIPMANAGEMENT CORP
HELLENIC SHIPMANNAGEMENT CORP
HELLESPONT SHIP MANAGEMENT GMBH & CO KG
HELMSTAR SHIPPING
HERMANN BUSS GMBH & CIE KG
HEROIC CAPRICORNUS INC. C/O ANGLO-EASTERN SHIPMANA
HEROIC LYRA INC
HISPANIA GRAECA SHIPPING LIMITED
HISTRIA SHIPMANAGEMENT SRL
HLL PACIFIC SCHIFFFAHRTSGESELLSCHAFT & CO. KG
HLTA LLC
HOEGH AUTO LINER AS
HOEGH AUTOLINERS SHIPPING PTE LTD
HOEGH FLEET SERVICES AS (MANAGER FOR OWNER)
HOLLAND AMERICA LINES
HONG KONG SEA LION SHIPPING CO LTD
HONG KONG MING WAH SHIPPING CO. LTD
HORIZON LINES LLC
HORNBECK OFFSHORE SERVICES LLC
HS DISCOVERER SCHIFFFAHRT-GESELLSCHAFT
HSIN CHIEN MARINE CO., LTD.
HTM SHIPPING CO. LTD
HUDSON RIVER SHIPHOLDING SA
HYUNDAI AMERICA SHIPPING AGENCY
HYUNDAI GLOVIS CO LTD
IBLEA SHIPPING LTD/JSC NOVOSHIP
ICICLE SEAFOODS INC
ICICLE VESSEL HOLDING INC.
ICON TRIANON LLC
ICS PETROLEUM
ID WALLEM SHIPMANAGEMENT LTD
IM SHIPPING PTE LTD
IMI DEL PERU SAC
IMPERIAL EAGLE SHIPPING LLC
INDIA NAVIGATION LIMITED
INFINITY NAVIGATION S.A.
INTEDIUM INTERNATIONAL CORP
INTEROCEAN AMERICAN SHIPPING (VESSEL OPERATOR)
INTRANS CO LTD C/O SYNCRO SHIPPING CO LTD
INTREPID SHIP MANAGEMENT INC
INUI STEAMSHIP CO LTD
INVESTMENTS LTD
INVINCIBILITY SHIPPING CO. LTD

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IONIAN WAVE SHIPPING INC.
IRIS ENTERPRISES CO SA
ISC NOVIRDOSSIYSE SHIPPING COMPANY
Ishima Pte Ltd
ISLAND TUG AND BARGE LTD
ITALIA MARITTIMA SPA
IVS BULK 462 PTE LTD
J. LAURITZEN SINGAPORE PTE LTD
J. POULSEN SHIPPING A/S
J.O.J. SHIPPING / HANJIN SHIPMANAGEMENT
J.O.M. SHIPPING SA / HANJIN SHIPMANAGEMENT
J.O.O SHIPPING SA/HANJIN SHIPPING
J.O.V. SHIPPING SA
JAFETT SHIPPING INC / WALLEM SHIPMANAGEMENT LTD
JEK NAVIGATION (PANAMA) A.S C/O EXCEL MARINE CO
JIN LU NAVIGATION INC
JIN YING NAVIGATION INC/CHINA SHIPPING INTERNATION
JOHANN M.K. BLUMENTHAL GMBH & CO KG REEDEREI
JOHN C. HADJIPATERAS + SONS LTD
JOONG ANG SHIPPING CO. LTD
JOY OCEAN SHIPPING LIMITED
JOZ SHIPPING S.A. / HANJIN SHIPPING
JSC NOVOROSSIYSK SHIPPING COMPANY (NOVOSHIP)
JSC SAKHALIN SHIPPING COMPANY
JULIA VENTURE MARITIME LTD
JUPITER MARINE S.A.
K LINE PTE LTD
K NAVIGATION S.A. C/O OMC SHIPPING PTE LTD
KALLIROI NAVIGATION COMPANY C/O PILOT SHIPPING CO
KAMCO NO 11 SHIPPING / HANJIN SHIPPING
KAMCO NO.17 SHIPPING CO SA 53RD STREET EAST URBANI
KANSAI STEAMSHIP CO LTD
KARAT BULKSHIP S.A.
KASHIMA NAVIERA S.A. C/O WORLD MARINE CO
KASSIAN MARITIME NAVIGATION AGENCY LTD
KH COLBURN INC
KINAROS SPECIAL MARITIME ENTERPRISE/ELETSON CORP.
KIRBY OFFSHORE MARINE LLC
KIRKHAM COMPANY S.A.
KLEIMAR N.V.
KOBE SHIPMANAGEMENT COMPANY LTD
KOKURA SANGYO SHIP MANAGEMENT INC
KOMMANDITGESELLSCHAFT "MS SANTA FABIOLA" OFFEN REE
KOMMANDITGESELLSCHAFT MS "SAN ALBANO" OFFEN REEDER
KOMMANDITGESELLSCHAFT MS "SAN ALFREDO"
KOMMANDITGESELLSCHAFT MS "SANTA FEDERICA" OFFEN RE
KOMMANDITGESELLSCHAFT MS SANTA BIANCA OFFEN REEDER

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KOMMANDITGESELLSCHAFT MS "SEATTLE EXPRESS" OFFEN
KREY SCHIFFAHRTS GMBH & CO MS "GRAF EDZARD" KG
K-SEA TRANSPORTATION LLC
KYKLADES MARITIME CORPORATION
KYOWA SANSHO CO. LTD
L.O.S. INTERNATIONAL SA / EUKOR CAR CARRIERS INC
LA DARIEN NAVIGACION S.A
LANTERN MARITIME COMPANY
LAPIS MARITIME LIMITED
LARES SHIPPING LTD
LAURIN MARITIME AMERICA INC
LB SHIP OWNER II A/S
LEONHARDT & BLUMBERG REEDEREI GMBH & CO KG HAMBURG
LEVANTER MARITIME LTD
LIBERATOR FISHERIES LLC
LIBRA LEADER B.V.
LMS SHIPMANAGEMENT
LONGFORD DEVELOPMENTS LTD C/O GLEAMRAY MARITIME IN
LOS HALILLOS SHIPPING CO S.A
LOYALTY SHIPPING S.A. PANAMA, C/O CARRAS(HELLAS)S.
LSC SHIPMANAGEMENT SIA
LUCID RAINBOW S.A.
LUCKY MIND LIMITED
LUCRETIA SHIPPING S.A.
LUCRETIA SHIPPING S.A/ISLAND VIEW SHIPPING
LUNA LINE S.A C/O WORLD MARINE CO LTD
M/V SAVAGE INC
MAERSK TANKERS SINGAPORE LTD C/O AP MOLLER-MAERSK
MAESTO MARITIME LTD
MAGIC PENINSULA LIMITED
MAGICAL CRUISE COMPANY LTD D/B/A DISNEY CRUISE LIN
MAGSAYSAY MOL SHIP MANAGEMENT INC
MAJESTIC MARITIME COMPANY LTD C/O TAI CHONG CHEANG
MAKIRI GREEN B.V C/O CLIPPER PROJECTS A/S
MANDARIN DALIAN SHIPPING PTE LTD
MANDARIN PHOENIX SHIPPING / DASIN SHIPPING
MANDHELING MARITIME S.A., C/O HACHIUMA STEAMSHIP
MANILA SHIP MANAGEMENT INC
MAPLE DIAMOND MARITIME LIMITED
MARAD/MATSON NAVIGATION CO. INC.
MARAN TANKERS MANAGEMENT INC
MARBULK SHIPPING INC
MARFIN MANAGEMENT S.A.A.
MARGUERITE SHIPPING S.A.
MARIENVOY SHIPPING LTD / COSCO (HK) SHPG CO LTD
MARINE HARVEST CANADA INC.
MARINE OIL SERVICE

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MARINE PETROBULK LTD
MARINE RESOURCE GROUP SERVICES INC
MARINE SERVICE INT'L LLC
MARITIME LIMITED
MARITIME LTD. MONROVIA / LIBERIA
MARITIME S.A. PANAMA RIVERDALE
MARKA SHIPPING LTD
MARLOW SHIP MANAGEMENT DEUTSCHLAND GMBH & CO
MARS SHIPPING CO LTD
MARYVILLE MARITIME INC.
MASSMARINER S.A. FRIBOURG CH MASSOEL LTD
MATSON NAVIGATION COMPANY
MAYFLY SHIPPING LIMITED
MAYNARD SHIPING CORP./TSAKOS COLUMBIA
MEDCOA (SINGAPORE) PTE LTD C/O JUTHA MARITIME
MELODIA MARITIME PTE LTD
MERCATOR LINES LIMITED
MESSRS SEAROSE MARINE SA / VRONTADOS SA
MI-DAS LINE S.A. (C/O DOUN KISEN)
MILLENNIUM TRANSPORTATION E.N.E. / NEDA MARITIME
MINERVA FIDELITY S.A.
MISC BERHAD
MISUGA KAIUN (HK) LIMITED
MITSUBISGI UFJ LEASE SINGAPORE PTE LTD
MITSUMI O.S.K LINES LTD
MITSUMI OSK LINS HEATH ALBRIGHT
MK CENTENNIAL MARITIME B.V.
MK SHIPMANAGEMENT CO. LTD
MMS CO. LTD
MODERN PEAK CORPORATION
MOL SHIP MANAGEMENT (SINGAPORE) PTE LTD
MONARCH MARITIME S.A
MONC LIBERIA INC
MONEGHETTI SHIPHOLDING LTD C/O EURONAV SHIP MANAGE
MONTANA MARINE CORP C/O ENTERPRISEES SHIPPING & TR
MONTROSSE MARITIME CORP
MOON RISE SHIPPING CO/SEYEONG MARINE CO LTD
MOUNT RAINIER LIMITED
MS "ANGOL" SCHIFFFAHRTSGESELLSCHAFT MBH & CO KG
MS "JOHN WULFF" SCHIFFFAHRTSGESELLSCHAFT MBH & CO.
MS "JULIA S" H+H SCHEPERS REEDEREI GMBH & CO KG
MS "KING HARVEY" SCHIFFFAHRTS GMBH & CO KF
MS "MANHATTAN" SCHIFFFAHRTSGESELLSCHAFT MBH & CO KG
MS "MARE SICULUM" SCHIFFFAHRTSGESELLSCHAFT
MS "SANSIBAR' GMBH & CO.KG
MS "VARGAS TRADER" SCHIFFFAHRTS GMBH & CO. KG
MS 'CHRISTOPH S' H+H SCHEPERS GMBH&CO KG

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MS EXTUM-BRIESE SCHIFFAHRTS
MS HAMMONIA KORSIKA SCHIFFAHRTS GMBH & CO. KG
MS LABRADOR STRAIT SHIPPING COMPANY LIMITED
MS MARE CASPIUM SCHIFFAHRTSGESELLSCHAFT MBH&CO KG
MS MOLENE GMBH & CO KG
MS PHOENIX GMBH & CO KG
MS SANMAR SHIPPING LIMITED
MS STADT ROSTOCK ZWEITE T + H SCHIFFAHRTS GMBH
MS UNITED TAMBORA SCHIFFAHRTSGESELLSCHAFT MBH & CO
MS ALEXANDRA STEFAN PATJENS GMBH & CO REEDEREI
MSC GENEVA
MT "COLONIAN SUN" SCHIFFAHRTSGESELLSCHAFT MBH & CO
MT ARCTIC BRIDGE TANKSCHIFFAHRTSGESELLSCHAFT GMBH
MT MITCHELL LLC/GLOBAL SEAS LLC
NATIONAL NAVIGATION COMPANY
NAUTICAL VENTURES L.L.C
NAVIGAZIONE MONTANARI SPA
NAVIOS SHIPMANAGEMENT INC
NEMTASNEMRUT LIMANISL AS
NEPTUNE ORIENT LINES/APL
NET DENIZCILIK
NEW ASIAN SHIPPING COMPANY LTD
NEW EAGLE SHIPPING S.A. C/O KOYO KAIUN CO
NEWLEAD VOCTORIA LTD
NIMARES OVERSAEA CORPORATION-PANAMA
NINGBO PIONEER COMPANY LIMITED
NISSHO ODYSSEY SHIP MANAGEMENT PTE LTD
NOBAL SKY LIMITED / PACIFIC BASIN SHIPPING
NOBLE DRILLING (US) LLC
NORDDEUTSCHE REEDEREI H SCHULDT GMBH & CO KG
NORDEN SHIPPING (SINGAPORE) PTE LTD
NORDIC HAMBURG SHIPMANAGEMENT
NORTH PACIFIC FISHING, INC.
NORTHERN AXIMUTH SHIPPING LTD.
NORTHERN EAGLE LLC
NORTHERN JAEGER LLC
NORTHSTAR SHIP MANAGEMENT LTD., HONG KONG
NORTON SOUND ENTERPRISES LLC
NORWEGIAN CRUISE LINES
NORWEGIAN CRUISE LINES
NSB NIEDERELBE SCHIFFAHRTSGESELLSCHAFT MBH&CO KG
NSIN CHIEN MARINE CO., LTD
NT MARINE CO. LTD
NYK KOREA BULKSHIP CO. LTD
NYK SHIPMANAGEMENT PTE LTD
OA NAVIGATION SA
OASIS MARITIME SERVICES

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OCEAN LANCE MARITIME CO. LTD.
OCEAN LONGEVITY SHIPPING & MANAGEMENT CO LTD
OCEAN PEACE INC
OCEAN POSEIDON SHIPHOLDING SA C/O MK SHIPMANAGEMENTEN
OCEAN ROVER LLC
OCEAN TRANSIT CARRIER S.A
OCEANFLEET SHIPPING LTD
OCTAVIA SHIPPING CORPORATION
OFFSHORE SERVICE VESSELS LLC
OINOUSSIAN LADY SME/EPLOIA SHIPPING CO SA
OLDENDORFF CARRIERS GMBH & CO KG
OLDSON VENTURES LTD C/O ENTERPRISES SHIPPING & TR
OLIVE SHIPPING CO LIMITED
OMEGAS BULK CO. LTD /ENTRUST MARITIME CO
ONCHAN NAVIGATION LIMITED
OPAL SEA CARRIERS PTE LTD
ORANGE 23 GMBH&CO C/O UNITED SEVEN GMBH & CO
ORIENT APPROACH SHIPPING CO LTD / INTERORIENT MARI
ORION BULKERS GMBH&CO KG
ORION EXPEDITION CRUISES
OSG SHIP MANAGEMENT, INC
OSG SHIPMANAGEMENT (GR) LTD
OVERSEAS BOSTON LLC
OVERSEAS MARINE CO LTD
PACIFIC BASIN SHIPPING (HONGKONG) LTD
PACIFIC TRANSPORT TRADING S.A.
PACIFIC WEALTH SHIPPING CO
PACIFIC-GULF MARINE INC
PADDINGTON SHIPPING LTD
PALOMINO TRADING SA
PANMAX TANKER S.C. C/O ASAHI MARINE CO LTD
PARAISO SHIPPING S.A.
PARTITA SHIPPING S.A C/O DOJIMA MARINE CO LTD
PASSION RAY LIMITED
PEACOCK MARITIME S.A.
PEDREGAL MARITIME S.A
PEGASUS MARITIME ENTERPRISEES INC
PEREGRINE SHIPPING LLC
PERICLES MARINE LLC
PERRINE AS
PETER DOHLE SCHIFFFAHRTS-KG
PETRINA MARITIME CORPORATION, LIBERIA
PHOENIX PROCESSOR LIMITED PARTNERSHIP
PICER MARINE S.A. C/O WORLD MARINE CO LTD
PIONEER SHIP MANAGEMENT SERVICES LLC
PIT PACIFIC INVESTMENT & TRADING GMBH
PLATINUM RAY SHIPPING LTD

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POLAR EXPRESS S.A.
POLINOS MARITIME LIMITED C/O JG ROUSSOS SHIPPING
POLSKA ZEGLUGA MORSKA P.P
PORT ANGELES LIMITED
PORTLINE- TRANSPORTES MARITIMOS INTERNACIONAIS SA
POSEIDON P. INC/ AEGEAN BULK CO
POSSIDONIA SHIPPING CO LTD / DELTA INTERNATIONAL
PRESTIGE RAY LIMITED
PRIME HILL SHIPPING LTD
PRIMEROSE SHIPPING CO LTD
PRINCE KAIUN CO. LTD
PRINCESS CRUISE LINES, LTD
PRISCO (SINGAPORE) PTE LTD
PRISMA SERVICES CO./GLEAMRAY MARITIME
PRIVEWAY FORCE SHIPPING S.A
PROCEED SHIPPING S.A.
PROSPER WORLD MARINE CO LTD
QING DAO OCEAN SHIPPING CO., LTD
QINGDAO FUSHUN SHIP MANAGEMENT CO LTD
QINGDAO OCEAN SHIPPING CO LTD
RAINBOW MARITIME CO. LTD
REDFIN SHIPPING SA C/O GOOD FAITH SHIPPING CO SA
REDSTONE MARINE LTD C/O ENTERPRISE SHIPPING
REDSUN OCENA WAY SA
REEDEREI ELBE SHIPPING GMBH&CO KG
REEDEREI F. LAEISZ GMBH
REEDEREI HARMSTORF & THOMAS MEIER-HEDDE GMBH & CO
REEDEREI LAEISZ GMBH
REEDEREI NORD GMBH
REMSEN NAVIGATION CORP.
RICKMERS HAMBURG SCHIFFAHRTSGESELLSCHAFT MBH & CO
RIGEL BEREEDERUNGS GMBH & CO KG MT "MURRAY STAR"
RIMSCO
RIZZO-BOTTIGLIERI-DE CARLINI ARMATORI S.P.A
Romanzof Fishing Co. LLC
ROUND MARINE SHIPPING S.A.
ROYAL CARIBBEAN CRUISES LTD
S.T. LIN SA C/O CSL MARITIME TOKYO BRANCH
SAGA SHIPHOLDING (NORWAY) AS
SALTER SHIPPING S.A
SARACEN SHIPPING LTD
SATO STEAMSHIP CO LTD
SAUSE BROS INC
SAUSE BROS. INC.
SCC SHIPPING COMPANY
SCERNI DI NAVIGAZIONE S.R.L.
SCHIFFAHRTS GESELLSCHAFT "HANSA ARENDEL" MBH &

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SCHIFFAHRTS-GESELLSCHAFT "HANSA REGENSBURG" MBH
SCHIFFAHRTS-GESELLSCHAFT "HANSA RENDSBURG"MBH&CO K
SCHIFFAHRTS-GESELLSCHAFT "HS SCHUBERT" GMBH&COKG
SCHIFFAHRTSGESELLSCHAFT MS "NORTHERN POWER" MBH &
SCHLUSSEL REEDEREI KG (GMBH&CO)
SCORPIO SHIP MANAGEMENT S.A.M.
SCYTHIA GRAECA SHIPPING LTD
SEA BLUE SHIPPING INC/AEGEAN BULK CO INC
SEA BREEZE HH SHIPPING INC.
SEA EAGLE HH SHIPPING INC
SEA GREEN SHIPPING C/O KITaura KAIUN CO
SEA RICHES MARITIME INC
SEAA OF GRACIAHOLDINGS CO LTD
SEACARAVEL SHIPPING LIMITED
SEAQUEST ORIENTAL PTE LTD
SEARBULK NORWAY AS
SEASPAN MARINE CORPORATION
SEASPAN SHIP MANAGEMENT LTD
SEASTAR CHARTERING LTD
SEASTAR MARINE S.A.
SEATEAM MANAGEMENT PTE LTD
SELECTA STEAMSHIP LTD/INTRESCO LTD
SERENITY MARITIMA SHIPHOLDING LTD
SEVEN OCEAN LINES S.A.
SHANGHAI MARITIME LIMITED
SHANGHAI ZHENHUA SHIPPING CO LTD
SHELFORDS BOAT LTD
SHELL OFFSHORE INC
SHELTON TANKERS CO LIMITED C/O TAI CHONG CHEANG ST
SHIKISHIMA KISEN K.K
SHINYO WISDOM LIMITED
SHREE SHIPPING LIMITED
SIBERIAN SEA FISHERIES LLC
SIERRA LALA SHIPPING COMPANY BV
SIGNATURE SEAFOODS INC
SKOPELOS II SPECIAL MARITIME ENTERPRISE
SKOPELOS SHIPPING CORP C/O ERNST JACOB SHIPMANAGEM
SNC LEGAZPI
SNOPAC PRODUCTS INC
SNUG S.R.L
SNUG SRL
SONGA SHIPMANAGEMENT LTD
SOUTHERN PACIFIC HOLDING CORPORATION
SOUTHERN ROUTE MARITIME S.A. C/O OLDENDORFF CARRIE
SOUTHERN SHIPMANAGEMENT
SOUTHWEST MARITIME 1 INC C/O JAHRE-WALLEM AS
SOUTHWEST MARITIME 2 INC C/O JAHRE-WALLEM AS

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SOUTHWEST MARITIME 3 INC C/O JAHRE-WALLEM AS
SOUTHWEST MARITIME 4 INC C/O JAHRE-WALLEM AS
SPACE SHIPPING LTD
SPORADES SPECIAL MARITIME ENTERPRISE
SPRINGFIELD SHIPPING CO PANAMA S.A.
ST OCEAN SHIPPING C/O SANTOKU SENPAKU CO LTD
ST. MAXIMUS SHIPPING XO. LTD., C/O REEDEREI THOMAS
STAR BULK CARRIER CO S.A.
STAR EPSILON LLC/STARBULK S.A.
STAR REEFERS (UK) LTD
STARBOUND INC
STARGOLD SHIPPING CORP. PANAMA/GOLDEN MANAGEMENT
STATE OF ALASKA (ALASKA MARINE HIGHWAY SYSTEM)
STELLAR EAGLE SHIPPING LLC
STEVENS LINE CO LTD
STEVENS TRANSPORTATION LLC
STICHTING GREENPEACE COUNCIL
STILAN MARITIME INC. C/O HISTRIA SHIPMANAGEMENT
STRONG INTERNATIONAL CORP C/O ENESEL S.A.
STX PAN OCEAN SHIPPING CO LTD
SUGHARA KISEN CO LTD
SUN GOD NAVIGATION S.A
SUN LANES SHIPPING S.A. / NIKKO KISEN CO LTD
SUN LEAF SHIPPING S.A C/O MEC CO LTD
SUNBERTH SA/MTM SHIP MANAGEMENT
SUNNY AMAZON MARITIME S.A.
SUNNY OASIS MARITIME S.A.
SUNPRIDE FINANCE COMPANY
SURBY NAVIGATION LIMITED C/O RICKMERS SHIPMANAGEME
SWB INTERNATIONAL/VESTA SHIPPING CO
SYNERGY MARITIME PRIVATE LIMITED
TAIYO NIPPON KISEN CO LTD
TAIYO SANGYO TRADING & MARINE SERVICE LLC
TAMAI STEAMSHIP CO. LTD
TANAGRA SHIPPING S.A.
TANKER PACIFIC MANAGEMENT (SINGAPORE) LTD
TANKER PACIFIC MANAGEMENT (SINGAPORE) PTE LTD
TANKERSKA PLOVIDBA
TEEKAY SHIPPING LTD
TERAS BBC OCEAN NAVIGATION ENTERPRISES HOUSTON
TERN SHIPHOLDING CORP/APL MARITIME LTD
TEU CARRIER (NO. 1) CORP.
TEUCARRIER (NO. 4) CORP
TEUCARRIER (NO. 5) CORP
THE BOAT CO.
THE GREAT EASTERN SHIPPING CO. LTD.
THENAMARIS SHIPS MANAGEMENT INC.

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THIEN & HEYENGA BEREDERING UND BEFRACHUNG GMBH
THOME SHIP MANAGEMENT PTE LTD
TIANJIN TIANHUI SHIPPING ENTERPRISE CO LTD
TIMUR SHIP MANAGEMENT
TM SHIPOMANAGEMENT CO., LTD
TMS BULKERS LTD
TMS DRY LTD
TMS SHIPMANAGEMENT GMBH
TMS TANKERS LTD
TMT CO LTD
TOLANI SHIPPING CO. LTD
TOPAZ SEA CARRIERS PTE LTD
TOSHIN KISEN CO LTD.
TOTEM OCEAN TRAILER EXPRESS
TPC KOREA CO. LTD
TRADE FORCE SHIPPING /ALLSEAS MARINE
TRADEWIND NAVIGATION S.A. & MURAKAMI SEKIYU CO. LT
TRANSOCEAN MARITIME AGENCIES S.A.M
TRANSOCEANIC CABLE SHIP COMPANY LLC
TRENDY GOOD CO LTD
TRIDENT SEAFOODS CORPORATION
TRIUMPH MANAGEMENT CO
TRUCARRIER (NO. 2) CORP.
TS MARITIME CORPORATION
TSAKOS COLUMBIA SHIPMANAGEMENT
TYON RIVER SHIPPING CO. LTD
U.S. FISHING, LLC
UGLAND MARINE SERVICES LLC
U-MING MARINE TRANSPORT (SINGAPORE) PTE LTD
UNICOM MANAGEMENT SERVICES SYPRUS LTD
UNIMAK VESSEL LLC
UNITED OCEAN SHIP MANAGEMENT PTE LTD
UNITED SEAFOODS LLC
UNITED SHIPPING SERVICES NINE C/O ULJANIK SHIPMAN
UNITED STATES SEAFOODS LLC
UNIVAN SHIP MANAGEMENT (HK) LTD
UNIVERSAL BREMEN BV
UNIX LINE PTE LTD
V SHIPS (UK) LTD
V.SHIPS NORWAY AS
V.SHIPS USA LLC (BOSTON)
VALLES STEAMSHIP (CANADA) LTD
VALLOY SHIPPING CO. LTD C/O UNICOM MANAGEMENT SERV
VARUN SHIPPING COMPANY LIMITED
VELOPOULA SPECIAL MARITIME ENTERPRISE
VICTORIA SHIP MANAGEMENT INC
VIKING SUPPLY SHIPS A/S

Enclosure: WA State Maritime Cooperative Member List

VIOET RAY LIMITED
VROON SHIP MANAGEMENT B.V.
WALLEM GMBH & CO KG
WALLEM SHIPMANAGEMENT LIMITED
WAN HAI LINES (SINGAPORE) LTD
WATERMAN S.S. CORP
WEALTH OCEAN SHIP MANAGEMENT (SHANGHAI) CO LTD
WEST FORTUNE SHIPPING S.A., C/O MKSHIPMANAGEMENT C
WEST MARITIME PTE LTD
WEST MOON SA C/O ENTERPRISES SHIPPING & TRADING SA
WESTFAL LARSEN SHIPPING US
WHITE PEONY SHIPPING S.A.
WHITNEY HOLDING S.A.
WILHELMSSEN LINES CAR CARRIER LTD
WILHELMSSEN LINES SHIPOWNING MALTA
WILHELMSSEN SHIP MANAGEMENT (KOREA) LTD
WILHELMSSEN SHIP MANAGEMENT (NORWAY) AS
WILHELMSSEN SHIP MANAGEMENT LTD
WILHELMSSEN SHIP MANAGEMENT SINGAPORE PTE LTD
WISODOM MARINE LINES SA EASTERN CAR LINER CO
WORLD MARINE CO. LTD
WORLDBOND SHIPPING INC
WSDOT FERRIES DIVISION
YAKUTAT INC
YAMASA NEW PULSAR VSA / EVERGREEN MARINE TAIWAN
YANG MING MARINE TRANSPORT CORP
YASA TANKER ISLETMECILIGI AS
YASA TANKERCILIK VE TASIMACILIK AS
YELLOWSTONE SHIPPING INC
YU PEAK SHIPPING S.A./CHINA SHIPPING (HK) MARINE C
YURI SHIPPING S.A./SEAQUEST ORIENTAL MNGT
ZHEN HUA 9 SHIPPING (SVG) CO. LTD
ZIM INTEGRATED SHIPPING SERVICES
ZODIAK MARITIME AGENCIES LIMITED
ZOVERLORD MARINE COMPAN LTD/CHINESE-POLISH JOINT S

From: Campbell, Laura <Laura.Campbell@portofportland.com>
Sent: Thursday, October 04, 2012 1:50 PM
To: ECY RE Spills Rule Making
Cc: Vincent, Richard
Subject: Port of Portland Signed DOE Comments
Attachments: Port - WADOE Letter.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Sonja:

See the attached for your comment collection. I am also faxing you a copy in the next few minutes. Can you please confirm via e-mail that you have received the fax as well as this PDF version?

Thank you,

Laura Campbell
Administrative Coordinator
Marine Operations
Port of Portland
P: (503) 415-6234
F: (503) 548-5601
C: (503) 949-2353



October 4, 2012

Ted Sturdevant, Director
Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

RE: Oil Spill Contingency Plan Rule Update

Dear Mr. Sturdevant:

The Port of Portland would like to thank you for this opportunity to provide comments on draft rules concerning oil spill contingency planning. The Port of Portland is a municipal corporation operating four public marine terminal facilities on the lower Columbia/Willamette/Snake River system. Our tenants, as well as private terminal operators on the Oregon side of the Columbia and in the Portland harbor of the Willamette River, rely on cost effective methods of shipping to both import and export products using the Columbia River system. The eight Washington ports along the Columbia River also rely on cost effective transit of goods.

In an April 20, 2011 memo to the Washington Department of Ecology (DOE), Washington Governor Gregoire asked that the Department "ensure that rules addressing cargo ship spill response requirements minimize potential impacts to discretionary cargo moving through our state, providing protections appropriate to the level of risk posed by different vessels and sectors." The Port of Portland shares this interest.

Unfortunately, we do not believe this balance has been achieved in the Washington Department of Ecology's proposed Oil Spill Contingency Plan. Our specific concerns are:

- The Columbia/Willamette/Snake River system is inherently different than the Puget Sound open water environment and this difference is not reflected in the proposed rulemaking. In addition, the type and volume of petroleum product transiting the Columbia River system is different. Any new rules should reflect these differences by providing alternate standards appropriate to the Columbia River system.
- The environmental interests which the Department is attempting to preserve could be achieved by more appropriate and cost-effective measures.
- The current draft rules are estimated to double costs to \$1,100 for cargo vessels carrying discretionary cargo on the Lower Columbia River, a 200% cost increase. In addition, the per day fee charged to contracted U.S. Army Corps of Engineer dredges on the river is expected to increase from \$272 per day to \$544, and may result in less dredging availability unless budgets increase to deal with the additional fees.

- Agricultural operations east of the Cascades, in both Eastern Oregon and Washington, work with extremely thin margins in order to be profitable and rely on cost competitive methods of getting their export products to foreign markets. Any additional cost will negatively affect these agricultural exports and potentially affect the jobs that they provide.
- Relative to Puget Sound, the Columbia/Willamette/Snake River system has significant challenges comparatively in pilotage, price of bunkers, and possibly now in unnecessary increased regulatory costs. This places the Columbia River system at a competitive disadvantage relative to Puget Sound.
- The increase in costs to shippers and the potential subsequent loss of ship calls risks the money invested in both the channel deepening and Columbia River lock improvements.
- Marine activities on our “river highways” are vital to our economy, supporting jobs and access to international markets for trade – it is this region’s gateway to the globe. Over 1,000 businesses count on the Port of Portland’s marine facilities to get their goods to market. Portland’s seaport and marine activities support \$921 million in total income, \$776 million in business revenues, and a healthy mix of over 20,000 valuable family wage jobs located in the Portland metropolitan area and southwest Washington.

The Port of Portland is an active member of the Maritime Fire & Safety Association (MFSA) and has been following the proposed rulemaking since House Bill 1186’s passage in the 2011 Washington Legislative session. The Port fully supports MFSA’s position on this rulemaking and encourages you to address the concerns that MFSA has expressed during this public comment period. Of particular concern are the following requirements identified in the draft rule:

- Aerial Surveillance – The use of this type of equipment in a river environment vs. the open-water of Puget Sound appears unwarranted. Furthermore, the use of FLIR type equipment in aircraft to detect/track the refined petroleum product transiting the Columbia River system has not been fully tested to determine if it will work under the circumstances of a spill to a river environment.
- 4-hour Planning Standard (Current Buster Technology) – The use of this technology in a river system with a narrow navigational channel is unproven and should not be required without additional testing and an analysis of whether existing equipment/procedures will achieve the same or better results.
- Vessel of Opportunity (VOO) program – MFSA and their partner organization Clean Rivers Cooperative already has boats, equipment and trained staff in place along the Columbia River from the Portland/Vancouver harbor all the way to the mouth of the River at Astoria. In addition, MFSA has already established a unique relationship with member Fire Agencies on the Lower Columbia River which adds another layer of trained personnel to provide appropriate coordinated response in the case of a spill.

The Port respectfully requests the following:

- That DOE modify the rulemaking to incorporate alternate planning standards for the Columbia River that are appropriate to a riverine environment, the level of risk, and cost effectiveness, and that support the continuation of discretionary cargo movement on the Columbia River and its regional multi-state transportation system.
- That DOE address MFSA's concerns expressed in their comments regarding this rulemaking.
- That DOE complete further economic analysis on the rules as the analysis to date appears inadequate.
- There appears to have been little coordination with the Oregon Department of Environmental Quality (ODEQ), the Port asks that additional discussions and coordination with ODEQ be conducted before this rule is made final.

This rulemaking has significant consequences for Oregon and Washington shippers, growers, and other businesses that rely on maritime transit on the Columbia/Willamette/Snake River System to international markets. It is critical that these proposed regulations be fully vetted to account for the unique nature of the river system and that the costs and true benefits are fully understood.

Sincerely,



Bill Wyatt
Executive Director

- c: Governor Chris Gregoire, State of Washington
Governor John Kitzhaber, State of Oregon
Sonja Larsen, Washington Department of Ecology
Todd Coleman, Port of Vancouver
Lanny Cawley, Port of Kalama
Geir-Eilif Kalhagen, Port of Longview
Tim Arntzen, Port of Kennewick
Scott Keller, Port of Richland
Jim Toomey, Port of Pasco
Wanda Keefer, Port of Clarkston

From: Ulrich, David B CIV Code 106.2, Code 106.22 <david.b.ulrich@navy.mil>
Sent: Thursday, October 04, 2012 1:49 PM
To: ECY RE Spills Rule Making
Subject: Comments to Revised Oil Spill Contingency Plan Regulations

Follow Up Flag: Follow up
Flag Status: Completed

Below comments are submitted from U.S. Navy, Region NW:

WAC 173-182-264 Notification requirements for facility spills to ground or containment that threaten waters of the state

The second sentence of this section states (all) spills over 42 gallons are considered reportable. The following sentence states that a spill onto a paved surface is considered to have not impacted ground. Request clearer language on whether spills 42 gallons and greater onto a paved surface are/are not reportable. Request clarification on reporting procedures, e.g., provide notification only to Department of Ecology NW Region Office, or include WA Emergency Management and USCG (or EPA) if waterways or groundwater are threatened.

David Ulrich
Navy On-Scene Coordinator PM
Navy Region NW
Cell (360) 340-5991
Office (360) 315-5410

-----Original Message-----

From: Pilkey-Jarvis, Linda (ECY) [mailto:JPil461@ECY.WA.GOV]

Sent: Tuesday, August 28, 2012 14:03

To: amoret@ppcla.com; Andrew_Holbrook@kindermorgan.com; annikaw2@ptpc.com; Bill Collins; Bill Griffith; Bill Lankford; Bill.Stowell@nustarenergy.com; BradRosewood@chevron.com; Brian Wuellner; Charles_mathis@kindermorgan.com; Chris Church; Pitchford, Clark A CIV Navy Region NW, N40; Condon, Michael W; Dan Kovacich ; Dan York; Dan.tibbits@nustarenergy.com; Dan_orourke@kindermorgan.com; David A. Sawicki (sawickda@bp.com); Ulrich, David B CIV Code 106.2, Code 106.22; Dennis McVicker; Erin Carriere; Frederic LeJeune (fred.lejeune@conocophillips.com); Harley Franco; jacobswt@bp.com; Jeff Loa ; Jeff Pitzer; Jeffrey Pitzer; Jeffrey.McBride@conocophillips.com; John Husum; John Schumacher (john.g.schumacher@tsocorp.com); Josh Ross; JR.marti@nustarenergy.com; Karen Hays (karen.hays@aktanker.com); Karl Iams; Liz Wainwright (wainwright@pdxmex.com); lpatterson@ppcla.com; Lynnette Langlois; Marisa Chilafoe (Chilafoe@mfsa.com); Marjorie Hatter; Michael Curry; Mike.Poirier@nustarenergy.com; mkolata@soundrefining.com; Patrick_davis@kindermorgan.com; Paul A. Caruselle (paul.a.caruselle@exxonmobil.com); Pete Lundgreen; Wallis, Renee B CIV Navy Region NW, N40; Richard Graham; Rob Yarbrough (Rob.Yarbrough@conocophillips.com); Roger Loney ; Roger Mowery; Roger.ainsworth@imperiumrenewables.com; Sammy Makalena; Shaun.wilkinson@shell.com; Stephen J Alexander (stephen.alexander@bp.com); Steve.maulding@bp.com; Susan.Krienen@shell.com; Ted.lilyblade@nustarenergy.com; tedf@ptpc.com; Teresa.Glodek@bp.com; Tim Kline; tlg@usor.com; Todd Ellis; Tom Callahan (tcallahan@wsmcoop.org); Tracy.Hascall@shell.com; Troy Goodman (tgoodman@soundrefining.com); Wayne Arcand; wilricard@chevron.com

Cc: Larson, Sonja (ECY)

Subject: Revised Oil Spill Contingency Plan Regulations open for Public Comment

Hello everyone - please send this email to others if you think they are interested. This email has information about the open comment period for the oil spill planning rules. Please let me know if you have questions.

Linda Pilkey-Jarvis

I want to provide you with an update on our revised oil spill contingency plan regulations which will be open for formal public comment on September 5th, 2012. As you may recall, the 2011 Legislature passed oil spill related legislation HB 1186. Among other things that legislation directed Ecology to amend our existing Oil Spill Contingency Plan Rule (Chapter 173-182 WAC) by the end of 2012. In June we completed a 6 month rule development process that benefitted tremendously from input by our stakeholder advisory committee. I believe the draft rule represents a sensible balance between the need to protect our environment, economy and quality of life while ensuring the cost to industry for phased-in implementation is reasonable and will not adversely affect the competitiveness of our ports that trade in discretionary cargoes.

The proposed rule has been signed and will be open for formal public comments from Sept 5th until October 4th.

If adopted in its current version, the draft rule proposal would:

- . Update state oil spill preparedness planning standards to incorporate best achievable protection and best available technology.
- . Improve the state's current vessels of opportunity system.
- . Establish a volunteer coordination system.
- . Improve the state-required notification serious spill threats (such as large disabled ships) as well as actual spills.
- . Make other changes related to oil spill contingency plans and Ecology's review and approval process.

The proposed rule and other documents are available for review at:

<http://www.ecy.wa.gov/programs/spills/rules/1106.html> <<http://www.ecy.wa.gov/programs/spills/rules/1106.html>> .

Public Hearings are scheduled for this rule: September 25th, & 26th as follows:

- . FIRST HEARING: September 25th, 2012

Holiday Inn Express

8606 36th Ave, NE

Marysville, WA

Time: 6:00 PM

Questions and comments at this hearing may also be provided via webinar at:

http://www.ecy.wa.gov/programs/spills/community_outreach/sppr_webinar.html

<http://www.ecy.wa.gov/programs/spills/community_outreach/sppr_webinar.html>

- . SECOND HEARING: September 27, 2012

Vancouver-Clark Parks and Recreation

Marshall Community Center

1009 E. McLoughlin Blvd.

Vancouver, WA

Time: 3:00 PM

The public comment period closes on October 4th. You and your constituents may provide comments in the following ways:

1. Testify or submit written comments in person at the two public hearings scheduled for September 25th and 27th.

2. Email your comments to: spillsrulemaking@ecy.wa.gov <mailto:spillsrulemaking@ecy.wa.gov>
3. FAX comments to 360-407-7288
4. Testify via webinar at the September 25th public hearing in Marysville:
http://www.ecy.wa.gov/programs/spills/community_outreach/sppr_webinar.html
<http://www.ecy.wa.gov/programs/spills/community_outreach/sppr_webinar.html>
5. Formal comments on the rule and questions should be directed to:

Sonja Larson, (360) 407-6682, sonja.larson@ecy.wa.gov
Department of Ecology
PO Box 47600
300 Desmond Dr.
Olympia, WA 98504

From: Ashley Helenberg <Ahelenberg@portoflongview.com>
Sent: Thursday, October 04, 2012 1:37 PM
To: Sturdevant, Ted (ECY); ECY RE Spills Rule Making
Subject: Public Comment
Attachments: PortofLongviewPublicCommentOilSpillResponse.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Please accept the attached letter as public comment for the Oil Spill Contingency Plan on behalf of the Port of Longview.

Please let me know if you have any questions, thanks!

Ashley Helenberg | *Communications/ Public Affairs Manager*
10 Port Way | P.O. Box 1258 | Longview, WA 98632
T: 360-425-3305 | D: 360-703-0206 | F: 360-425-8650
E: ahelenberg@portoflongview.com | www.portoflongview.com



All email communications with the Port of Longview are subject to disclosure under the Public Records Act and should be presumed to be public.



October 4, 2012

Director Ted Sturdevant
Washington State Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Delivered electronically to: tstu461@ecy.wa.gov

Dear Director Sturdevant:

The Port of Longview is a strong proponent of emergency preparedness when it comes to oil spill response on the Columbia River, hence our interest in the Oil Spill Contingency Plan Rule Update. Through our memberships with the Washington Public Ports Association and Marine Fire & Safety Association, we have become aware of proposed regulations that may negatively impact Port business.

Washington State is one of the most marine dependant states in the country. A recent report released by the Washington Council on International Trade states that nearly 40% of jobs in Washington are tied to the trade industry. By overburdening our river with additional, costly regulations, we run the risk of creating an unfriendly trade climate that will ripple through hundreds of thousands of jobs and households in the Pacific Northwest.

Similar to President Obama's National Export Initiative, Governor Gregoire herself launched a plan in 2010 to increase State exports 30% within five years. With the recent completion of the Columbia River Channel Deepening project, followed by more than \$390 million dollars in trade related investments along the Columbia, overburdening the system with new fees and unnecessary regulations may steer discretionary cargo and jobs right out of the State. Cargo coming to Washington has the option of diverting to nearby Canadian ports and the impending opening of the expanded Panama Canal poses its own threats to discretionary business at West Coast ports.

Specifically, we ask for your leadership in revising the following three areas of the proposed rule:

- Vessels of Opportunity: we appreciate Ecology's recent downsizing of the number of contracted vessels required and in the agency's reduction of the proposed zone where this response method would be mandated. However, we maintain that this method is ideally suited for a large area where unpredictable currents require a diverse and mobile volunteer force to collect spilled oil. These conditions do not exist in the confined and predictable waters of the Columbia River.

- Aerial Surveillance: while Ecology has shown flexibility in some areas, this is an area where the requirements have actually grown more rigid. The recent draft rule now requires two aerial surveillance assets deployed within 6 and 8 hours (respectively) of a major spill for purposes of oil spotting. Again, this is an area where the scale of resources mandated is out of sync with the actual effectiveness this mandate would provide. During the *Deepwater Horizon* spill event aerial surveillance aided oil spotting in the vast environs of the Gulf of Mexico, a system non-comparable to the Columbia River.
- Current Buster: the proposed enhancement to the Cathlamet Planning Standard requires the addition of a 4-hour response window and use of Current Buster technology. This equipment is untested, especially in a riverine environment and poses a significant investment. Therefore, if use of this technology is mandated, the requirement should be limited to use in Puget Sound.

We have always enjoyed and appreciated great working relationships with our State's leadership and regulatory agencies in expanding Washington State's international trade industry. From infrastructure funding to project guidance and recommendations, Washington's partnerships continue to be one of our best assets. We strongly encourage agencies, leaders and partners to come back to the table and amend regulations that will protect both our natural and business environments.

Sincerely,



Geir-Eilif Kalhagen
Chief Executive Officer

Cc: Governor Gregoire
Keith Phillips, Governor's Executive Policy Office
18th District Senator Joe Zarelli
18th District Representative Ann Rivers
18th District Representative Ed Orcutt
19th District Senator Brian Hatfield
19th District Representative Brian Blake
19th District Representative Dean Takko

From: Pauline Marchand <Pauline.Marchand@InternationalGroup.org.uk>
Sent: Thursday, October 04, 2012 1:12 PM
To: ECY RE Spills Rule Making
Cc: David Baker
Subject: IG comments to oil spill contingency plan and NRDA rules
Attachments: IG Letter Washington Oct 2012.pdf

Follow Up Flag: Follow up
Flag Status: Completed

To whom it may concern

The International Group is writing to submit its comments to the Washington State Department of Ecology regarding the proposed rules on oil spill contingency plan and natural resource damage assessment.

Please find the International Group's written comments in the attached pdf.

We look forward to receiving confirmation of receipt, and remain at your disposal for further information.

Best regards,

Pauline Marchand

International Group of P&I Clubs
Peek House
20 Eastcheap
EC3M 1EB
LONDON
UNITED KINGDOM
+ 44 7557 283 752



International Group of P&I Clubs

Department of Ecology
P.O. Box 47600
Olympia
WA 98504-7600

4th October 2012

RE: PROPOSED OIL SPILL CONTINGENCY PLAN AND NRDA RULES

Dear Ms Larson, Dear Ms Post

I am writing to you as Chairman of the International Group of P&I Clubs' (the Group) Pollution Subcommittee.

The International Group comprises thirteen mutual not-for-profit marine insurance associations ("Clubs") which, between them, cover the legal liabilities to third parties relating to the use and operation of ships. This includes pollution, loss of life and personal injury, damage to fixed and floating objects, cargo loss, etc. The Clubs are true mutuals, i.e. the shipowner members are both insured and insurers and, as such, third party liabilities are shared between the members.

The thirteen member Clubs of the International Group insure over 90% of the world's ocean-going tonnage and approximately 95% of the world's tanker fleet. As such the Group Clubs are actively involved in ensuring that their shipowner members comply with Federal and State vessel response plan requirements.

The International Group very much appreciates the opportunity to comment on the proposed Oil Spill Contingency Plan Rule (173-182 WAC) and on the Natural Resource Damage Assessment (NRDA) Rule (173-183 WAC). For ease of reading we have listed our comments in two distinct sections below.

I. Comments on the Oil Spill Contingency Plan Rule

The International Group had previously addressed serious concerns with regards to House Bill 1186, in particular on the new Vessel of Opportunity program, the volunteer coordination system and the increased penalties. I attach these comments again as an Appendix to this letter for your attention.

II. Comments on the NRDA Rule

The current schedule has a compensation range between \$1 and \$100 per gallon spilled for any spill volume. The change proposed in this rule will make the range between \$3 and \$300 per gallon for spills of 1,000 gallons or more in volume.

Although the International Group appreciates that the money collected is used to restore and enhance oil-spill related injuries in the area of the spill, this increase is unjustified as, based on the factors



used in the compensation schedule, the maximum possible/ceiling per gallon damage assessment has never been reached. The proposed increases are clearly not based on the historical experience of incidents and claims arising therefrom in Washington State, which should form the central basis of any proposed changes. This is clear given that the Frequently Asked Questions accompanying Rule Making (WAC 173-183) states that “since the adjustment was made in April of 2009, the average assessment determined by the Compensation Schedule has been \$27.36 per gallon of oil spilled. This figure comes from 71 cases”. If this is the case, then the existing compensation range between \$1 and \$100 is more than adequate and there is no justification to increase the range to between \$3 and \$300 per gallon.

Washington State Department of Ecology readily admits in the Preliminary Cost-Benefit and Least Burdensome Alternative Analyses (July 2012, Publication no. 12-08-008) that they could not determine the change in probability of contacting shoreline given the change in definition of “shoreline” and that it is therefore only possible to analyse that change qualitatively. Similarly, it is admitted that the definition of “*recovered oil*” has only been analysed qualitatively. Yet, Washington State Department of Ecology states that “*liable parties receive less recovery credit and pay more damages with the proposed rule definition of “shoreline” and that “there is conceivably a cost to liable parties in the form of small recovery credit, or greater damages” arising from the change in the definition of “recovered oil”.*

Given the possible impacts of these changes on the liable parties as stated by Washington State Department of Ecology, and with little hard evidence/justification provided that the changes are necessary, the Group believes that the proposal to increase the current compensation ranges from between \$1 and \$100 per gallon to between \$3 and \$300 per gallon should be put on hold until the necessary justification is provided that such changes are needed.

Yours sincerely

Colin Williams
Chairman, Pollution Sub-committee
International Group of P&I Clubs



International Group of P&I Clubs

**WASHINGTON STATE PROPOSED SECOND SUBSTITUTE HOUSE BILL 1186 – 2SHB 1186 –
H AMD 63 (“House Bill 1186”)
POSITION OF THE INTERNATIONAL GROUP OF P&I CLUBS (IG)**

Introduction

The 13 P&I Clubs (the Clubs) that comprise the IG are mutual not-for-profit insurance organizations that between them cover the legal liabilities to third parties (which include pollution, loss of life and personal injury, damage to fixed and floating objects, cargo loss) of approx. 90% of the world’s ocean-going tonnage. The Clubs are mutual organisations, that is the shipowner members are both insured and insurers and, as such, third party liabilities are shared (pooled) between the Members. Clubs are individually liable for claims up to US \$8 million. Above this amount, claims up to a figure of approx. US \$1 billion for oil pollution damage are pooled between the 13 Clubs.

House Bill 1186

The IG has a close interest in the proposals contained in House Bill 1186 since the IG Clubs insure approx. 95% of the world’s tanker fleet and the IG Clubs’ are actively involved in ensuring that their Members comply with State and Federal vessel response plan requirements.

The IG does however have significant concerns with House Bill 1186 which contains unrealistic and counter-productive proposals that would require tank owners or operators to establish or fund a new Vessel of Opportunity (VOO) program to supplement current spill response requirements. The IG supports the concerns already expressed by the Western States Petroleum Association (WPSA) that the proposals could be counter-productive, not least since Washington State already has a VOO program which provides training and contracts with vessels that can effectively support an oil spill response. It would be unfortunate if the current existing and effective arrangements are replaced with a system that fails to achieve the objective of improving safety, particularly in the absence of any evidence that it would meet this objective and given the excellent safety record of shipping in Washington State waters.

The IG also has concerns with the “volunteer co-ordination system” proposal which, as has also been pointed out by the WPSA, has been drafted without reference to any specific information about existing volunteer response programs that are in place, including the current work undertaken by the Department of Ecology with stakeholders which includes examining the safety and liability for volunteers.

The increased penalties contained in Section 11 are also unnecessary. No reasoned justification has been provided to suggest that an increase to the existing penalties that are

contained in both State and Federal legislation is warranted. The IG therefore opposes the proposals to increase the penalties in Section 11 on such an arbitrary basis.



International Group of P&I Clubs

In conclusion, the IG supports the WPSA position that House Bill 1186 either duplicates or conflicts with current State and Federal laws and, as a result, the IG questions the necessity for the proposals contained in the Bill, in particular the proposals on the VOO program, the volunteer co-ordination system and the increased penalties.

From: Stephanie Buffum <stephanie@sanjuans.org>
Sent: Thursday, October 04, 2012 12:16 PM
To: Larson, Sonja (ECY)
Subject: Friends of the San Juans Oil Spill Comment Letter - Please use this one
Attachments: FSJ Oil spill Cmt ltr 10-1-12 - final.docx

Follow Up Flag: Follow up
Flag Status: Completed

Dear Ms. Larson,

Attached is the Friends of the San Juans comment letter on the Oil Spill Contingency Planning Rule (Chapter 173-182 WAC).

We look forward to the State playing a lead role in helping prepare for a spill from crude transported through the San Juan archipelago.

Stephanie

Stephanie Buffum Field
Executive Director

FRIENDS OF THE SAN JUANS
POB 1344 Friday Harbor, WA 98250
360. 378.2319 office
360.472.0404 cell
Stephanie@sanjuans.org

FRIENDS OF THE SAN JUANS

POB 1344 Friday Harbor, WA 98250 (360) 378-2319 www.sanjuans.org

October 1, 2012

Delivered by email: sonja.larson@ecy.wa.gov

Sonja Larson
Department of Ecology
PO Box 47600
300 Desmond Dr.
Olympia, WA 98504

Re: Public Comment on the Oil Spill Contingency Planning Rule (Chapter 173-182 WAC).

Dear Ms. Larson and the Rule Advisory Committee Members:

On behalf of over 2,000 members who reside in the San Juans, we appreciate the opportunity to comment on the Oil Spill Contingency Planning Rule (Chapter 173-182 WAC).

Hundreds of thousands of tourists enjoy the beauty of the San Juans annually. Families rent sailboats and yachts, children attend camps, canoes and kayakers paddle, and vacationers enjoy our local restaurants, accommodations, and shops.

Maintaining the health of these islands is critical to preserving our local and regional economy and regional Coast Salish cultural.

According to the Outdoor Industry Association, outdoor recreation supports 115,000 jobs and contributes \$11.7 billion to the state economy. In San Juan County, tourism is valued to generate over \$51 million dollars in spending and 669 jobs. International, national, and regional media and publications continually show a strong interest in the destination value of the San Juans.¹

A large oil spill would change this overnight.

San Juan County is surrounded by narrow shipping channels with strong currents and navigational challenges. A strong and immediate response to a major oil spill with appropriate equipment and personnel is imperative.

The San Juans are already impacted by the export of tar sands to all five refineries in Washington State. The refineries are fed by almost 100 tankers coming south through the Salish Sea from

¹ New York Times: The 41 Places to Go in 2011—listed as the number 2 place to visit in the world, in between Santiago, Chile as number 1 and Koh Samui, Thailand as number 3. (Editor's tagline related to the San Juan Islands: "Bold-face restaurateurs vie with unspoiled nature. Nature wins."), National Geographic Traveler: The world list featured San Juan Islands as number 3 in the 10 Best Trips of Summer 2011, "all about weather, whales, and water", Travel + Leisure: World's Best List in 2011 and 2010, the number 4 position for Top Islands (moving up from number 5 in 2009), Life: 100 Places to See in Your Life Time, July 2011, USA Today: Best Wildlife Watching Spots in Each State, July 2011, Lonely Planet: US Islands that Won't Break the Bank, July 2011, New York Times: A Directory of Rare Wonders, May 2011, HUFFPOST TRAVEL: 10 Best Whale Watching Destinations Around the World, April 2011, The TODAY Show, NBC: Affordable Secret Island Getaways, April 2011, AOL Travel: Six Best Beach Vacation Spots in the Pacific Northwest, February 2011, Sunset magazine: "One of the Best Coastal Vacation Spots in the West 2010"

Canada every year, as well as by the Puget Sound Spur of the Trans-Mountain pipeline. Both tankers in the sound and the Trans-Mountain pipeline create the risk of a tar sands disaster in the Salish Sea.

Based on recent experience in Kalamazoo Michigan in 2010, an event involving tar sands bitumen material could be far worse than an oil spill. The Kalamazoo River tar sands bitumen disaster turned out to be the most costly onshore pipeline break in U.S history. We need to know exactly how this type of a spill would be handled in this region.

This spill was the result of a pipeline rupture from the Enbridge pipeline running through Marshall, Michigan. This spill was reported to cost \$29,000 per barrel to cleanup which makes it the most costly spill in US history. Prior to this incident, the average crude oil spill in the past decade is reported to be approximately \$2,000 per barrel.

We request that the final Cost Benefit and Least Burdensome Alternative Analysis include the cost associated with the 2010 Kalamazoo River spill in Michigan. Cleanup and restoration of the Kalamazoo River diluted bitumen spill is on-going.

The proposed pipeline expansion projects in Canada are poised to significantly increase vessel traffic carrying Alberta bitumen (tar sands) oil through the waters around the San Juan Islands and the Strait of Juan de Fuca. These vessels may be bound for Washington ports or move through our waters bound for other destinations. It is also expected that the trans-boundary pipeline between Canada and the United States will significantly increase their capacity and expand their tank farm capability accordingly.

Oil from Alberta bitumen, even once diluted, is uniquely difficult to remove after a spill, because of its properties. Alberta bitumen oils also generally sink, or some portion is expected to sink, which renders ineffective conventional techniques to contain and remove oil from the water's surface. Sinking oil poses a risk of contamination to sediments and their ecosystems, which include economically and culturally valuable shellfish and fisheries.

Increased shipping traffic from proposed coal export terminals should also be a consideration. Projections for coal ships alone moving through Washington and British Columbia waters of the San Juans (Strait of Juan de Fuca, Rosario Strait, Haro Strait, Boundary Pass, and the Strait of Georgia) could mean an additional 1,774 transits from 887² cargo ships exporting from ports in British Columbia and the proposed Gateway Pacific Terminal outside of Bellingham.

DESIGNATE SAN JUAN COUNTY AS A STAGING AREA

Having San Juan County identified as a Staging Area and having additional spill response equipment and personnel resident in San Juan County to meet the two, three, four, and six hour planning standards will significantly improve the response time and the capacity to contain and clean-up a major spill.

The Oil Spill Contingency Plan Rule must require the appropriate geographic distribution of spill response equipment and personnel.

² 487 ships from Gateway Pacific Terminal in Washington, 200 ships from Roberts Bank Super Port (aka Delta Port) in BC, 200 ships from Westshore Terminal in BC. 300-470 additional large cargo vessels from BP and Tesoro at March Point, Anacortes, and Kinder Morgan in Vancouver Harbor carrying tar sands and/or bitumen blends will add additional potential for vessel traffic to the Salish Sea compounding the risk for collision, allision, oil spill and marine impacts to this fossil fuel export marine highway.

As a Planning Standard Area, only the resources to meet the two and three-hour required timeframe standards must be resident. To meet the four and six hour planning standard, the law only requires that equipment and personnel reach the nearest border of the Planning Standard Area in the required timeframe.

Equipment and personnel resident in Anacortes, Bellingham Bay, or Port Angeles will likely be able reach the east side of our County but there are no assurances that the two, four or six-hour planning standards can be met if there is a major spill in Haro Strait.

PROTECTING ENDANGERED SPECIES/ AVOIDING “TAKE”

Another justification for San Juan County’s designation as a Staging Area and requiring that the two, three, four, and six hour Planning Standards be resident is to avoid taking species listed under the US Endangered Species Act or the Canadian Species at Risk Act, including Southern Resident Killer Whales (*Orcinus orca*), Marbled murrelets (*Brachyramphus marmoratus*), and some ecologically significant units or species of Pacific salmon (*Onchorynchus* spp.), which traverse the boundary daily.

Ensuring that the appropriate BAT and BAP containment and recovery gear and personnel is response-ready and on-site in a timely manner in the event of a major spill in Haro Strait will reduce the impacts and avoid losses to the orca whales and their entire food chain (including federally listed endangered Chinook salmon). The value of a southern resident orca whale can be quantified and that cost must be included in the Cost-Benefit and Least Burdensome Alternative Analysis.

PLEASE INCORPORATE THE FOLLOWING ELEMENTS INTO THE REVISED RULE SUCH THAT AN OIL SPILL CAN BE QUICKLY CONTAINED AND CLEANED IN THE SAN JUANS:

1. Identify and designate San Juan County as a Staging Area and specify that the two, three, four, and six hour planning standards be resident;
2. Distribute equipment and personnel to the San Juans sufficient to address the risk from oil and diluted bitumen tar sands spills;
3. Require and ensure the ability to respond, contain and cleanup spills of hydrocarbons that sink. Potentially sinking hydrocarbons include Group V oils, bunker fuels, and diluted bitumen tar sands;
4. Prohibit the use of Coexit as a dispersant as has been done in the United Kingdom;
5. Specifically require that all Alberta Tar Sands/Canadian crude products including diluted bitumen and all forms of synthetic crude being transported by land-based pipelines be subject to the Oil Spill Contingency Plan Rule;
6. Require that all contingency plans, technical manuals, and planning standards be publically available on Ecology’s website; and
7. Require that public review and comment be provided on all proposed changes to contingency plans, technical manuals, and planning standards.

We look forward to the State playing a lead role in helping prepare for a spill from crude transported through the San Juan archipelago.

Sincerely,

Stephanie Buffum, Executive Director

From: Joe Bowles <Bowles@msrc.org>
Sent: Thursday, October 04, 2012 12:10 PM
To: ECY RE Spills Rule Making
Subject: MSRC formal comments
Attachments: Formal comments HB1186 FINAL.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Please reply with confirmation of receipt.

Best regards,
Joe

Joe Bowles
Region Vice President
MSRC, PACNW Region
Office: 425-304-1514
Mobile: 425-870-7820
bowles@msrc.org

Leadership drives culture, culture drives behavior



October 4, 2012

Washington Department of Ecology
Oil Spill Program
PO Box 47600
Olympia, WA 98504-7600

Attention Sonja Larson – via email: spillsrulemaking@ecy.wa.gov

RE: Comments on Proposed Amendment of Washington Oil Spill Rules – WAC 173-182

Dear Ms. Larson:

The Marine Spill Response Corporation (MSRC) appreciates the opportunity to comment on the Department of Ecology's proposed amendments to the Oil Spill Contingency Planning rule (Chapter 173-182 WAC).

MSRC respectfully submits the following comments:

173-182-010(2) This new section is mostly redundant with current Section 173-182-310. While the portion stating "so that all reasonable efforts are made to do so" is new, it is ambiguous and unnecessary.

173-182-030(4)(a) This does not track with the RCW definition of BAT, as it does not refer to "processes that are currently in use."

173-182-142 First, there should be a consistent materiality standard, such as the 10% reduction standard used in subpart (2)(b). For example, this same 10% standard could be applied to subpart (2)(c), as not every transfer of equipment for an out of region response may be significant enough to be of concern to Ecology, and/or applied to subpart (f), where Ecology could ask to be notified of any contract cancellation reducing resources by 10% or greater.

173-182-315 To be consistent with the new VOO requirements, the language regarding "platforms as vessel of opportunity skimming systems" should be updated to say "support of on-water oil recovery efforts."

173-182-317 Subpart (1)(b) should be revised to say "Support of on-water oil recovery in the nearshore environment," and subpart (3)(g) should refer to "vessel crew" consistent with subpart (2)(h). Subpart 5 should reference "support of on-water recovery in the nearshore environment" to be consistent with (1)(b).

173-182-321 (3) The language in the rule should not be so specific that it restricts the type of aerial platform to only fixed wing or rotary aircraft to meet the FLIR requirement. This is written in such a way that it eliminates viable alternatives that could be used to meet the goals and objectives as defined in the rule of providing a strategic picture of the response area and the various types of situations and weather conditions that one might encounter in Washington State waters. To use an analogy, it would be similar to telling a professional golfer that they must shoot par, but then only allowing them to have two clubs to accomplish the goal, rather than the 14 that are allowed and provide the greatest flexibility to accomplish the task. Each spill is different in the same way each golf shot requires a different technique, distance, and playing surface; what may work on one may not work on the next spill or golf shot, and while an aircraft outfitted with the suite of equipment written in the rule may work on one spill, the delivery platform may not offer the flexibility to work on another. The lack of a low visibility detection requirement (a radar sensor), and, the technical conservative approach to remote sensing platforms (aircraft and/or helicopter only) prevents the use of innovative alternative solutions such as ship based sensors, aerostats, drones, drifters/buoys in combination with large area coverage by radar satellites.

173-182-324 Some of the listed equipment (such as dredges) may simply not be available in some areas within the specified planning timeframes. Therefore, the last sentence of the introductory paragraph of subpart (1) should read: "Such equipment may include but is not limited to the following:"

173-182-349 Consistent with other language in the rule, the end of subpart (1) should read "... to meet the recovery and storage planning standards, through the 48 hour..." In subparts (3)(e) and (5)(c), "mobilization time" shall be replaced with "mobilization planning factor" to be consistent with 173-182-350(3).

173-182-370 Change the language in the second and third sentence of the 4hr Planning Standards from "additional boom" and "this boom" to "this system". Changes for consistency should also be made to 173-182-,375,380,395 and 405.

173-182-522 Subpart (a) requires workers to have appropriate safety and hazwoper training. The last sentence of this subpart, however, states a different standard for safety training ("The training should ensure cleanup workers can safely perform cleanup actions...") that is impossible to meet (as no amount of training can "ensure" safety, given the many other variables involved). The last sentence should therefore be revised to say "The training should enable cleanup workers to perform cleanup actions under the direction of supervisors and the work assignments as developed by the Unified Command." Finally, in subpart (d), the reference to "trailer" should be changed to "mobile cache."

173-182-621 Consistent with the RCW definition of BAP, the five year review of BAP should take into account the cost of such measures. And in subpart (4)(d), there is a statement that Ecology can "require[e] studies;" what kind of studies can be required, and who can be made to pay for them?

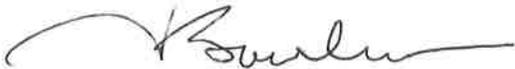
173-182-700 The new language requires PRCs to participate in drills. However, both in this section and in 173-182-710, it is unclear what drill responsibilities fall to plan holders, and what fall to PRCs.

173-182-800 Subpart (1)(e) is awkwardly worded.

173-182-810 (1) (c) v. MSRC does not provide land-based response services and the language should reflect that not all PRC's will be accountable to this part of the requirement.

173-182-820 See comments above under 173-182-142. With respect to the 10% standard, it should be clarified that this means a 10% reduction below planning standard levels; if a PRC has equipment in excess of planning standard levels, it should not have to report a small reduction if it relates solely to this excess capacity. Additional comments regarding this section: (i) subpart (2)(a), as currently worded, would require notifications be made to Ecology and all plan holders for every change, as a PRC has no way of knowing what other resources each plan holder may be relying on to meet their myriad of planning requirements, (ii) subpart (2)(c) should have an exception for when such movement is due to training or drills, (iii) subpart (2)(d) should refer to "Permanent loss of..." (to be consistent with 173-182-142), and (iv) subpart (5) drops the former language allowing Ecology the option of placing conditional modifications on a PRC's approval status pending resolution of any deficiencies.

Sincerely,



Joe Bowles
Vice President, MSRC PACNW Region

From: Andy Papachristopoulos <andyp@orion-ship.com>
Sent: Thursday, October 04, 2012 11:33 AM
To: ECY RE Spills Rule Making; tim.probst@leg.wa.gov; Harris, Paul; Rivers, Ann; brian.blake@leg.wa.gov; dean.takko@leg.wa.gov; jim.moeller@leg.wa.gov; Wylie, Sharon
Subject: Oil spill Contingency Plan Rule /MFSA

Follow Up Flag: Follow up
Flag Status: Completed

to: Sonja Larsen-Washington Dept. of Ecology

I have been in the ship agency business for 40 years and I am very concerned with the proposed changes for the Columbia River.

The proposed changes for the Columbia River are prohibitively expensive, unnecessary and untested of their effectiveness.

The Columbia River is not like the Puget Sound for many reasons:

1. There are no refineries and vessel that carry large quantities of crude oil.
2. The number of vessels calling the Columbia River has been declining and therefore fewer ships will carry the burden of such increases.

Until the year 2000 they were 2,200 ships calling the Columbia River.

The last few years they were fewer than 1,500 ships and there are no signs that the numbers will increase again to the 2,200 ships level.

3. MFSA has a robust and well tested responsive Contingency Plan that enables the Columbia River to remain commercially competitive.

4. There is a very small number of tanker ships calling the Columbia River and those carry refined products.

I hope that the Washington Dept. of Ecology will reconsider making any changes effecting the Columbia river.

Regards

Andy Papachristopoulos

From: Rob Rich <rdr@shavertransportation.com>
Sent: Thursday, October 04, 2012 11:32 AM
To: ECY RE Spills Rule Making
Cc: tim.probst@leg.wa.gov; Harris, Paul; Rivers, Ann; brian.blake@leg.wa.gov;
dean.takko@leg.wa.gov; jim.moeller@leg.wa.gov; Wylie, Sharon
Subject: HB 1186 comments
Attachments: 11860001.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Hello,

Enclosed is a letter from our company addressing our concerns over proposed rulemaking on the referenced bill.
Thank you all for your attention.

Rob Rich

V.P. Marine Services

Shaver Transportation Company

"Providing The Power Since 1880"

Phone: 503-228-8850 Fax: 503-274-7098

Cell: 503-781-7635

e-mail: rdr@shavertransportation.com

www.shavertransportation.com



October 4, 2012

Ms. Sonja Larsen
Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

Dear Ms. Larsen,

I am writing in response to proposed amendments to E2SHB 1186. Though an Oregon based provider of tug and barge serviced on the Columbia River, over half of our employees and a major portion of our work is derived from shipping associated with this river system.

We supported an objective review of oil spill contingency planning for our unique waterway in light of public interest since Deep Water Horizon. As no refining, water borne transportation of unrefined products, or distribution of said products occurs on the river system, these proposals should focus on any gaps, if identified, in the existing MFSA based response capability as specifically tailored to our non-open water environment.

The Columbia River system has a long and valued history of "ahead of the curve" technology and response capability advancements as well as multi agency support and co-ordination of preparedness. Our system of response has actually been a model for other areas to build from.

We specifically ask for alternate planning standards to be incorporated into Chapter 173-182 WAC specific to the Columbia River and its' unique operations and needs. This includes modification of the Vessel of Opportunity System, Aerial Surveillance, and Current Buster Technology proposals.

Washington State has been safely and competently served by the Columbia River system and our MFSA based Oil Spill Response network. We urge you to continue to rely on the cost effective infrastructure that is so well proven here and not drastically increase cost with little or no proven benefit to our system.

Best regards,

Rob Rich

V P, Marine Services



4900 N.W. Front Avenue • Portland, OR 97210-1104 • P.O. Box 10324 • Portland, Oregon 97296-0324
Office (503) 228-8850 • Toll Free (888) 228-8850 • Dispatch (503) 228-8847 • FAX (503) 274-7098



From: Liam Antrim <liam.antrim@noaa.gov>
Sent: Thursday, October 04, 2012 11:06 AM
To: ECY RE Spills Rule Making
Subject: C-plan rule comments (editorial addendum)

Follow Up Flag: Follow up
Flag Status: Completed

I sent these editorial comments via email to Sonja Larson yesterday, but wanted to make sure they reached the right folks

- OCNMS also submitted a comment letter today. Here are a few additional editorial comments not included in our letter:

- why not capitalize Ecology "the department"? It reads weird with the small e. Also, in some places "the department" is used. Not a big deal, and I suspect you're trying to avoid such little changes.
- in -230(4)(ii) it appears the word "for" is missing between capacity and all.
- I've never figured out what P&I club is. Not in the definitions and I can't find an acronym introduction.
- in -232(1) owner should be plural. Also, I don't think the umbrella plans "provide" response resources, but they define or identify them. Also, recommend adding "combined" as in "resources, and if those combined resources are sufficient to meet the requirements of this chapter."
- in -262(3)(b), it seems to be missing "the vessel owner/operator will coordinate with"
- in -317, might want to reference the figure
- in -317(7)(a)(ii) the word "crew" should follow pretrained; also could use "Ecology" here instead of "the department"
- in -321(3)(c)(iv) the "and" is not needed at the end
- in -349(1), frames could be singular.
- in -349(5), seems like you want those things described for each storage system to meet the requirement, not the general storage requirement.
- in -350(3), could add "required for" between "will include time" and "for notification"
- in -395 for the 4h standard, suggest using barrels not bbls, which is not used widely in other places.
- in 522(1)(c), not sure what three miles of shoreline on three tide lines means. I would guess this means 3 tidal cycles not 3 wrack lines on the beach.

Hope this is helpful.

--

Liam Antrim
Resource Protection Specialist
Olympic Coast National Marine Sanctuary
115 E. Railroad Ave, Suite 301
Port Angeles, WA 98362
office: 360-457-6622 x16
cell: 360-460-2530

From: Liam Antrim <liam.antrim@noaa.gov>
Sent: Thursday, October 04, 2012 11:04 AM
To: ECY RE Spills Rule Making
Subject: Sanctuary comments on C-plan rule
Attachments: Ecology C-plan 10-04-2012.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Please see attached for Olympic Coast National Marine Sanctuary comments on the draft contingency plan rule.

--

Liam Antrim
Resource Protection Specialist
Olympic Coast National Marine Sanctuary
115 E. Railroad Ave, Suite 301
Port Angeles, WA 98362
office: 360-457-6622 x16
cell: 360-460-2530



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
OFFICE OF NATIONAL MARINE SANCTUARIES
Olympic Coast National Marine Sanctuary
115 East Railroad Avenue, Suite 301
Port Angeles, WA 98362-2925

October 4, 2012

Washington Dept. of Ecology
Attn: Sonja Larson
PO Box 47600
Olympia, WA 98504-7600

Dear Ms. Larson,

Olympic Coast National Marine Sanctuary (OCNMS) is located off the outer coast of Washington state, covering about 2,400 square nautical miles along 135 miles of shoreline between Cape Flattery and the Copalis River and extending from the intertidal to between 25 and 40 nautical miles offshore. This federally designated marine protected area complements intertidal and upland ownership by the Washington Islands National Wildlife Refuges and Olympic National Park. Through these designations, Washington's outer coast has been recognized as a unique area, rich in natural resources relatively uncompromised by human activities. The biological productivity of the area supports recreational and commercial fisheries as well as recreational activities, which contribute significantly to the regional economy.

OCNMS was pleased to participate in the oil spill contingency plan's Rule Advisory Committee as an invited observer and to provide verbal comments at committee meetings. With a geographic focus on the outer coast, OCNMS strongly supports changes to the contingency plan rule that increase availability of response assets in early phases of spill response and strengthen regional preparedness. Comments on specific sections of the draft revised rule follow.

WAC 173-182-130 Phase in language: although OCNMS would like to see all revisions to the rule implemented as soon as possible, we understand that a phased approach is practical. OCNMS supports the vessel of opportunity (VOO) for Region 1 (Cape Flattery/Strait of Juan de Fuca) and Neah Bay staging area 4-h standard being required within 18 months, rather than later. OCNMS also supports the Region 6 (Grays Harbor) VOO and the new 4h planning standards but recommends phase in of these standards sooner than 48 months.

WAC 173-182-317 Vessels of Opportunity: a strong VOO program will enhance regional capacity to implement a rapid and sustainable response to a spill event. OCNMS supports the requirement for Region 1 to have a larger minimum number of Tier I vessels than other regions. This region covers a broad geographic area, and response actions in less protected waters of Region 1 will require more complex operations, requiring additional VOO support when larger response efforts are implemented.

WAC 173-182-321 Aerial Surveillance: OCNMS supports these aerial surveillance requirements, which represent significant improvements in regional ability to initiate and sustain effective spill response operations.



- It is unclear in -321(2) what “logistical sources of additional resources” means. Is the word logistical unnecessary to this statement?
- It appears that the aerial asset required in -321(1) can be the same asset used for -321(3). If the intent was to require two different aerial assets with different capabilities or simultaneous operations, this should be made more explicit. Also, the aerial asset in -321(3) should have the same requirement as -321(1)(a) for capacity for operations at least 10 hours per day.
- -321(3)(b) requires at least two remote sensing systems but it is unclear what system other than an infrared (IR) camera would be recommended or required. High definition video is currently available technology that could be identified as the alternative remote sensing system until an alternative is available as best achievable technology. The capabilities listed all apply to the IR camera and appear to be very prescriptive. OCNMS recommends the capabilities required for remote sensing systems focus on the functional aspects of the IR camera for spill detection.

WAC 173-182-324 Group 5 Oils: OCNMS appreciates the need for and supports adding planning standards for Group 5 oils. The general nature of the equipment required for Group 5 oil response indicates that spill response methods for negatively buoyant oils are not well established.

- OCNMS recommends modifying (d) to: “Equipment necessary to assess the natural resource and habitat impacts of Group 5 oil discharges; and” to be more specific about what impact is being addressed.
- For consistency purposes, OCNMS recommends replacing “petroleum oil” with “petroleum-based oil”, as is used in the definitions.

WAC 173-182-330 Dispersants: OCMNS supports the addition of language to this planning standard. As we understand it, commonly available dispersants are not equally effective at water temperatures typical for Washington state waters. The requirement for identification of dispersant type available and equipment necessary to reliably apply and monitor effectiveness of dispersant will provide plan reviewers the ability to assess more accurately and thoroughly if this planning standard can be met.

WAC 173-182-349 Technical Manuals: OCNMS supports this new section covering technical manuals, which should facilitate evaluation of best available protection with recovery and storage systems.

- Subsection -349(3)(d) is odd in that it identifies a specific boom capacity (or alternative) which would be better identified in a staging/planning area standard. An alternative wording might be “a description of boom (a minimum of 300 feet) or an alternative based on manufacturers’ recommendations to enhance each skimmer system”.

WAC 173-182-395 Neah Bay staging area: OCNMS supports additional response assets for the Neah Bay staging area through the new 4-hour standard and equipment appropriate for open water and high current conditions relevant to this operational area.

- It is unclear why this area is called a staging area as opposed to planning standard as is used for other areas.
- In this and other planning standards, language requiring identification of vessels for deployment of 4h standards is not included. As this standard does not address a GRP tactic (and identification of equipment to deploy GRPs is required) OCNMS recommends



including identification of vessels for deployment of the 4h standard as these vessels may not be the same as those for other boom types. Also, it is unclear why boom and recovery resources required for 2, 3 and 6 hour standards are required to be resident but not for the 4h standard.

WAC 173-182-405 Grays Harbor planning standard: OCNMS supports additional response assets added to this planning standard through the new 4-hour standard. While some of the equipment identified in this planning standard is focused on calm water conditions, the operational area for this standard includes the open ocean and high current areas adjacent to the harbor entrance.

- To remove ambiguity, OCNMS recommends changing the 4-h standard by replacing “This boom shall be of a type appropriate for the operating environment” with “This boom shall be of a type appropriate for open water deployment”.

WAC 173-182-640: Language in this section does not clearly support public review of submitted contingency plans as paper copies “may” be scanned to provide secure web portal access to digital documents. Requiring interested public, local and tribal governments to visit Ecology offices to view documents is impractical. OCNMS recommends this language be modified to ensure availability of contingency plans, including those submitted digitally and on paper, via a secure online web portal.

WAC 173-182-710 Drills: OCNMS recognizes the importance of drills to improve preparedness of primary response contractors and to support Ecology’s ability to assess preparedness and compliance with contingency plans. OCNMS hopes Ecology will be able to support a robust drill program, that identified deficiencies are corrected, and drill evaluation reports are made available to the public, local and tribal governments for their review. OCNMS supports addition of emergency response towing vessel, wildlife response, and tank vessel multiple plan holder deployment drills to the triennial cycle.

- In -710(6), the multiple plan holder deployment drill may include objectives outlined. Because these objectives are all important, OCNMS recommends the word “may” be replaced with “shall” and a minimum set of required objectives defined. Optional objectives (e.g., perhaps deployment of aerial assets) can be outlined following a phrase using “may”. A model for this is in -710(7), where minimum emergency response towing vessel drill objectives that shall be accomplished are defined.
- OCNMS recommends changing the name of the “Wildlife Deployment Drill” in the table to “Wildlife Rehabilitation Drill”.

WAC 173-182-820 Notification of significant changes: OCNMS supports the new language which provides clarity to changes considered significant that must be reported to Ecology.

OCNMS appreciates the efforts of Ecology and the Rule Advisory Committee to update rule language and improve spill response preparedness and planning in Washington.

Sincerely,



Carol Bernthal
Sanctuary Superintendent



From: Gene.Loffler@LDCom.com
Sent: Thursday, October 04, 2012 7:58 AM
To: ECY RE Spills Rule Making
Subject: Comments on Proposed Amendments Chapter 173-182 WAC, Oil Spill Contingency Plan to Implement Chapter 122, 2011 Laws (E2SHB 1186)
Attachments: ecy.pdf
Follow Up Flag: Follow up
Flag Status: Completed

Please see attached comment letter.

**Louis Dreyfus
Commodities**

Gene Loffler
Operations Manager
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This is an environment friendly email. Please do not print it unless it is really necessary.

October 4, 2012

Washington State Department of Ecology
Attn.: Ms. Sonja Larson
P.O. Box 47600
Olympia, WA 98504-7600

RE: RE: Comments on Proposed Amendments Chapter 173-182 WAC, Oil Spill Contingency Plan to Implement Chapter 122, 2011 Laws (E2SHB 1186)

Dear Ms. Larson:

Louis Dreyfus Commodities is a world-wide grain trading and shipping company with facilities in Portland and Seattle that exports grain via ocean going vessels. Louis Dreyfus Commodities is an active member of the Maritime Fire & Safety Association ("MFSA") and has been following the proposed oils spill contingency plan rulemaking since the passage of E2SHB 1186 during the 2011 Washington Legislative session.

We are concerned that while the Department of Ecology has made some select changes to the proposed rules in response to maritime stakeholder input, the most costly aspects of the proposed amendments ignore the fact that the Columbia River varies greatly from the Puget Sound and places an undue burden on the Columbia River region. The type and volume of vessels, the type and volume of petroleum cargo transported and the type and volume of discretionary cargo varies greatly from that of Puget Sound. In addition safeguards already in place along the Columbia River have kept spill volume and frequency consistently low. Puget Sound safeguards are redundant, unnecessary and inappropriate.

It appears from the proposed rule amendments that Ecology has not considered the impact to the State of Oregon and those businesses located in Oregon – whether on the Columbia or Willamette Rivers. Our cargos are discretionary and highly cost sensitive. The Columbia River is the nation's largest wheat export gateway and Louis Dreyfus Commodities contributes to this export market. Increased costs to the vessels due to increased fees to support unnecessary requirements will drive discretionary cargo from the Columbia River, including the Washington Ports that serve the Columbia River District.

We urge you, therefore, to continue working with the Maritime Fire and Safety Association to further perfect the draft rules and create a program that advances sound prevention and response measures without endangering discretionary trade.

Sincerely,



Arnie Schaufler
Vice President/ General Manager
Louis Dreyfus Commodities Northwest Facilities, LLC

CC: Governor Christine Gregoire
Keith Phillips, Governor's Executive Policy Office
17th District Senator Benton
17th District Representative Probst
17th District Representative Harris
18th District Senator Zarelli
18th District Representative Orcutt
18th District Representative Rivers
19th District Senator Brian Hatfield
19th District Representative Blake
19th District Representative Takko
49th District Senator Pridemore
49th District Representative Moeller
49th District Representative Wylie
Liz Wainwright- Portland MEX

From: Tim Wadsworth <TimWadsworth@itopf.com>
Sent: Thursday, October 04, 2012 7:09 AM
To: ECY RE Spills Rule Making
Subject: Washington State Department of Ecology Oil Spill Contingency Plan Rulemaking WAC 173-182
Attachments: Washington Department of Ecology rulemaking WAC 173-182 - ITOPF comments.pdf
Follow Up Flag: Follow up
Flag Status: Completed

Attn: Sonja Larson

Dear Ms Larson,

Please see attached the comments of ITOPF on the proposed amendment to the Washington State oil spill rule - WAC 173-182.

Please revert if you have any queries.

Best regards

Tim Wadsworth



Tim Wadsworth - Technical Support Manager – ITOPF Ltd.

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Washington Department of Ecology
Oil Spill Program
PO Box 47600
Olympia, WA 98504-7600

Attention: Sonja Larson – via email: spillsrulemaking@ecy.wa.gov

October 4, 2012

RE: Comments on Proposed Amendment to Washington Oil Spill Rules - WAC 173-182

Dear Ms. Larson,

The International Tanker Owners Pollution Federation Ltd (ITOPF) is a not-for-profit organisation established on behalf of the world's shipowners, of both tank and non-tank vessels, and their insurers to promote effective response to marine spills of oil, chemicals and other hazardous substances. We provide objective technical advice and information on all aspects of pollution response and the effects of spills on the marine environment. Our technical services include emergency response, advice on clean-up techniques, damage assessment, claims analysis, assistance with spill response planning, and the provision of training and information.

General Comments:

ITOPF encourages initiatives designed to improve oil spill response planning. Amongst these, we appreciate that the preparation of vessels of opportunity, the co-ordination of volunteers, holding of pre spill drills, improved notification procedures and other measures can serve to enhance contingency plan requirements. In this regard, we welcome this opportunity to comment on the proposed rule changes (WAC 173-182). However, we are concerned about the over-prescriptive nature of the rules proposed by the Department. Based on our experience of response to approximately 700 ship-source spills in 99 countries over the course of the past 40 years we believe strongly that each oil spill is unique and therefore requires its own tailored and dynamic response approach. Therefore, while we support the idea of improving capacity and capability of those responsible for managing and carrying out the response operations, we find that the overly-detailed nature of the Washington State rules as they currently stand and as they are proposed does not promote dynamic, and case-specific response capability. Furthermore, we are not fully clear as to the benefits of the amended rule over the existing rule and over the existing federal requirements.

We are concerned that the regulatory cost benefit analysis required by the State's own Regulatory Fairness Act (RCW 19.85.070) has found that "the proposed rule amendments ... are likely to have a disproportionate impact on small business." Further, we are surprised at the stance taken that any "above disproportionate impacts" can be "mitigated – if not eliminated" if only the response contractor were to give up its response business: "Ultimately, one can argue that no PRC is required to take on any of the prospective new costs under the proposed rule amendments, since none of them are required to be a PRC, and can instead focus on other ... tasks."

Specific Comments:

Considering the document containing the text of the proposed rule, we have the following specific comments:

Page 2 WAC 173-182-030 (Definitions) Part (3) on "best achievable protection" does not adequately integrate the concept of "reasonable" response. "Cost" is mentioned as a consideration in part (3c),

but we consider this should be elaborated to avoid a situation where best protection is achieved at any cost. In other words, as one moves up the scale of protection from poor to adequate to best achievable, the success of further improvements should be weighed against the additional costs. Such terms as “Cost effectiveness” or “Cost-benefit” could perhaps be included usefully in the definitions.

Page 2 WAC-173-182-030 (Definitions) Part (4) on best achievable technology should include only response techniques, equipment and other resources that have been proven widely to benefit oil spill response. We consider that technology under development should not form part of the requirements.

Page 5-6 WAC-173-182-030 (Definitions) Parts (29), (30) and (41) define “persistent” and “non-persistent” oils respectively. We generally agree with the definitions used for petroleum-based oils, whether they refer to the boiling point ranges, the specific gravity/ API or groupings. However, we are not aware of the use of the same groupings for non-petroleum oils given the very different weathering behaviour that might be expected of these oils. We do not know of any relevant evidence to support the use of such detailed class ranges for non-petroleum oils. In this context, it would be helpful if the Department could provide the source of this grouping.

Page 14 WAC-173-182-142 (Significant changes) Part (2)(b) requires notification if greater than 10% of equipment is moved out of the base and Part (2)(c) refers to equipment moved out of the region. What does this mean for stockpile management during a local spill when equipment is put to use? Does it have to be replaced even before it can be cleaned and returned to the stockpile? We are unclear as to whether this part of the rule refers to the waters covered by the respective PRC, the waters of Washington State, the Pacific Northwest or the US West Coast? Does the “10%” refer to a share of any one type of item or 10% of the total stockpile? How is this measured? If one from nine skimmers and two from 100 boom segments are moved away, is this more or less than 10% in total?

Page 15 WAC-173-182-145 (Plan implementation) Part (2)(b) allows a spill response to deviate from the plan in response to unforeseen conditions to avoid additional environmental damage. In our experience and despite the best planning arrangements, the response to a pollution incident is often unforeseen and the results of decisions made to address these unforeseen events are themselves often unforeseen. In this context, it would be helpful if the Department could define the term ‘unforeseen’ and to qualify further the occasions in which deviation from the plan can occur. For example what would be the repercussions if deviation caused greater but unforeseen environmental damage?

Page 16 WAC-173-182-220 (Binding agreements) Parts (2)(a) and (c); Page 19 WAC 173-182-232 (Umbrella plans) Part (1); and Page 19 WAC 173-182-240 (Field documents) Part (1) refer to a “substantial threat(s) of a spill” which is further described on Page 21 in WAC 173-182-262 (Notification) Parts (1, 3 and 5). We suggest that a more precise definition, in particular of the word “substantial” could be usefully added to the initial definition section of the rules.

Page 17 WAC-173-182-230 (General content) Part (5)(f) requires, among other things, the listing of all oils on board a vessel, whether carried as cargo or fuel. This would appear to be an onerous burden, in particular given the changing quantities and great variety of non-cargo oils on board. Bearing in mind that the amount of oil carried as cargo will vary with each voyage and the amount of bunker oil onboard will decrease as the voyage progresses, it would be helpful if the Department could clarify the requirement. Should the plan specify the capacity of tanks on-board instead?

Page 18 WAC-173-182-230 (General content) Part (5)(g) appears, from our reading, to make two separate and distinct requirements: the first part of the sentence requires details of the vessel layout while the second part requires details of “oil storage and transfer sites and operations” which

we take to mean activities in relation to an oil spill response. It would be helpful if the Department could clarify this part.

Page 18 WAC-173-182-230 (General content) Part (6)(a)(iii) refers to the “worst case discharge type and quantity” whereby “worst case” is defined previously (page 8) for a vessel as the sum of the entire cargo and fuel on board. Given that the entire list of cargo and fuel on board must already be listed in part (5)(f) on page 17, we suggest this may be a duplication of requirements? Further, given historical evidence which shows the vast majority of spills to be less than the total quantity of oil on board (i.e. the “theoretical worst case discharge”), we suggest that the inclusion of “reasonable/probable worst case scenario” would be more useful, whereby a more realistic spill quantity is estimated.

Page 18 WAC-173-182-230 (General content) Part (6)(a)(iv) requires the listing of the name and API gravity of the densest oil on board the vessel. We suggest this may be a duplication of Part (5f) which requires a list of “all” oils by density, etc.?

Page 18 WAC-173-182-230 (General content) Part (7) requires a plan for claims management. We are unsure what is meant by this requirement? For example, how much detail is required in the plan to address this? Does this include pre-contracted capability that may be provided by the spill management team? We suggest this may be a duplication service that may be provided by the P&I Club? Does this preclude the ability of a claimant to submit claims directly to a P&I Club?

Pages 23 – 28 WAC-173-182-317 (Vessels of opportunity). This part of the rules requires owners of covered vessels to pre-contract with vessels of opportunity such as owners of fishing and pleasure boats to support response operations. We are unsure of the need for this requirement if a PRC (primary response contractor) can be shown to have sufficient equipment and other resources in place to address these support requirements. We are also unsure to what extent the owners of covered vessels are obliged to ensure the contracted vessels of opportunity remain available throughout the period of the plan. Part (7)(a)(v) of the rule requires owners of vessels of opportunity to “make best efforts... ..to mobilise”. We are unclear what is meant by best efforts. What redress would the owner of the covered vessels have if best efforts are not made or if 50% of the contracted vessels of opportunity are not available.

Page 28 WAC 173-182-320 (Facility aerial surveillance) and WAC 173-182-321 (Vessel aerial surveillance) Part (1)(a) refer to “ten-hour operational periods”. We note this requirement is in the federal regulations (33 CFR 155.1050 (l)(2)). However, we are unclear whether this requires an aircraft to be in the air for 10 hours constantly? Given that no aircraft will have flight times of this length without refueling, crew rest periods and other necessary downtime, we are not clear as to what is meant by this requirement? Does this imply that two aircraft and corresponding crews will be required so as to cover this downtime? Furthermore, we are not clear why an aircraft may be required to be in the air for 10 hours constantly as a much reduced time in the air is sufficient to meet the needs of a coordinated and effective response in our experience.

Page 28 WAC 173-182-320 (Facility aerial surveillance) and WAC 173-182-321 (Vessel aerial surveillance) Part (1) refer to a maximum duration of 6 hours from notification to arrival on scene of the aerial surveillance capability while Page 29 WAC 173-182-321 Part (3)(a) refers to 8 hours. It would be helpful if the Department could clarify the difference.

Page 29 WAC 173-182-321 (Vessel aerial surveillance) Part (2) requires aerial surveillance to support shoreline clean-up activities. Does this imply a requirement to be able to communicate directly from the aircraft to personnel on the shoreline? We suggest it would not be practical to equip shoreline teams with air communications equipment.

Pages 28-29 WAC 173-182-321 (Vessel aerial surveillance) refers in various parts to very specific requirements in regards to photographic equipment, remote sensing systems, near-real time transmission of images. We consider that the degree of detail in these requirements is overly prescriptive and that a requirement to meet certain general objectives would suffice.

Page 29 WAC 173-182-321 (Vessel aerial surveillance) Part (3) refers to the use of remote aerial sensing technology to extend the hours of clean-up to include darkness and poor visibility. We consider this not to be a reasonable requirement. Work at sea and in darkness and poor visibility is dangerous and tends to be highly unproductive, even if operating in confirmed slicks. Night work may be reasonable and safe in specific instances, where a stable work environment and sufficient lighting are available, for example around fixed facilities. However, even in such instances work in daylight is invariably safer and more productive. Furthermore to ensure a clean-up progresses effectively, the presence of oil detected by remote sensing equipment should be confirmed visually prior to continuing operations. Consequently, we suggest equipment to detect oil at night provides little benefit to a response and suggest this should not form a part of the revised rule. We note this requirement to support night operations is not in the federal regulations.

Page 29 WAC 173-182-321 (Vessel aerial surveillance) Part (3)(a) requires aircraft with remote sensing equipment to be located “appropriately” and “could” arrive with trained observers. We are not clear as to the obligations imposed on the owner of covered vessel by these non-specific terms.

Page 30 WAC 173-182-321 (Vessel aerial surveillance) Part (3)(b)(iv) requires the remote sensing equipment to be able to integrate images and other information with “appropriate” spill management software. Again, we are not clear as to the obligations imposed on the owner of covered vessel by this term, in particular what the software should accomplish and how this might benefit a response.

Page 30 WAC 173-182-321 (Vessel aerial surveillance) Part (4) requires the plan holder to have “enough” trained personnel to undertake the specified aerial tasks. Given the lack of clarity of the requirements to be airborne we are not clear as to the requirements of this term.

Page 30 WAC 173-182-324 (Group V oils) refers to especially heavy oils that may be neutrally buoyant or tend to sink. Part (a) requires sonar, sampling equipment, and methods to locate such oil suspended in the water column and Part (b) refers to dredges, pumps or other related equipment”. While we are aware of *ad hoc* efforts made on past spills to detect and recover submerged or sunken oils, we do not believe that there is proven, reliable technology available for these tasks. Much of the equipment would not be used during the initial ‘emergency’ phase of a response. Instead, such equipment would be used in the later ‘project’ phase of the operation that would follow the initial on-water and shoreline response. To require that this capacity be held in contract and on site within 12 hours (Part (2)) appears excessively prescriptive. The use of sonar and dredging equipment requires specialised training for effective and safe use that can only be provided by appropriate organizations such as the military or dredging companies. We believe it is beyond the ability of a PRC to hold this highly specialised and expensive equipment in their inventory and believe this requirement does not take into account the cost of the measures as required in section WAC 173-182-030 (Definitions) Part (3)(c). We note that the federal requirement (33 CFR 155.1052) requires such equipment to be available but does not place this requirement on the PRC and requires the equipment to be available within 24 hours.

Page 30 WAC 173-182-324 (Group V oils) Part (1)(b) refers to the requirement for a covered vessel to pre-contract with a PRC that has equipment to reduce the spreading of oil on the sea bottom. In many instances such equipment, if available, would require the involvement of highly trained divers that are not employed usually by a PRC.

Page 30 WAC 173-182-324 (Group V oils) Part (1)(e) specifies a PRC has other “appropriate” equipment necessary to respond to a discharge involving the type of petroleum oil handled stored or transported. We are not clear as to the obligations imposed on the owner of covered vessel by this term.

Page 30 WAC 173-182-324 (Group V oils) Part (2) specifies that the equipment for response to Group V oils must be suitable for the “geographic area authorized”. We are not clear what is meant by this term, for example whether this means State inland waters, the Pacific Northwest, the US West Coast etc. The need to maintain the range of equipment required to operate in all areas would place an enormous financial burden on a PRC.

Page 32 WAC 173-182-335 (Storage) requires owners of covered vessels to maintain storage dedicated to oil spill response that can store liquid equivalent to 25% of the total worst case discharge, that is 25% of the volume of all oils carried. We consider this volume of storage is excessive and should be based on a reasonable/probable worst case scenario. We note that the federal regulations (33 CFR 155 Appendix B 9.2) require the capacity of temporary storage to be linked to the capacity of recovery devices and we consider this approach to be more helpful.

Page 32 WAC 173-182-349 (Technical manuals) Part (3)(g) requires details of the ability of recovery systems to work at night should be included in the manual. As discussed above we consider work during the hours of darkness to be ineffective, inefficient and unsafe.

Page 32 WAC 173-182-349 (Technical manuals) Part (3)(j) requires “the product type the associated skimmer is optimized for” to be specified. We are not clear what is meant by the term “product type” and it would be helpful if the Department could provide clarification.

Pages 34-42 WAC 173-182-370 to 415 (Planning standards). The location-specific planning standards for the hour-by-hour arrival of boom and for storage and recovery capacity appear particularly over-prescriptive from our experience world-wide. It would be helpful if the Department could clarify the basis on which the requirements for the specified lengths of boom lengths in the stated hours were determined.

The standards state that lengths of boom and other resources “could” have arrived within the stated hours. We are not clear as to the decision process required to deploy or not deploy the required resources in the required time frame. It would be helpful if the Department could clarify the meaning of this term.

A newly added part of the standards, for example in WAC-173-182-370 San Juan County, require within four hours “an additional 200 feet of boom and temporary storage of at least 196 bbls with the ability to collect, contain and separate collected oil from water could have arrived”. Notwithstanding the previous comment on the decision process, we are not clear how boom and storage could be used to collect and separate oil from water without a recovery device. We are also not clear as to how the water should be separated from the oil and the process by which the water can be dealt with. Furthermore, we are not clear why temporary storage is required at this stage of the response prior to the requirement for a recovery device (pump or skimmer) that would be required to fill the storage device.

The same newly added part of the standards requires the boom to “be capable of encountering oil at advancing speeds of at least 2 knots in waves.” We are not clear as to whether the boom should be merely capable of withstand such currents and waves or whether the boom should be capable of containing oil in such conditions. In our experience, boom is rarely capable of containing oil successfully in currents in excess of one knot and in waves. As a consequence, we are not clear why these performance criteria are required and it would be helpful if the Department could provide

clarification.

A further newly added part of the standards, in WAC-173-182-405 (Grays Harbor), requires "... 3,000 feet of calm water – Current capable appropriate for ...". We are not clear what is meant by calm water current capable boom and it would be helpful if the Department could provide clarification.

Page 43 WAC 173-182-450 (Washington coast) requires equipment specific to "Washington's coast". It would be helpful if the Department could clarify exactly the area of sea in which the specified resources are expected to operate. The requirement specifies that equipment should arrive within specific time frames but does not specify exactly where the equipment should be deployed and therefore the distances over which the equipment should be transported. It would be helpful if the Department could provide clarification.

Page 44 WAC 173-182-522 (Shoreline clean-up) Parts (1)(a) and (b) requires plan holders to have access to 100 trained shoreline clean-up workers and 10 supervisors. Given the natural turnover of personnel, we are not clear to what extent this requirement must be monitored. WAC 173-182-140 (Plan maintenance) requires the plan holder to review the plan annually. Should the plan holder ensure the 100 workers remain available only at this annual review or more or less often? It would be helpful if the Department could provide clarification.

Page 44 WAC 173-182-522 (Shoreline clean-up) Part (1)(c) requires the plan holder to have access to "adequate equipment for passive recovery for three miles of shoreline on three tide lines.". We are not clear as to what is meant by the term "tide lines" and it would be helpful if the Department could provide clarification. WAC 173-182-030 (Definitions) states that passive recovery means the use of sorbent material. We are therefore unclear why the plan holder is also required to specify the equipment required as this is specified in the requirements. Furthermore, we note that WAC 173-182-621 (Five year review cycle) states that the Department will consider technology that reduces waste. We suggest that the deployment of the considerable lengths of sorbent material specified is counter to this consideration, particularly as in our experience the deployment of sorbent material along a shoreline is rarely, if at all, successful in preventing shoreline contamination.

Page 44 WAC 173-182-522 (Shoreline clean-up) Part (2) requires the plan holder to describe the process for data collection, transmission and management. We are not clear what data is required for this process and it would be helpful if the Department could provide clarification.

Page 44 WAC 173-182-522 (Shoreline clean-up) Part (3) requires the plan holder to describe the process for obtaining resources for an additional 14 days of shoreline clean-up, over and above the requirement for the initial five days. Given the individual nature of each oil pollution incident, we are not clear exactly what equipment might be expected up to two and half weeks after a spill of oil and it would be helpful if the Department could provide clarification.

Page 46 WAC 173-182-621 (Five year review cycle) Part (4)(c) states that the Department will sponsor a technology conference during the five year cycle with groups with interests and expertise in relevant technologies. We are interested in an involvement in such a conference and ask to be placed on a mailing list for this event. We are keen also to be kept informed of the work done by the Department to evaluate best available practice.

Please revert if you have any queries on the above.

Best regards

Dr. Michael O'Brien/Tim Wadsworth
Signatures available on request

From: Janet Alderton <jmalderton@yahoo.com>
Sent: Wednesday, October 03, 2012 10:38 PM
To: Larson, Sonja (ECY)
Subject: Public Comment on the Oil Spill Contingency Planning Rule

Follow Up Flag: Follow up
Flag Status: Completed

Janet Alderton 491 Harborview Lane PO Box 352 Deer Harbor, WA 98243

October 3, 2012

Delivered by email: sonja.larson@ecy.wa.gov

Sonja Larson
Department of Ecology
PO Box 47600
300 Desmond Dr.
Olympia, WA 98504

Re: Public Comment on the Oil Spill Contingency Planning Rule
(Chapter 173-182 WAC).

Dear Ms. Larson and the Rule Advisory Committee Members:

The San Juan Islands and the Salish Sea provide essential environmental and economic benefits to both the local residents and to the wider region. These benefits include a unique ecosystem where young salmon from both Puget Sound and from Canadian waters shelter and grow before they travel to the open ocean. The beauty and biological diversity of the San Juan Islands attract both tourists and new residents. The economy of our islands would be devastated by an accident that released fossil fuel into our marine waters.

I say "fossil fuel" and not "oil " because our energy sources are changing and will change more radically in the future. Tar sands bitumen from Alberta will represent an increasing fraction of the fossil fuels that threaten our waters. Bitumen behaves very differently from oil when it is released into water. While conventional oil floats upon the surface of the water and may contain a significant fraction of volatiles that evaporate into the air, tar sands-derived bitumen sinks. This makes any cleanup of spilled bitumen much more costly and problematic than cleanup of a conventional oil spill. The release of tar sands bitumen into the Kalamazoo River in 2010 illustrates the significantly increased costs and technical difficulties of dealing with a bitumen spill.

Therefore, it is imperative that spill equipment and personnel be stationed within the San Juan Islands so that a faster response time can result in a more effective response. Aid must be rapidly provided to any ship that is foundering and releasing fossil fuel into our marine waters. Rapid containment and cleanup of fossil fuel can only occur if local spill response equipment and trained personnel are strategically stationed among our San Juan Islands.

-

Alongside of my bitumen concerns, the projected increase in tanker and bulk cargo ship traffic through our waters makes a significant fossil fuel spill increasingly likely. The proposed Gateway Pacific Terminal expansion of the deep-water port at Cherry Point in Whatcom County and other port expansions along the Pacific Northwest coastline will funnel more and more huge ships through our waters. Some of the bulk tankers are six times larger than the Exxon Valdez. These tankers are propelled by bunker fuel, another fossil fuel mixture that is more toxic than conventional oil.

I support the comment letter sent by my San Juan County Councilors regarding the proposed oil spill rules and provisions for addressing spills, and I support the summary requirements listed in their comment letter and copied below:

The Oil Spill Contingency Plan Rule

1. Must require that the appropriate BAT and BAP containment and recovery gear and personnel be response-ready and on-site in a timely manner to respond to spills of oil that can sink, including diluted bitumen and bunker fuels.

2. Must specifically state that Alberta Tar Sands products including diluted bitumen and all forms of synthetic crude are subject to the Oil Spill Contingency Plan Rule.

3. Must define San Juan County as a Staging Area and must specify that the two, three, four, and six hour planning standards be resident.

4. Require that all contingency plans, technical manuals, and planning standards be publically available on Ecology's website.

5. Require that public notification, review, and comment be provided for all proposed changes to contingency plans, technical manuals, and planning standards.

The Cost-Benefit and Least Burdensome Analysis

1. Is to be commended for including, and must retain and expand, Section 1.6 on the emerging risk from sinking oils.

2. Must update the costs to date of the 2010 diluted bitumen spill in Michigan.

3. Must include the significant costs that can be associated with very small spills.

4. Must quantify the value of a Southern Resident orca whale.

5. Must include the hourly cost savings of reducing spill cleanup costs over the duration of the spill in both Appendix B and the text.

6. Must quantify the data provided by the San Juan County Economic Development Council and the San Juan Visitors Bureau, including the press coverage San Juan receives.

In addition, I support:

1. The inclusion of more Vessels of Opportunity (VOO) distributed throughout the region.

2. Additional requirements in the four hour planning standard that adequately addresses storage issues and ensures continuous response capacity.

3. The inclusion of the Neah Bay Response Tug in the spill response task force.

4. The inclusion of a dedicated storage barge, combined with the Neah Bay Response Tug to enable tankers to meet upcoming changes in federal regulations associated with moving the High Volume Port Line from Port Angeles to Cape Flattery.

Thank-you for your attention to spill response planning and especially to the emerging threats of sinking oils and significantly expanded tanker and bulk vessel traffic through the San Juan archipelago.

Sincerely,

Janet Alderton

jmalderton@yahoo.com

From: Audrey Gurule <admin@crsoa.net>
Sent: Wednesday, October 03, 2012 4:58 PM
To: ECY RE Spills Rule Making
Cc: tim.probst@leg.wa.gov; Harris, Paul; Rivers, Ann; brian.blake@leg.wa.gov; dean.takko@leg.wa.gov; jim.moeller@leg.wa.gov; Wylie, Sharon
Subject: CRSOA re: Proposed rulemaking CR-102
Attachments: Final CRSOA Letter to Ecology on Proposed Rules 10 03 12.docx

Follow Up Flag: Follow up
Flag Status: Completed

Good afternoon Ms. Larson,

Please find the attached letter from the Columbia River Steamship Operator's Association.

Cc:
Representative Tim Probst
Representative Paul Harris
Representative Ann Rivers
Representative Brian Blake
Representative Dean Takko
Representative Jim Moeller
Representative Sharon Wylie

Best regards,

Audrey Gurule
CRSOA administrator
360-901-8144



Columbia River Steamship Operators Association

PO Box 55788
Portland, OR 97238
503-939-7854

October 3, 2012

VIA EMAIL (SPILLSRULEMAKING@ECY.WA.GOV)
AND FIRST CLASS MAIL

Washington Dept. of Ecology
Attn: Sonja Larson
PO Box 47600
Olympia, WA 98504-7600

RE: Proposed rulemaking CR-102

Dear Ms. Larson:

I write on behalf of the Columbia River Steamship Operators Association (“CRSOA”). CRSOA members include local and regional businesses, as well as local offices of global companies, all of which are engaged in maritime commerce on the Columbia River system. CRSOA works with public and private stakeholders to make Columbia River ports attractive to commercial ships and shippers by ensuring that high-quality service is provided at competitive prices—safely, reliably, and efficiently.

This letter provides our very strong objections to the Washington Department of Ecology’s (“Ecology”) rule proposal for Chapter 173-182 WAC Oil Spill Contingency Planning (CR-102). The proposed rules raise costs substantially, with no offsetting benefit. It is important to note that the proposed rules threaten to more than double the cost of our entire existing spill prevention and response program, which already exceeds requirements of Washington State approved plans for a worst-case scenario spill. We expected minor tweaks and improvements would be proposed in the new rules based on lessons learned from the Deep Water Horizon spill. Instead, the rule will double (or more) the costs of oil spill compliance, but not provide any improvement in the Columbia River system’s readiness nor response. Greatly increased costs with no benefit causes great alarm in our industry and is a threat to our region’s economy.

We believe there are several reasons why the proposed rules simply do not apply to the realities of Columbia River maritime commerce operations, reasons that account for the substantial cost increases with no counter-balancing benefits. The reasons are as follows:

I. THE COLUMBIA RIVER IS VERY DIFFERENT THAN PUGET SOUND: PHYSICALLY, HYDROLOGICALLY, AND IN ITS MARITIME COMMERCE

CRSOA is generally concerned that Ecology’s proposed rules greatly expand, rather than help to implement, HB1186. HB1186, which led to these proposed rules, required that Ecology look at improvements to the existing oil spill response program in light of the Deep Water Horizon spill. The proposed rules focus on open water, Puget Sound-related spills. In the Sound, there are areas where currents, tides, weather, and waves can quickly and unpredictably spread an oil spill. This is not the case in the Columbia River.

For the conditions of Puget Sound, equipment such as designated aircraft, FLIR technology, and “Current Buster” technology may provide additional safeguards, but not so for the Columbia River. Applying this methodology statewide fails to account for significant river system differences. The Columbia River presents vastly different hydrology, cargos, traffic patterns, and traffic density than does Puget Sound or coast-wise trade. The Columbia River presents none of the crossing situations, with inherent collision risk, as is present on Puget Sound. Traffic moves in a confined channel highway, up and downriver.

In the Columbia River, moreover, water flows in a consistent direction and at predictable speeds. An oil spill on the Columbia River reacts much differently than a spill on the open waters of Puget Sound. Furthermore, the Columbia River already makes extensive use of sophisticated river-wide navigation safety systems, current and water depth sensing and recording systems, and other weather tracking and reporting technologies that enable accurate forecasts of river movement and operational assessments of wind and current effects.

Cargo moving on the Columbia is also quite different. Importantly, eighty-eight percent of the vessels transiting the Columbia River are non-tank vessels carrying discretionary non-hazardous cargo, primarily grain and other agricultural or bulk mineral products. These low profit margin cargoes are tremendously important to both Oregon’s and Washington’s economies, pose little risk to the environment even in worst-case situations, and are extremely sensitive to fluctuations in costs. An increase in shipping cost of only a penny or two per bushel can cause significant volumes of such cargoes to be diverted to the Mississippi and Gulf of Mexico. Any cost increase must produce demonstrable added value to the safety, reliability, and/or efficiency of commerce movements.

The Columbia River has a well-established and robust oil spill response program supported by coordinated agencies with decades-long experience combined with a wealth of response equipment and comprehensive contingency planning that really works to prevent and, when necessary, promptly address a spill site. Our exemplary record over these many decades attests to the effectiveness of our existing spill prevention and response program and to our efforts at continually improving it. Yet the proposed rules require the addition of substantially expensive resources for use on the Columbia River that are unproven, unnecessary, and will not significantly improve oil spill response or remediation effectiveness.

It is important to note that the relatively smaller shipping community on the Columbia River will be heavily burdened with the costs of the new rules. The number of ships calling Columbia River ports has been reduced the last several years by twenty to thirty percent below

levels of a decade ago. Thus, Columbia River users get the least benefit from the proposed response technologies and yet shall be required to pay the greatest cost per ship.

Also of note is the fact that, in spite of this reduction, and the accompanying loss of revenues, CRSOA opted to continue funding its spill prevention and response program at existing levels, in effect exceeding Washington State's worst-case scenario plan requirements. Our accident risk decreased while our spill program cost per ship was allowed to increase in the interest of sustaining our proven effective program. We are continuing to fund our spill prevention and response programs at these higher levels despite the fact that our members do not see ship levels increasing in the coming years. The doubling of costs to our existing program, created by these proposed rules, to fund technologies and approaches of untested and unproven application to our river system, will force us to re-think our approach and search for creative ways to reduce program costs in an effort to minimize the devastating impact this unprecedented cost increase will have on our regional competitiveness. A doubling of these costs is simply unsustainable by a low cargo profit margin, small ship size and volume system like ours.

II. CRSOA'S KEY OBJECTIONS TO THE RULES

A. Vessels of Opportunity

Proposed WAC 173-182-317 requires twelve "volunteer" vessels be under contract to be available on the lower Columbia River as vessels of opportunity ("VOO") for a spill event. The Lower Columbia River is a relatively narrow river expanse with professional response resources under contract and established in a variety of locations, including resources provided through MFSA, CRC, and MSRC.

Unlike open water scenarios, these professional resources can get to a spill within timeframes established by federal and state regulations. The lower Columbia River system does not require or necessarily benefit from VOO. To complicate matters, we are unaware of the existence of potential and suitable VOO, nor of vessel owners or operators who are eager or interested in participating in a VOO. Further, the costs of establishing a VOO program and of finding, training, testing, and doing the planning related to maintaining a VOO program will be significant, especially if those owning the VOO assets have no particular desire to participate.

We request that Ecology reevaluate the application of its proposed VOO rule to the lower Columbia River. CRSOA urges that the VOO requirement not apply in the lower Columbia River.

B. Aerial Surveillance

Proposed WAC 173-182-321 requires designated aircraft with FLIR technology to provide detailed oil spotting capabilities. This regulation adds two significant aspects to current regulations: (i) that the aircraft carry expensive FLIR technology; and (ii) that aircraft be designated for oil spill response only. These requirements add significant costs for operators on the Columbia River and may, in fact, be unfeasible for operators on the upper Columbia River. Moreover, the need for such resources on the Columbia River cannot be supported. In fact, there is no evidence that such resources will improve the current, robust resources available under the existing regulatory regime.

A designated aircraft with FLIR technology provides value in circumstances where the dispersion of spilled oil is subject to varied conditions that are difficult to predict. In these circumstances, the aircraft can search large areas in a short timeframe to locate oil on and in the water. Such regulations seem tailored toward potential oil spills in the open ocean or Puget Sound.

The Columbia River system is completely different. Currents carrying spilled product are measurable and their effects are more reasonably predictable. Modeling technology provides predictive capability to direct response resources. This modeling resource is available immediately and is more effective for directing response resources than waiting for a designated aircraft to arrive and deploy a capability of highly questionable value. Overhanging brush, swirling eddies at numerous outcroppings, the presence of islands and marshy areas, and the water temperature variations introduced by the many freshets and streams that feed the Columbia system, all render airborne FLIR ineffective or useless.

We request that Ecology revise the Aerial Surveillance rules to not apply to the Columbia River. As with the VOO rule, the Aerial Surveillance rule does not provide benefit in relation to the cost for spill response in the Columbia River. CRSOA recommends that Ecology modify its rules to exclude the Columbia River from the requirement to have a designated aircraft with FLIR technology.

C. “Current Buster”

Proposed WAC 173-182-415 requires additional boom capable of encountering oil at advancing speeds of at least 2 knots in waves, regularly known as current busters, be available at the Cathlamet staging area. The current buster provides value for oil spill response in high waves. However, it is an untested technology on river systems.

CRSOA is concerned that operators on the Columbia River system will bear the significant expense for this technology that is unnecessary. We already have in place an impressive array of booming and collection capabilities that have been procured, tested, and proven in exercises and real world events over many decades. These capabilities are the result of many decades of experience and benefit from lessons learned and avoid another very detrimental situation created by the requirement to procure a current buster. The substantial cost of a current buster means that it will likely only be purchased by a single response association and thereby create a monopoly for compliant response planning.

CRSOA requests that Ecology delete this requirement from the Cathlamet Staging area requirements.

III. THE COST-BENEFIT ANALYSIS THAT IS REQUIRED TO SUPPORT THE RULES IS FLAWED

Washington Governor Gregoire intended discretionary cargo to be treated carefully in these new rules. Economic impact was supposed to be carefully evaluated and only increases reasonably necessary were to be implemented.

The cost-benefit analysis conducted to justify these rules fails the standard required by the Governor in implementing the legislation that led to these proposed rules. The original worst-case scenario that stands as the foundation of existing oil spill response efforts has not changed. The existing worst-case scenarios remain the foundation for analysis of the new rules. As previously mentioned, shipping on the Columbia River has declined by more than twenty-five percent and has remained at depressed levels over the last few years. Therefore, far fewer ships are paying for the original program. Now, with these new proposed rules, the response costs will be, at best, doubled or, in some reasonable instances, tripled. So the far fewer vessels that were originally accounted for will pay two or three times the cost of the original program.

The cost-benefit analysis does not explain the reasonableness of that increase. What logically should be minor tweaks, adjustments, and improvements to our existing programs, based on lessons learned from Deep Water Horizon, along with associated minor increases in cost that would be applied to a spills program that already exceeds the worst-case scenario CBA on which our current approved plans are based, are not all what a reasonable person would expect. A doubling or tripling of total system cost to accommodate fine-tuned lessons learned from a non-commercial vessel incident in the Gulf of Mexico does not square with reality, practicality, or prudence.

IV. CRSOA STRONGLY URGES ECOLOGY TAKE AN APPROACH ON THE COLUMBIA RIVER THAT IS DESIGNED TO WORK SUCCESSFULLY IN OUR UNIQUE CONDITIONS

CRSOA appreciates this opportunity to comment. We understand that Ecology has worked hard to formulate rules that implement HB1186 and provide a greater level of protection to Washington waters. As discussed above, however, the rules seem focused on open water oil spill response. The proposed VOO, Aerial Surveillance, and Current Buster rules would not provide a substantial improvement to the Columbia River's already well-developed and robust oil spill planning and response system. The cost-benefit analysis fails to take into account the impact of these rules on the Columbia River.

CRSOA respectfully requests that you consider these comments. We are available to discuss these comments further at your convenience.

Best regards,

Jim Townley,
Executive Director,
Columbia River Steamship Operators Association

cc: The Honorable Christine Gregoire, Governor, State of Washington
Keith Phillips, Governor's Executive Policy Office

From: Commissioners <commissioners@co.skagit.wa.us>
Sent: Wednesday, October 03, 2012 4:23 PM
To: ECY RE Spills Rule Making
Cc: Will W. Honea; Jill M. Dvorkin; Commissioners
Subject: Skagit County's Comment Letter-- Oil Spill Contingency Plan Rule
Attachments: Skagit County Comment Ltr - Oil Spill Continengecy Plan Rule.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Please find attached the Skagit County Commissioners comment letter on the proposed changes to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC).

Thank you

*Skagit County Commissioners
Administrative Building
1800 Continental Place, Suite 100
Mount Vernon, WA 98273
Phone (360) 336-9300
Fax (360) 336-9307*



SKAGIT COUNTY BOARD OF COMMISSIONERS

RON WESEN, First District
KENNETH A. DAHLSTEDT, Second District
SHARON D. DILLON, Third District

October 2, 2012

Sonja Larson
Department of Ecology
PO Box 47600
300 Desmond Dr.
Olympia, WA 98504

RE: Comments on proposed amendments to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC)

Dear Ms. Larson,

We appreciate this opportunity to provide comments on proposed changes to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC).

Background

A major oil spill is a very real threat in Skagit County. Skagit County has roughly 275 miles of marine shorelines, including several small islands, estuaries, sloughs, and the Skagit River Delta. This very rich and complex environment supports a diverse array of sea life, birds, and habitat for threatened and endangered salmon species. There is a significant shellfish and fishing industry reliant on these marine waters. In addition to Skagit County's marine economy, there are two major refineries at March Point near Anacortes that each employ hundreds of workers. Petroleum products are transported via large oil tankers through the sensitive marine areas of Skagit County including Padilla Bay, as well as via underground pipelines. There are four pipelines that run through Skagit County, two of them transporting petroleum products to the refineries.

A significant oil spill would be devastating both environmentally and economically to Skagit County. A strong and immediate response to a major oil spill either in the water or from a facility or pipeline is imperative. Skagit County supports the comments submitted by the San Juan County Council and the Washington Association of Counties (WSAC) Coastal Caucus and augments them with Skagit County's specific concerns below.

Crude Oil From Alberta Tar Sands

Kinder Morgan intends to increase the export of crude oil from the Alberta Tar Sands considerably in the next few years, both via oil tankers as well as the TransMountain pipeline. The TransMountain pipeline delivers this crude oil to the refineries in Skagit County. These

crude oil exports include diluted bitumen, a product known to result in particularly challenging spills and costly clean-ups. Skagit County wants to ensure that diluted bitumen and all forms of synthetic crude are subject to the new Oil Spill Contingency Planning rule. In addition, Skagit County joins with the San Juan County Council and the WSAC Coastal Caucus in calling for stronger requirements for responses to Group 5 oils and other oils that can sink.

New Planning Standards Should Apply to Facilities and Pipelines, Not Just Covered Vessels

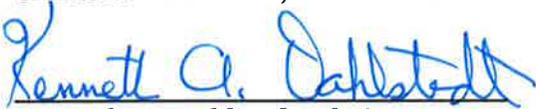
Proposed WAC 173-182-522 sets forth important new planning standards for shoreline cleanup, but are applicable only to covered vessels. These standards should be applicable to all facilities, as defined in proposed WAC 173-182-030(19) (which would include pipelines and refineries). In Skagit County, the two refineries and the pipelines transporting oil to the refineries are located on or near shorelines. If a spill occurred from a pipeline or refinery rather than from a covered vessel, the same shoreline cleanup plan standards should apply.

Conclusion

Our quality of life depends upon the health of our interconnected economy and environment, both of which would be severely impacted by a major oil spill. The capacity to respond quickly and effectively to a major oil spill will determine the difference between temporary and lasting economic and environmental impacts.

Sincerely,

**BOARD OF COUNTY COMMISSIONERS
SKAGIT COUNTY, WASHINGTON**



Kenneth A. Dahlstedt, Chairman



Sharon D. Dillon, Commissioner



Ron Wesen, Commissioner

From: Liam Antrim <liam.antrim@noaa.gov>
Sent: Wednesday, October 03, 2012 3:28 PM
To: Larson, Sonja (ECY)
Cc: Carol Bernthal
Subject: comments on C-plan

Follow Up Flag: Follow up
Flag Status: Completed

Sonja - OCNMS will submit a comment letter today or tomorrow. Here are a few additional editorial comments not included in our letter:

- why not capitalize Ecology "the department"? It reads weird with the small e. Also, in some places "the department" is used. Not a big deal, and I suspect you're trying to avoid such little changes.
- in -230(4)(ii) it appears the word "for" is missing between capacity and all.
- I've never figured out what P&I club is. Not in the definitions and I can't find an acronym introduction.
- in -232(1) owner should be plural. Also, I don't think the umbrella plans "provide" response resources, but they define or identify them. Also, recommend adding "combined" as in "resources, and if those combined resources are sufficient to meet the requirements of this chapter."
- in -262(3)(b), it seems to be missing "the vessel owner/operator will coordinate with"
- in -317, might want to reference the figure
- in -317(7)(a)(ii) the word "crew" should follow pretrained; also could use "Ecology" here instead of "the department"
- in -321(3)(c)(iv) the "and" is not needed at the end
- in -349(1), frames could be singular.
- in -349(5), seems like you want those things described for each storage system to meet the requirement, not the general storage requirement.
- in -350(3), could add "required for" between "will include time" and "for notification"
- in -395 for the 4h standard, suggest using barrels not bbls, which is not used widely in other places.
- in 522(1)(c), not sure what three miles of shoreline on three tide lines means. I would guess this means 3 tidal cycles not 3 wrack lines on the beach.

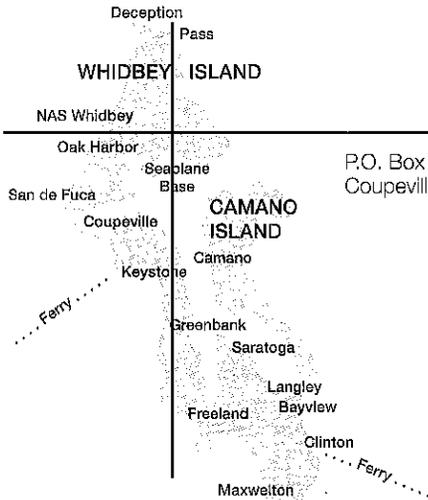
Hope this is helpful.

--
Liam Antrim
Resource Protection Specialist
Olympic Coast National Marine Sanctuary
115 E. Railroad Ave, Suite 301
Port Angeles, WA 98362
office: 360-457-6622 x16
cell: 360-460-2530

From: Pam Dill <PamD@co.island.wa.us>
Sent: Wednesday, October 03, 2012 2:59 PM
To: Larson, Sonja (ECY)
Cc: smerriman@wa.counties.org
Subject: Comments on proposed amendments to the Oil Spill Contingency Plan Rule from Commissioner Homola and Commissioner Price Johnson

Attachments: Larson-DOE.pdf

Follow Up Flag: Follow up
Flag Status: Completed



Island County Board of Commissioners

P.O. Box 5000
Coupeville, Washington 98239-5000

Phone: (360) 679-7354
From Camano: (360) 629-4522
From S. Whidbey: (360) 321-5111
Fax: (360) 679-7381
www.islandcounty.net

October 3, 2012

Sonja Larson
Department of Ecology
PO Box 47600
300 Desmond Dr.
Olympia, WA 98504

RE: Comments on proposed amendments to the Oil Spill Contingency Plan Rule
(Chapter 173-182 WAC)

Dear Ms. Larson:

Island County faces potential devastation from an oil spill. We are in proximity to the major shipping lanes of the Salish Sea, oil refineries, and of course derelict vessels. A release from any of these sources could be overwhelming to our local economy and environment. This was apparent during our incident with the sinking of the FV Deep Sea on May-June 2012. It was clearly demonstrated that even a small quantity of spilled oil can be very expensive to clean up. Here are some lessons learned from that experience:

- Adequate equipment is needed and trained personnel to recover various quantities of oil and to address site specific conditions (i.e. from a sunken vessel). Equipment should be staged to provide timely response and protect valuable resources. Like any resource this should include not just the booming materials but recovery equipment, assessment equipment, sampling capabilities and trained operators.
- While Island County has an impressive cadre of volunteers, they lack the necessary training to implement any plan dealing with high volume spills. As with any plan and training program, it is necessary to exercise these capabilities.

Sonja Larson
October 2, 2012
Page 2

- Develop a program for the use of vessels of opportunity (VOO) to help contain and recover larger spills during the early stages. We currently do not have the outreach, coordination, or training for such a program.
- Establish a spill management team, following the ICS structure, to respond to and coordinate the initial stages of a spill.
- Establish a team, plan, equipment and training to rescue and rehabilitate any wildlife affected by an oil spill.
- Coordinate with WA Dept. of Ecology to establish methods of evaluation and exercise of plans.
- Re-evaluate Coast Guard prioritization of derelict vessel response sites to take into consideration local impacts due to geography, currents, as well as fin and shell fisheries.

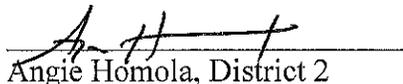
Island County is in need of resources to ensure we have the training and capacity to respond quickly and effectively to oil spills. Part of ensuring we are prepared is by understanding our surrounding waters, potential threats in these areas, and assessing potential impacts. A key issue is a lack of potential local impacts data. The Northwest Straits Foundation and the local Marine Resource Committee currently are seeking funding to address this critical data collection. The amount and type of equipment and personnel to respond to an oil spill is also inadequate. What we do have is a smart, motivated, and concerned core of first responders and community members that mitigate some of these shortfalls.

Thank you for this opportunity to comment on WAC 173-182 amended Oil Spill Contingency Rule.

Best regards,



Helen Price Johnson, District 1



Angie Homola, District 2

Cc: Commissioner Emerson
Scott Merriman

From: Rebecca Craven <rebecca@pstrust.org>
Sent: Wednesday, October 03, 2012 2:27 PM
To: ECY RE Spills Rule Making
Cc: Carl Weimer
Subject: Comments on spill response planning rule changes
Attachments: Comments on Ecy draft spill response rules.docx

Follow Up Flag: Follow up
Flag Status: Completed

Please find attached the comments of the Pipeline Safety Trust. Feel free to contact us with any questions.

Rebecca

Rebecca Craven, Program Director
Pipeline Safety Trust
300 N. Commercial St., Suite B
Bellingham WA 98225
360-543-5686
<http://www.pstrust.org>



300 N. Commercial Street, Suite B, Bellingham WA 98225
360-543-5686 www.pstrust.org

October 4, 2012

Washington Dept. of Ecology
Attn: Sonja Larson
PO Box 47600
Olympia, WA 98504-7600

By email to: spillsrulemaking@ecy.wa.gov

Dear Ms. Larson:

We appreciate the opportunity to comment on the Department's proposed changes to the Oil Spill Contingency Plan Rule. The State of Washington can be proud of its leading role among the states in oil spill response planning. When asked by members of the public from other states what they can do to improve fuel transportation safety, we frequently use the Washington spill planning requirements as an example of a program their home states could emulate. There are several aspects of the proposed rules where improvements should be made.

1. Preparing for risks of non-floating oils

Given the dramatic increase in planned marine transport of oil, petroleum products and other cargo by vessels carrying bunker oil through Washington's marine waters, and the use of at least one hazardous liquid pipeline in the state for transport of non-floating oils that could affect both marine and fresh waters, ensuring that oil spill response planning is adequate is critical. The pipeline rupture and diluted bitumen (dilbit) spill in Marshall, Michigan makes clear the substantial risks to Washington's environment from the transportation of increasing quantities of similar mixtures of tar sands and diluents by tanker and pipeline into Washington and through its waters. Washington's current spill response planning rules do not account for the particular risks from the introduction of dilbit into marine and freshwater environments, and we are concerned that the

proposed amendments to the rules do not provide sufficient certainty that operators and plan holders will be prepared to respond to spills of this type.

Some of the risks of transportation of dilbit are laid out in the Preliminary Cost-Benefit Analysis at Section 1.6:

Oil from Alberta bitumen, even once diluted, is uniquely difficult to remove after a spill, because of its properties. Alberta bitumen oils also generally sink, or some portion is expected to sink, which renders ineffective conventional techniques to contain and remove oil from the water's surface. Sinking oil poses a risk of contamination to sediments and their ecosystems, which include economically and culturally valuable shellfish and fisheries.

The analysis goes on to describe the expense and difficulty of cleaning up after a spill of this type of product. However, the proposed rules don't seem to be drafted to take into account the variations in dilbit and/or synthetic crude currently being shipped and planned for increasing shipments. The rules add specific planning criteria for Group 5 oils – those with a specific gravity of >1.0 -- and we agree that these oils require special consideration and planning. However, the dilbit that spilled in Michigan had a specific gravity of less than one, and it is our understanding that it would not have been considered a Group 5 oil for that reason. Yet once the diluents volatilize, and/or once the oil combines with any suspended sediment, the remaining product does sink and all of the same difficulties with recovery and cleanup occur as with Group 5 sinking oils. It is imperative that the proposed rules be revised to require adequate planning for spill response not only to Group 5 oils, but also for synthetic crude from tar sands and for dilbit, regardless of the proportion of bitumen and diluents.

2. Transparency

The Trust has worked for many years to improve the transparency of state and federal regulation of pipeline safety. While we are pleased that draft spill response plans are available for public comment, the public would be better served if all plans, proposed amendments, planning manuals, and planning standards were publicly available on the Ecology website, allowing easy access and review.

3. Definition of "oil"

In reviewing the proposed rule change, we noticed that the definition of oil in the existing and proposed state regulations varies from that in the federal Oil Pollution Act, in that the state definition limits oil to that which is liquid at atmospheric temperature and pressure. The federal definition contains no similar limitations. Given the characteristics of tar sands and its derivatives, it

caused us to wonder whether this limitation might unintentionally exclude from coverage some products that may be transported in tankers or pipelines. It would be helpful to provide an explanation of this difference in definitions, and/or to reconsider the limitation and match the broader federal definition of oil.

4. Planning standards for Group 5 oils

While we are pleased that there are now proposed planning standards specific to Group 5 oils, and we hope they will be expanded to include tar sands synthetic crude and all varieties of dilbit, we have some concerns about the proposed standards themselves. To paraphrase, the standards essentially say: “ Have enough capacity to respond within 12 hours.” Unfortunately, with this type of standard, you will only learn that it is not strong enough after a spill, when an approved response plan results in an inadequate response and clean up.

The standards should be strengthened to provide some reference to the volume of spill and geographic area the plan holder should be prepared to respond to; some quantity of equipment, materials and staffing that needs to be available, and the response time should be reduced to fewer than 12 hours. For products like dilbit, where the volatilization of the diluents triggers the sinking of the oil and dramatically increases the difficulty of a cleanup and recovery effort, time is of the essence, and every hour after a spill means more product sinking. Twelve hours seems excessive.

Adding tar sands synthetic crude and dilbit to the oils covered under these Group 5 standards will help, but will not provide complete preparation for a spill. Some of the product will float for some period of time, and the plan holder needs to be able to respond to the spill accordingly, with responses appropriate to floating oils in the first period following the spill, and transitioning to add in efforts to recover the sinking oil products when the sinking occurs.

Thank you for the opportunity to review this proposal.

Sincerely,

Rebecca Craven
Program Director

From: Jenny Atkinson <jenny@whalemuseum.org>
Sent: Wednesday, October 03, 2012 2:13 PM
To: ECY RE Spills Rule Making
Cc: Larson, Sonja (ECY)
Subject: Comment Letter
Attachments: Letter to Dept of Ecology re Oil Spill Contingency plan_100312.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Thank you for the opportunity to submit formal comments. A PDF of our letter is attached. The original will be mailed today.

Jenny L. Atkinson
Executive Director
The Whale Museum (voted [Best Museum in the Northwest](#) 2009)
P. O. Box 945
Friday Harbor, WA 98250
office: (360) 378-4710 ext. 26
fax: (360) 378-5790
website: www.whalemuseum.org



PROMOTING STEWARDSHIP OF WHALES AND THE SALISH SEA ECOSYSTEM THROUGH EDUCATION AND RESEARCH

October 3, 2012

Sonja Larson, Lead Response Technology Specialist
Ecology Spills Program
Department of Ecology
Post Office Box 47600
Olympia, WA 98504-7600

Re: Comments on proposed amendments to Oil Spill Contingency Plan Rule (Chapter 173-182 WAC)

Dear Ms. Larson:

On behalf of The Whale Museum, I am writing to express our support for the comments and suggestions outlined by the San Juan County Council and Council Member Level Pratt in her letter to you dated September 28, 2012.

The Whale Museum would like to emphasize the fragility of the Southern Resident Community of endangered orcas and the horrific impact an oil spill would pose to their survival.

Identified as one of the major threats faced by the orcas, the NOAA's Recovery Plan uses the example of the *Exxon Valdez* oil spill and impacts on Alaskan killer whales to illustrate the potential catastrophe for our local orcas:

Major oil spills are potentially catastrophic to killer whales and their environment, as illustrated by the probable impacts on the main resident and transient pods frequenting the area of the massive *Exxon Valdez* oil spill in Prince William Sound, Alaska, which occurred in 1989. Six of the 36 members of AB pod were missing within one week of the spill after being seen in heavily oiled waters and eight more disappeared within two years (Dahlheim and Matkin 1994, Matkin et al. 1994, 1999a, 2003, Matkin and Saulitis 1997). These were followed by the deaths of two orphaned calves in the winter of 1993-1994, as well as two adult males (including one fairly young individual) in 1994 and 1997 whose dorsal fins collapsed soon after the spill, indicating stress or ill health. AT1 pod lost eight of its 22 members by 1990 and two others by 1992. These mortality rates are unprecedented for the northeastern Pacific. Causes of death of the missing animals could not be confirmed because their carcasses were never located or fully necropsied, thus researchers were unable to directly attribute the deaths to oil contamination.
January 2008 II-50 NMFS

However, retrospective evaluation shows it highly likely that oil exposure contributed to their deaths or did so indirectly for orphaned calves. Deterioration of the social structure of AB pod, with subgroups traveling independently from the pod and certain members no longer consistently

associating with their closest relatives, was an additional probable outcome of the spill (Matkin et al. 2003). The spill may have also contributed to AT1 pod's failure to produce any offspring since 1984 (see Matkin et al. 2003). AB pod began recovering in 1996, but is not projected to regain its pre-spill size until about 2015 (Matkin et al. 2003). Five other resident pods seen swimming through oil-sheened waters after the spill did not experience losses (Matkin et al. 1994). However, these pods likely spent less time in the spill area and were observed only in lighter sheens (C. O. Matkin, pers. comm.), which suggests that lesser degrees of exposure may not have been harmful to the whales. (Recovery Plan for Southern Resident Killer Whales, pp. II-48 -49, <http://www.nwr.noaa.gov/Marine-Mammals/Whales-Dolphins-Porpoise/Killer-Whales/ESA-Status/upload/SRKW-Recov-Plan.pdf>)

Listed as an endangered species in November 2005, the Southern Resident Community of Orcas is struggling to recover. In the past year, while there were only two calves born, at least six members of this population were lost. The current population is 84 members. Other on-going threats include shortage of prey, vessel effects and toxins. It is unlikely that our local orcas could survive a major oil spill. The Whale Museum has spent decades recording sightings of these orcas in the Salish Sea. Since 1978, there have only been two months (in 2009 & 2010) when one of the pods of orcas was not seen in the Salish Sea showing how important this area is to this population. Furthermore, analyses of our long term data set show all three pods use Haro Strait as their core summer habitat, thus making it even more critical that oil spill response to that body of water be enhanced, in light of potential increases in shipping traffic there. Every reasonable precaution should be taken to further protect them.

Thank you for the opportunity to submit comments. We urge you to include the San Juan County Council and Council Member Pratt's recommendations in your decisions.

Respectfully submitted,



Jenny L. Atkinson
Executive Director

From: Sharon Abreu <sharmuse@gmail.com>
Sent: Wednesday, October 03, 2012 2:09 PM
To: Larson, Sonja (ECY)
Subject: Letter for Public Comment on the Oil Spill Contingency Planning Rule (Chapter 173-182 WAC).
Attachments: dept_of_ecology_ltr_100312.doc
Follow Up Flag: Follow up
Flag Status: Completed

Sharon Abreu
1315 Vusario Lane
Eastsound, WA 98245
[\(360\) 376-5773](tel:3603765773)

October 3, 2012

Delivered by email: sonja.larson@ecy.wa.gov

Sonja Larson
Department of Ecology
PO Box 47600
300 Desmond Drive
Olympia, WA 98504

Re: Public Comment on the Oil Spill Contingency Planning Rule (Chapter 173-182 WAC).

Dear Ms. Larson and the Rule Advisory Committee Members:

I appreciate the opportunity to comment on the Oil Spill Contingency Planning Rule (Chapter 173-182 WAC).

I am concerned about the threat of oil spills from the single-hulled tankers that would be transporting coal to Asia from the Gateway Pacific Terminal proposed for Cherry Point north of Bellingham.

It is my understanding that these tankers are more likely to have accidents and oil spills than other types of tankers. I am concerned about possible (and probable) catastrophic impacts on our local ecosystems here in the San Juan Islands, which would also be catastrophic to our local economies, were there to be even one oil spill from these tankers in our narrow straits.

I am also concerned about an increase in the number of tankers traveling through our straits as a result of tar sands oil, the increase in potential oil spills as a result of that, and the cost to our county and residents should an oil spill occur in our waters.

I echo the Friends of the San Juans' statement that the Oil Spill Contingency Plan Rule must require the appropriate geographic distribution of spill response equipment and personnel.

Thank you in advance for your attention to this matter.

Sincerely,

Sharon Abreu
Orcas Island Resident since 2001

**Sharon Abreu
1315 Vusario Lane
Eastsound, WA 98245
(360) 376-5773**

October 3, 2012

Delivered by email: sonja.larson@ecy.wa.gov

Sonja Larson
Department of Ecology
PO Box 47600
300 Desmond Drive
Olympia, WA 98504

Re: Public Comment on the Oil Spill Contingency Planning Rule (Chapter 173-182 WAC).

Dear Ms. Larson and the Rule Advisory Committee Members:

I appreciate the opportunity to comment on the Oil Spill Contingency Planning Rule (Chapter 173-182 WAC).

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It is my understanding that these tankers are more likely to have accidents and oil spills than other types of tankers. I am concerned about possible (and probable) catastrophic impacts on our local ecosystems here in the San Juan Islands, which would also be catastrophic to our local economies, were there to be even one oil spill from these tankers in our narrow straits.

I am also concerned about an increase in the number of tankers traveling through our straits as a result of tar sands oil, the increase in potential oil spills as a result of that, and the cost to our county and residents should an oil spill occur in our waters.

I echo the Friends of the San Juans' statement that the Oil Spill Contingency Plan Rule must require the appropriate geographic distribution of spill response equipment and personnel.

Thank you in advance for your attention to this matter.

Sincerely,

Sharon Abreu
Orcas Island Resident since 2001

From: Oakes, Steve <Steve.Oakes@kalamaexport.com>
Sent: Wednesday, October 03, 2012 1:31 PM
To: ECY RE Spills Rule Making
Subject: comment on oil spill contingency rule

Follow Up Flag: Follow up
Flag Status: Completed

Director Ted Sturdevant
Washington Department of Ecology

Dear Mr. Director,

Kalama Export Co. is a grain export terminal on the Columbia River.

Kalama loads approximately 160 ocean going vessels per year.

We are making this written comment on proposed rule amendment to the Oil Spill Contingency Plan.

We believe this proposed change is too broad. The proposal should be for Puget Sound. Not all Washington waters. We are asking that the proposal incorporate alternate planning standards into chapter 173-182 WAC for the Columbia River that are appropriate to the level of risk.

This proposal would double the fees paid by vessels starting in 2013. Excessive fees can make coming to the Columbia River too expensive. With thousands of jobs in this region, relying on foreign trade. We must do everything we can to be the low cost provider.

This proposed rule would be cost prohibitive and would exceed the response needed for a worst case discharge on the Columbia River.

We ask that the proposal be reviewed. And modified to incorporate something more appropriate for the Columbia River.

Kind Regards,

Steve Oakes
Vice President of Operations
Kalama Export Company
2211 N Hendrickson Dr
Kalama WA 98625
360-673-3900

From: Michael Riordan <mriordan137@gmail.com>
Sent: Wednesday, October 03, 2012 12:20 PM
To: ECY RE Spills Rule Making; Larson, Sonja (ECY)
Cc: Katie Fleming; Donna Gerardi Riordan
Subject: Oil Spill Contingency Planning

Follow Up Flag: Follow up
Flag Status: Completed

To whom it may concern:

As a resident of Orcas Island, I am becoming increasingly concerned about the tremendous increases we may be facing in oil tanker and coal carrier traffic through the waters of the San Juan Islands. There are many facets to this issue, but you are addressing one of the most important in your Oil Spill Contingency Planning rules. Therefore I would like to briefly mention here my three uppermost concerns, which may or may not be relevant to your rule-making process:

1. There should be an emergency response tug stationed at all times in the San Juan Islands, probably at Friday Harbor, in the likely event that a ship loses power or is otherwise disabled in the swift currents of Haro or Rosario Straits. Like the emergency tug stationed at Neah Bay, it should be manned and ready to respond at all hours, and the funding for that tug and its operators should be paid for by the shipping companies that use those channels — as is the case for the Neah Bay facility, according to Senate Bill 5344.
2. Should an oil spill occur, the ability to respond rapidly and contain the spill is paramount. Therefore sufficient oil-spill response equipment and materials should be stationed right here in the San Juan Islands, again probably in Friday Harbor as the best location. And sufficient personnel, whether state or local government employees, should be sufficiently trained to deploy them, possibly with the aid of well-trained volunteers.
3. Given the existing and proposed increases in the shipping of Alberta Tar Sands and Canadian crude products through these Straits, including diluted bitumen and synthetic crude oil, suitable equipment — and the personnel trained to use it — that can address the need to contain and clean up such heavy oils that sink should be a crucial part of the Oil Spill Contingency Planning rules. This would include Group V oils and bunker fuels, too.

In your rule-making process, you should put emphasis on prevention over response. A gram of prevention here is worth a pound of cure.

Sincerely yours,

Michael Riordan

--

Michael Riordan
Physicist/Author
Now living on beautiful Orcas Island
106 Hilltop Lane

Eastsound, WA 98245

From: Katie Fleming <katie@sanjuans.org>
Sent: Wednesday, October 03, 2012 9:30 AM
To: Larson, Sonja (ECY); ECY RE Spills Rule Making
Subject: Public Comment on the Oil Spill Contingency Planning Rule (Chapter 173-182 WAC)
Attachments: SASS Oil Spill Comment ltr 10-3-12 - final.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Dear Ms. Larson and the Rule Advisory Committee Members:

Please see the attached letter from the Safe Shipping Associate of the Salish Sea. On behalf of over 8 million residents living in and around the Salish Sea, we appreciate the opportunity to comment on the Oil Spill Contingency Planning Rule (Chapter 173-182 WAC).

Sincerely,
Katie Fleming

--

Katie Fleming
Community Engagement Director
FRIENDS of the San Juans
P.O. Box 1344 | Friday Harbor, WA 98250
Office: 360.378.2319 | Fax:360.378-2324 | Cell: 360.305.9066 www.sanjuans.org

Because you have to be more careful with an island.

SAFE SHIPPING ALLIANCE OF THE SALISH SEA

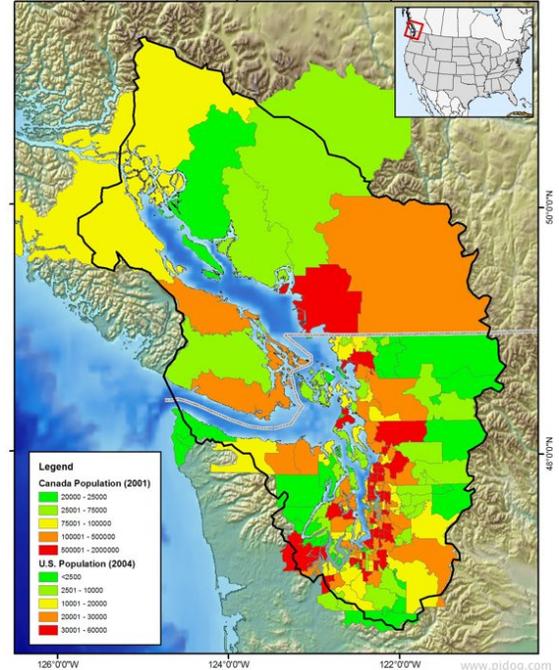
October 3, 2012

Delivered by email

sonja.larson@ecy.wa.gov

Sonja Larson
Department of Ecology
PO Box 47600
300 Desmond Dr.
Olympia, WA 98504

Re: Public Comment on the Oil Spill Contingency
Planning Rule (Chapter 173-182 WAC).



Dear Ms. Larson and the Rule Advisory Committee Members:

On behalf of over 8 million residents living in and around the Salish Sea¹, we appreciate the opportunity to comment on the Oil Spill Contingency Planning Rule (Chapter 173-182 WAC).

Hundreds of thousands of tourists enjoy the beauty of the Salish Sea annually. Families rent sailboats and yachts, children attend camps, canoes and kayakers paddle, and vacationers enjoy our local restaurants, accommodations, and shops. Maintaining the beauty of these islands is critical to preserving our local and regional economy.

According to the Outdoor Industry Association, outdoor recreation supports 115,000 jobs and contributes \$11.7 billion to the state economy. In San Juan County, tourism is valued to generate over \$51 million dollars in spending and 669 jobs. International, national, and

¹ The name Salish Sea has been approved by naming boards in both British Columbia and Washington State as well as by the United States and Canadian naming boards. Politically the Salish Sea is governed by the USA and Canada, but the international boundary separating the Puget Sound Basin (USA) from the Georgia Basin (Canada) corresponds to no natural barrier or transition. The border is invisible to marine fish and wildlife. Species listed as threatened or endangered under the US Endangered Species Act or the Canadian Species at Risk Act, including Southern Resident killer whales (*Orcinus orca*), marbled murrelets (*Brachyramphus marmoratus*), and some ecologically significant units or species of Pacific salmon (*Onchorynchus* spp.), traverse the boundary daily. The coastline length of the Salish Sea including 419 islands is 7,470 km. The total land area of all 419 islands is 3,660 square kilometers. The total sea surface of the Salish Sea area is 16,925 square kilometers (1:250,000 scale World vector Shoreline and TEOP02 topographic/bathymetric GIS grid). The maximum sea depth is 650 meters (Bute Inlet, BC; 1:250,000 scale World vector Shoreline and TEOP02 topographic/bathymetric GIS grid). There are 37 species of marine mammals, 172 species of birds, 247 species of fish, and over 3000 species of marine invertebrates spend all or a portion of their life in the Salish Sea ([Gaydos & Pearson 2011](#) and [Brown and Gaydos, 2011](#).) There are a 113 species listed as threatened, endangered or are candidates for listing ([Brown and Gaydos, 2011](#).)

regional media and publications continually show a strong interest in the destination value of the Salish Sea.²

The Salish Sea is one of the world's largest and biologically rich inland seas. It is the unified bi-national ecosystem that includes Washington State's Puget Sound, the Strait of Juan de Fuca and the San Juan Islands as well as British Columbia's Gulf Islands and the Strait of Georgia. The name recognizes and pays tribute to the first inhabitants of the region, the Coast Salish. Indigenous cultures surrounding the Salish Sea all depend on healthy marine waters.

A large oil spill would change this overnight.

Communities in the Salish Sea are already impacted by the export of tar sands to all five refineries in Washington State. The refineries are fed by almost 100 tankers coming south through the Salish Sea from Canada every year, as well as by the Puget Sound Spur of the Trans-Mountain pipeline. Both tankers in the sound and the Trans-Mountain pipeline create the risk of a tar sands disaster in the Salish Sea.

Based on recent experience in Kalamazoo Michigan in 2010, an event involving tar sands bitumen material could be far worse than an oil spill. The Kalamazoo River tar sands bitumen disaster turned out to be the most costly onshore pipeline break in U.S history. We need to know exactly how this type of a spill would be handled in this region.

This spill was the result of a pipeline rupture from the Enbridge pipeline running through Marshall, Michigan. This spill was reported to cost \$29,000 per barrel to cleanup which makes it the most costly spill in US history. Prior to this incident, the average crude oil spill in the past decade is reported to be approximately \$2,000 per barrel.

We request that the final Cost Benefit and Least Burdensome Alternative Analysis include the cost associated with the 2010 Kalamazoo River spill in Michigan. Cleanup and restoration of the Kalamazoo River diluted bitumen spill is on-going.

The proposed pipeline expansion projects in Canada are poised to significantly increase vessel traffic carrying Alberta bitumen (tar sands) oil through the waters around the San Juan Islands and the Strait of Juan de Fuca. These vessels may be bound for Washington ports or move through our waters bound for other destinations. It is also expected that the trans-boundary pipeline between

² New York Times: The 41 Places to Go in 2011—listed as the number 2 place to visit in the world, in between Santiago, Chile as number 1 and Koh Samui, Thailand as number 3. (Editor's tagline related to the San Juan Islands: "Bold-face restaurateurs vie with unspoiled nature. Nature wins."), National Geographic Traveler: The world list featured San Juan Islands as number 3 in the 10 Best Trips of Summer 2011, "all about weather, whales, and water", Travel + Leisure: World's Best List in 2011 and 2010, the number 4 position for Top Islands (moving up from number 5 in 2009), Life: 100 Places to See in Your Life Time, July 2011, USA Today: Best Wildlife Watching Spots in Each State, July 2011, Lonely Planet: US Islands that Won't Break the Bank, July 2011, New York Times: A Directory of Rare Wonders, May 2011, HUFFPOST TRAVEL: 10 Best Whale Watching Destinations Around the World, April 2011, The TODAY Show, NBC: Affordable Secret Island Getaways, April 2011, AOL Travel: Six Best Beach Vacation Spots in the Pacific Northwest, February 2011, Sunset magazine: "One of the Best Coastal Vacation Spots in the West 2010"

Canada and the United States will significantly increase their capacity and expand their tank farm capability accordingly.

Oil from Alberta bitumen, even once diluted, is uniquely difficult to remove after a spill, because of its properties. Alberta bitumen oils also generally sink, or some portion is expected to sink, which renders ineffective conventional techniques to contain and remove oil from the water's surface. Sinking oil poses a risk of contamination to sediments and their ecosystems, which include economically and culturally valuable shellfish and fisheries.

Increased shipping traffic from proposed coal export terminals should also be a consideration. Projections for coal ships alone moving through Washington and British Columbia waters of the San Juans (Strait of Juan de Fuca, Rosario Strait, Haro Strait, Boundary Pass, and the Strait of Georgia) could mean an additional 1,774 transits from 887³ cargo ships exporting from ports in British Columbia and the proposed Gateway Pacific Terminal outside of Bellingham.

DESIGNATE SAN JUAN COUNTY AS A STAGING AREA

Having San Juan County identified as a Staging Area and having additional spill response equipment and personnel resident in San Juan County to meet the two, three, four, and six hour planning standards will significantly improve the response time and the capacity to contain and clean-up a major spill.

The Oil Spill Contingency Plan Rule must require the appropriate geographic distribution of spill response equipment and personnel.

As a Planning Standard Area, only the resources to meet the two and three-hour required timeframe standards must be resident. To meet the four and six hour planning standard, the law only requires that equipment and personnel reach the nearest border of the Planning Standard Area in the required timeframe.

Equipment and personnel resident in Anacortes, Bellingham Bay, or Port Angeles will likely be able reach the east side of our County but there are no assurances that the two, four or six-hour planning standards can be met if there is a major spill in Haro Strait.

PROTECTING ENDANGERED SPECIES/ AVOIDING "TAKE"

Another justification for San Juan County's designation as a Staging Area and requiring that the two, three, four, and six hour Planning Standards be resident is to avoid taking species listed under the US Endangered Species Act or the Canadian Species at Risk Act, including Southern Resident Killer Whales (*Orcinus orca*), Marbled murrelets (*Brachyramphus*

³ 487 ships from Gateway Pacific Terminal in Washington, 200 ships from Roberts Bank Super Port (aka Delta Port) in BC, 200 ships from Westshore Terminal in BC. 300-470 additional large cargo vessels from BP and Tesoro at March Point, Anacortes, and Kinder Morgan in Vancouver Harbor carrying tar sands and/or bitumen blends will add additional potential for vessel traffic to the Salish Sea compounding the risk for collision, allision, oil spill and marine impacts to this fossil fuel export marine highway.

marmoratus), and some ecologically significant units of species of Pacific salmon (*Onchorynchus* spp.), which traverse the boundary daily.

Ensuring that the appropriate BAT and BAP containment and recovery gear and personnel is response-ready and on-site in a timely manner in the event of a major spill in Haro Strait will reduce the impacts and avoid losses to the orca whales and their entire food chain (including federally listed endangered Chinook salmon). The value of a southern resident orca whale can be quantified and that cost must be included in the Cost-Benefit and Least Burdensome Alternative Analysis.

PLEASE INCORPORATE THE FOLLOWING ELEMENTS INTO THE REVISED RULE SUCH THAT AN OIL SPILL CAN BE QUICKLY CONTAINED AND CLEANED IN THE SAN JUANS:

1. Identify and designate San Juan County as a Staging Area and specify that the two, three, four, and six hour planning standards be resident;
2. Distribute equipment and personnel to the San Juans sufficient to address the risk from oil and diluted bitumen tar sands spill;
3. Require and ensure the ability to respond, contain and cleanup spills of hydrocarbons that sink. Potentially sinking hydrocarbons include Group V oils, bunker fuels, and diluted bitumen tar sands;
4. Specifically require that all Alberta Tar Sands/Canadian crude products including diluted bitumen and all forms of synthetic crude being transported by land-based pipelines be subject to the Oil Spill Contingency Plan Rule;
5. Require that all contingency plans, technical manuals, and planning standards be publically available on Ecology's website;
6. Require that public review and comment be provided on all proposed changes to contingency plans, technical manuals, and planning standards; and
7. Prohibit the use of Coexit as a dispersant as has been done in the United Kingdom.

As co-signers to this letter, we look forward to the State playing a lead role in improving protection of the Salish Sea. Identifying and designating San Juan County as a Staging Area would be a critical first step in that process.

Sincerely,

Stephanie Buffum, FRIENDS of the San Juans
Donna Gerardi Riordan, Orcas NO COALition
Becky Hellman, Lopez NO COALition
Matt Krogh, North Sound Baykeeper, RE Sources for Sustainable Communities
Terry J. Wechsler, Protect Whatcom
Fred Felleman, Wave Consulting
Barry Wenger, Principle of Raven's Eye Environmental Consulting
Aaron Sanger, ForestEthics
Paul K. Anderson. The Chuckanut Conservancy
Marcie Keever, Friends of the Earth

From: Scott Merriman <SMerriman@wacounties.org>
Sent: Wednesday, October 03, 2012 8:26 AM
To: Larson, Sonja (ECY); ECY RE Spills Rule Making
Subject: Comment letter on the proposed changes to the Oil Spill Contingency Rules
Attachments: Spill Response Comments.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Please accept the attached comment letter on the proposed amendments to Chapter 173-182 WAC. Hardcopy will not follow.

Scott Merriman
Washington State Association of Counties
cell 3609519256



Washington State Association of Counties

October 2, 2012

Sonja Larson
Department of Ecology
PO Box 47600
300 Desmond Dr.
Olympia, WA 98504

RE: Comments on proposed amendments to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC)

Dear Ms. Larson,

The Washington State Association of Counties Coastal Caucus appreciates this opportunity to provide the following comments and suggestions on proposed changes to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC).

We also appreciate the opportunity to have participated on the oil spill advisory task force that helped shape the draft rule.

Washington State has an admirable spill prevention and response record. A major oil spill is a very real threat in Puget Sound with the planned increase of vessel traffic within the Sound. And, because we haven't had one doesn't lessen the need to update the rule. The Island County residents recently experienced the environmental and financial consequences of a minor spill in Penn Cove which demonstrate the need for our response system.

A strong and immediate response to any oil spill in the water, at a facility or pipeline with appropriate equipment and personnel is imperative.

Sinking Oils

The proposed changes to the Oil Spill Contingency Plan Rule do not adequately address the spill response capacity needed for spills of oils that can sink. New Section WAC 173-182-324 addresses Group 5 oils specifically but we question whether this new section requires any additional response capacity than that already required by federal law. Best Achievable Technology (BAT) and Best Achievable Protection (BAP) equipment and appropriate personnel must be available to respond to spills of oils that can sink, in addition to group 5 oils. In particular, these include the bunker fuels used for propulsion and diluted bitumen (an Alberta Tar Sands product).

The Oil Spill Contingency Plan Rule must require that the appropriate BAT and BAP containment and recovery gear and appropriate personnel be response-ready and on-site in a timely manner to respond to spills of oil that can sink. It is imperative that WAC 173-182 specify that Alberta Tar Sands products including diluted bitumen and all forms of synthetic crude are subject to the Oil Spill Contingency Plan Rule.

The only place in any of the Oil Spill Contingency Plan Rule update documents to mention the emerging risk from sinking oils is in section 1.6 in the Preliminary Cost-Benefit and Least Burdensome Alternative Analysis. This section must be retained and expanded. While the cost comparison of the average crude oil spill in the past decade - \$2 thousand per barrel or more - with the 2010 diluted bitumen spill in Michigan - \$29 thousand per barrel - is significant, it is important to note that when this report is finalized, the cost of the diluted bitumen spill should be updated and "costs to date" be added to the text.



Washington State Association of Counties

San Juan County Identified as a Staging Area

The Oil Spill Contingency Plan Rule must require the appropriate geographic distribution of spill response equipment and personnel. Neither Ecology nor the US Coast Guard has provided San Juan County with assurances that the appropriate spill response equipment and personnel can be on-site in the event of a major spill in Haro Strait in the four and six hour planning standard time-frames. While the new four hour and existing six hour planning standards can be legally met for the San Juan County Planning Standard Area given that equipment and personnel can reach the eastern edge of the San Juan County Planning Standard Area in the required time-frames, a major spill in Haro Strait is not assured the necessary equipment and personnel response times unless the appropriate equipment and personnel are resident. San Juan County resident personnel and equipment must be able to initiate a full response until additional equipment can cascade into the region. WAC 173-182-370 must define San Juan County as a Staging Area and must specify that the two, three, four, and six hour planning standards be resident.

Especially given the increased risk of a major spill from the increased traffic proposed by the Gateway Pacific Terminal and the increased export of diluted bitumen, having San Juan County identified as a Staging Area and having additional spill response equipment and personnel resident in San Juan County to meet the two, three, four, and six hour planning standards will significantly improve the response time and the capacity to contain and clean-up a major spill.

Another justification for San Juan County's designation as a Staging Area and requiring that the two, three, four, and six hour Planning Standards be resident is the avoided losses to endangered species. The southern resident orca whales were listed as endangered in 2005 under the federal Endangered Species Act. Haro Strait contains the orca whales' principal feeding grounds along the west side of San Juan Island. Ensuring that the appropriate BAT and BAP containment and recovery gear and personnel is response-ready and on-site in a timely manner in the event of a major spill in Haro Strait will reduce the impacts and avoid losses to the orca whales and their entire food chain (including federally listed as endangered Chinook salmon). The value of a southern resident orca whale can be quantified and that cost must be included in the Cost-Benefit and Least Burdensome Alternative Analysis.

Costs Associated With Very Small Spills

The Preliminary Cost-Benefit and Least Burdensome Alternative Analysis should be required to address the significant costs that can be associated with very small spills. The *Deep Sea* spill is a case in point. While the millions of dollars associated with the pollution response, vessel salvage, and vessel deconstruction costs would not be applicable in the Oil Spill Contingency Plan Rule, the very small amount of oil spilled caused over \$1 million in losses to Penn Cove Shellfish as well as the quantifiable losses related to the closure of Grasser's Lagoon in Penn Cove which is one of the most popular beaches in Washington State for recreational shellfish harvesting.

Greater Transparency

It is imperative that all contingency plans, technical manuals, and planning standards be publically available on Ecology's website. Further, the Oil Spill Contingency Plan must require that public notification, review, and comment be provided for on all proposed changes to contingency plans, technical manuals, and planning standards.



Washington State Association of Counties

Summary of recommended changes to the draft rule

The Oil Spill Contingency Plan Rule

1. Must require the appropriate BAT and BAP containment and recovery gear and personnel be response-ready and on-site in a timely manner to respond to spills of oil that can sink, including diluted bitumen and bunker fuels.
2. Must specifically state that Alberta Tar Sands products including diluted bitumen and all forms of synthetic crude are subject to the Oil Spill Contingency Plan Rule.
3. Must define San Juan County as a Staging Area and must specify that the two, three, four, and six hour planning standards be resident.
4. The new planning standards should also apply to facilities and pipelines.
5. The cost-benefit analysis should also include the age of the existing spill response equipment.
6. Require all contingency plans, technical manuals, and planning standards be electronically submitted and be publically available on Ecology's website.
7. Require adequate public notification for all proposed changes to contingency plans, technical manuals, and planning standards so the public there can be adequate public review and comment.

Sincerely,

A handwritten signature in black ink, appearing to read "Helen Price Johnson".

Helen Price Johnson, Island County Commissioner

And

A handwritten signature in black ink, appearing to read "Phil Johnson".

Phil Johnson, Jefferson County Commissioner

From: Lovel Pratt <LovelP@sanjuanco.com>
Sent: Wednesday, October 03, 2012 7:24 AM
To: Larson, Sonja (ECY); ECY RE Spills Rule Making
Cc: Jensen, Dale (ECY); Pilkey-Jarvis, Linda (ECY)
Subject: Comments on the Oil Spill Contingency Plan Rule and the rulemaking process

Follow Up Flag: Follow up
Flag Status: Completed

Hi Sonja,

Please include for the record the following comments on the proposed Oil Spill Contingency Plan Rule and the rulemaking process.

It was challenging to participate in the oil spill rule advisory committee with the significant participation from representatives of the spill response, marine transportation, and refineries, and so few representatives from local governments and the many industries dependent on environmental resources. The process appeared to be weighted significantly towards the in-pit of the majority oil industry participants. This must be rectified in future rulemaking processes.

A very troubling observation in this process and one that must be rectified in the update to the Oil Spill Contingency Plan Rule is the fact that Ecology does not know what oil products are being transported through our waters. The committee discussion on April 25th concluded with committee members emphatically stating that there are no group 5 oils being transported through Washington waters and Ecology's silence implying that I must take the word of the committee members representing the various components of the oil industry. On June 19th, Ecology confirmed that indeed there is regular transport of group 5 oils in Washington waters.

In June I asked Ecology if diluted bitumen were being transported through Washington waters to/from Washington ports. I received an answer (affirmative) in September, and I am still waiting to receive the MSDS sheets on those products. Ecology should not have to wait for a spill to receive this vital information that is required to be readily available in current rule.

It is imperative that Ecology know what products are being regularly transported through the waters of the state, and all contingency plans must be specific to those products.

I appreciate that Ecology has limited staff resources and I know that I have asked a significant number of questions and submitted many requests for information. The rulemaking process must provide sufficient staff capacity or sufficient time for existing staff to respond to the requests of the rulemaking advisory committee participants. At the February 23rd advisory committee meeting and in a follow-up email on March 5th, I asked Ecology to demonstrate that spill response equipment and personnel are geographically distributed appropriately, and specifically I asked Ecology to confirm that spill response equipment and personnel can meet the four and six hour planning standards for a major spill in Haro Strait. This information was not provided until September 24th, day 20 of the 30 day comment period. My June 25th email to ecology requested tracked changes of the various drafts of the rule. This information was also not provided until the comment period.

Thank you for this opportunity to comment on the proposed Oil Spill Contingency Plan Rule and the rulemaking process.

Lovel

Level Pratt
San Juan County Council, District 1
Office: 55 Second St. N., 1st floor
Phone: 360-370-7473
Mail: 350 Court Street, No. 1, Friday Harbor, WA 98250

Confidentiality Notice: This email message, including any attachments, is subject to the Washington State Public Records Act, RCW Chapter 42.56 et al.

From: Lovel Pratt <LovelP@sanjuanco.com>
Sent: Wednesday, October 03, 2012 7:24 AM
To: Larson, Sonja (ECY); ECY RE Spills Rule Making
Cc: Jensen, Dale (ECY); Pilkey-Jarvis, Linda (ECY)
Subject: Comments on the Oil Spill Contingency Plan Rule and the rulemaking process

Follow Up Flag: Follow up
Flag Status: Completed

Hi Sonja,

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It is imperative that Ecology know what products are being regularly transported through the waters of the state, and all contingency plans must be specific to those products.

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Thank you for this opportunity to comment on the proposed Oil Spill Contingency Plan Rule and the rulemaking process.

Lovel

Level Pratt
San Juan County Council, District 1
Office: 55 Second St. N., 1st floor
Phone: 360-370-7473
Mail: 350 Court Street, No. 1, Friday Harbor, WA 98250

Confidentiality Notice: This email message, including any attachments, is subject to the Washington State Public Records Act, RCW Chapter 42.56 et al.

From: Jerry Joyce <MoonJoyce@comcast.net>
Sent: Tuesday, October 02, 2012 8:19 PM
To: Larson, Sonja (ECY)
Cc: rolfes.christine@leg.wa.gov; Ranker, Kevin; 'Shawn Cantrell'; Jensen, Dale (ECY); Pilkey-Jarvis, Linda (ECY)
Subject: Seattle Audubon comments on WAC 173-182
Attachments: 182fnldraft comments-Seattle Audubon.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Dear Ms. Larsen:

I have attached the formal comments on the WAC 173-182 public draft from Seattle Audubon. Thank you for the opportunity to participate in the entire rulemaking process. I believe that with a few minor tweaks, we can advance the response capabilities in Washington State to be the one of the best in the nation. Of course, our natural resources, businesses, and quality of life require such an advancement in preparedness and response.

Please feel free to contact me or Shawn Cantrell, Executive Director of Seattle Audubon (ShawnC@seattleaudubon.org) if you have any questions.

Jerry Joyce
Advisor on Marine Issues
Seattle Audubon



October 2, 2012

Washington Dept. of Ecology
Attn: Sonja Larson
PO Box 47600
Olympia, WA 98504-7600
Sonja.Larson@ecy.wa.gov

Ms. Larson:

Thank you for the opportunity to comment on the revisions of WAC 173-182 made in response to the passage and signing of HB 1186, commonly known as the Oil Spill Bill. Seattle Audubon has a long-standing interest in this issue; as a member of the Rule Advisory Committee during the rulemaking, we witnessed the dedication of Ecology staff to the implement of not only the letter but also the spirit and intention of HB 1186.

We believe the requirements to use the best available technology to achieve the best achievable protection with a five-year review cycle, the initiation of the 4-hour standard, the added requirements for aerial surveillance, the implementation of a vessel of opportunity program, improved shoreline cleanup preparedness and response, improved drill requirements, added requirements for the primary response contractors, and the implementation of a technical manual all increase our capabilities to respond to both small and large oil spills. Additionally, the draft includes provisions to provide information usable for the updates of plans as more information and technology is developed. For instance, the simple requirement that the type of dispersant is listed along with the quantity and location provides an opportunity in the next plan update to ensure we have the least toxic and most effective dispersants on hand in the unfortunate event they are needed. With a few modifications to the current draft, most of which are minor, we believe that updated rule will be a great step forward in being adequately prepared in the event of a spill. Below are our comments on the final draft and recommendations for modifications.

AERIAL SURVEILLANCE

HB1186 requires that planning standards be updated to “provide for continuous operation of oil spill response activities.”¹ This requirement is for all planholders, not just covered vessels. Therefore, we **recommend** that this requirement also extend to all facilities and pipelines. Additionally, the law states that the equipment “represents the best achievable protection.” However, a FLIR type imaging system, especially if it is hand-held, does not achieve this. Mountable, multispectral, or hyperspectral systems are available that provide a wealth of data, including spill thickness. Additionally, a hand-held system is vulnerable to distortion associated with vibration and other movement, as well as operator error. Therefore, we **recommend** that all remote sensing

imaging systems be attached to an aircraft using vibration damping mountings and that the equipment meet the best achievable technology requirement.

VESSELS OF OPPORTUNITY

Concerns about the effective use VOOs were expressed during the Rule Advisory Committee meetings. As a result, the draft resulting from those meetings required training of VOOs as 1/3 on-water recovery, 1/3 sensitive area protection, and 1/3 logistic. The current draft revises this to require that no more than 50% of vessels are pre-trained for logistics.ⁱⁱ To ensure the full and proper use of these vessels, we **recommend** that the text reflects the intent of the Rule Advisory Committee by limiting pre-training for logistics to no more than 33%.

STORAGE

Storage of recovered oil and oil-water mix has frequently been identified as a major vulnerability in effective response. This rule (WAC 173-182-335 Planning standards for storage) addresses the issue by requiring that, for covered vessels, “at least 25% of the total worst case discharge on-water storage requirement must be staged and dedicated to oil spill response.” However, between the final draft of the Rule Advisory Committee and the release of this public comment draft, the requirement that these “storage devices meet the requirements of best available technology” was removed. The specific reason for this phrase was that the storage requirement might be met by inefficient and ineffective storage bladders or other storage methods that are inadequate for the sea conditions. Therefore, we **recommend** that this phrase requiring best available technology is returned to the final rule so Ecology will have the discretion to determine if a storage system is adequate for the potential spill and environment.

4-HOUR PLANNING STANDARD

This standard is a vital part of implementing the intention of HB 1186. However, a minor change in these sections (WAC 173-182-370, 380, 395, 405, and 415) from the Rule Advisory Committee final draft and this draft is the elimination of the requirement to identify vessels to be used in the deployment of the required advanced feature boom. While it seems that it is implied that there should be vessels available for this task, previous experience has shown that this is not always the case. For example, when booming of vessels prior to oil transfer became required, many vessels were not preboomed because a vessel or crew were not available or the vessel was not adequate to deploy the boom. While the prebooming issues have been mostly resolved, it took time and Ecology interventions. In the event of a spill, there is only one opportunity to rapidly deploy this specialized boom. Additionally, this specialized boom cannot be deployed using some of the smaller vessels used in deploying lighter boom, such as harbor boom. Therefore, we **recommend** that these sections on the 4-hour rule include the explicit requirement to identify the associated vessels to deploy the boom.

OIL TYPES AND PROPERTIES

The required contents of a contingency plan requires the description of the types of oils handled (WAC 173-182-230 Contingency plan general content, item 4 c ii). This does not seem to require adequate descriptions of all potential oils, which include the properties of synthetic oils as well the variability of oils within one group. With so many different properties, lack of detail on potentially

spilled oil could seriously hinder fast, safe, and effective response. Therefore, we **recommend** that Ecology include required detailed properties for all oils being handled in order to enhance the ability to respond to a spill of a specific oil.

SPILLS AT FACILITIES

A substantial change was made to the final Rule Advisory Committee draft and the final draft released for comment regarding spills at facilities (WAC 173-182-264 Notification requirements for facility spills to ground or containment that threaten waters of the state). This change is the addition of the phrase “that threaten waters of the state” in two places. This places the burden of determining if any oil from the spill could reach the waters of the state instead of relying on the professional expertise of a trustee agency, such as Ecology. At best, this will underreport the incidents of spills to ground, and at worse, will delay monitoring and response once it is finally determined that the spilled oil might threaten our waters. Therefore, we **recommend** that these two insertions (“that threaten waters of the state”) be deleted from this section.

EDRC AND TECHNICAL MANUALS

We want to reiterate our serious concern that the use of EDRC (WAC 173-182-348 Determining effective daily recovery capacity) to determine potential oil recovery is not adequate or even appropriate. While it was stated during the Rules Advisory Committee that the USCG was currently reviewing this methodology, we do not believe it is wise to wait for the USCG to issue its review, as many reviews have been delayed multiple times, some for years. Additionally, there is ample evidence that other available methodologies such as ASTM Standard F1780-97 (or later) are much more effective in determining recovery capacity.ⁱⁱⁱ Therefore we **recommend** that the EDRC section be replaced by a more appropriate methodology. If this is not possible at this point, this section should state that the alternatives to the EDRC method be aggressively investigated and that utilization of an improved methodology be implemented as soon as it is shown to be superior to EDRC.

One partial approach to the shortcomings of EDRC is to require technical manuals that evaluate the implementation of best achievable protection systems (WAC 173-182-349 Covered vessel plan holders technical manuals). While not as good as a full replacement of the EDRC method with an improved method, the technical manual does fill some of this gap. However, this manual is required only for “Each covered vessel plan holder that operates or transits in the Neah Bay, Cathlamet, or San Juan Islands planning standard areas.” This unfortunately leaves a major gap in evaluation for vessels operating outside of these areas, including (but not limited to) central and south Puget Sound, and Gray’s Harbor. Additionally, this does not require such a technical manual for facilities, and pipelines, potential major sources of spilled oil. Therefore we **recommend** that the technical manual apply to all planholders.

PUBLIC REVIEW

Public review of contingency plans and associated documents is vital to ensure that the best achievable protection is provided by the use of the best available technology. This section (WAC 173-182-640 Process for public notice and opportunity for public review and comment period) was modified after the Rules Advisory Committee met and currently does not recognize the difficulty of accessing these documents to evaluate and comment on them. Additionally, the draft does not

recognize the extreme difficulties for members of the public who are in the more distant parts of the state to have full access to the documents. Therefore, to ensure full and complete public access, we recommend that the rule state specifically that if a plan (and supporting documents) is submitted only as a paper copy, the plan **will** be scanned into an easily read electronic document. Additionally, **all** submitted plans must be available via a secure web portal.

VOLUNTEER MANAGEMENT

HB 1186 requires that Ecology establish a volunteer coordination system.^{iv} Neither the amendment of WAC 173-182 or WAC 173-183 addresses this issue. The failure of any rulemaking to address this issue is of concern. It should be noted that while other groups, such as the NWAC, have worked on this issue, there is no functioning volunteer management coordination system in place. Ecology should explore how to rectify this omission.

Once again, thank you for the opportunity to make these comments and we look forward to working with all concerned in the implementation on these rules.

Sincerely yours,

A handwritten signature in blue ink that reads "Jerry Joyce". The signature is written in a cursive style with a horizontal line above the first name and a horizontal line below the last name.

Jerry Joyce
Advisor on Marine Issues

ⁱ Engrossed Second Substitute House Bill 1186, section 2.

ⁱⁱ WAC 173-182-317 Covered vessel planning standards for vessels of opportunity (VVO), item 5.

ⁱⁱⁱ Washington State Oil Advisory Council, 2009. *Assessment of Capacity in Washington State to Respond to Large-scale Marine Oil Spills*.

^{iv} Engrossed Second Substitute House Bill 1186, section 4

From: Diane and Glenn Kaufman <dgkaufman@rockisland.com>
Sent: Tuesday, October 02, 2012 4:20 PM
To: ECY RE Spills Rule Making
Subject: Oil Spill Contingency Plan

Follow Up Flag: Follow up
Flag Status: Completed

Greetings:

As a resident of San Juan Island I am greatly concerned with having a thorough contingency plan for any eventual oil spill. I am aware of the proposal by SSA Marine and Peabody Coal to build the Gateway Terminal at Cherry Point and I'm aware of the tanker traffic going through Haro and Rosario Straits already. We have been lucky so far. I know also that there are other ports being proposed in order to ship more coal to Asia. All of these proposals are risky for so many reasons of which you are well aware.

Our islands here depend on tourism in order to survive but beyond that we live here for the natural beauty: the beaches, the whales, the water and the fish. This area has unparalleled beauty. A major oil spill that could easily happen on a foggy night or stormy sea could change all of that instantly especially in light of the possibility of an increase in tankers. For that reason we need an immediate response. We need our islands to be a staging area with a ship(s) and personnel to be readily available and this should be spelled out in the contingency plan.

I look out on Haro Strait from my home and there is almost always a cargo ship or tanker going through. It is busier than it was when we first moved here. I'm also concerned about the invasive species that can and do arrive on our shores from the ballast water. I would like to see a regulation that does not allow the ballast water to be dumped in these waters from tankers, cargo ships or cruise ships.

For the record, I do not like the idea of coal being shipped to Asia with the resulting mercury from burning finding its way back to the Northwest which it is doing right now.

I believe that protecting our environment is of top priority. Once we lose these treasures we may never get them back.

Sincerely,
Diane Kaufman
Friday Harbor

From: Barbara L. Brown <blbrown@rockisland.com>
Sent: Tuesday, October 02, 2012 4:17 PM
To: ECY RE Spills Rule Making
Subject: OIL SPILL

Follow Up Flag: Follow up
Flag Status: Completed

Please make sure that San Juan County is a staging area for oil spills and that the necessary equipment is available for local use. Oil from tar sands in Alberta is more toxic than the oil spilled in the gulf by BP and is heavier. With rocky shorelines on both sides of Haro Strait, both Canadian and U.S. islands are vulnerable to potential spills. The oil pipeline to Vancouver, B.C. is scheduled for expansion and tankers carrying the oil must come through narrow channels with many reefs and vulnerable species.

Please place all documents regarding this issue be available for public comment on your website.

Barbara L. Brown

From: Davais, Kenny (KAM.PTL) <Kenny.Davais@us.kline.com>
Sent: Tuesday, October 02, 2012 4:09 PM
To: ECY RE Spills Rule Making; tim.probst@leg.wa.gov; Harris, Paul; Rivers, Ann; Brian.blake@leg.wa.gov; Dean.takko@leg.wa.gov; Jim.moeller@leg.wa.gov; Wylie, Sharon
Cc: Davais, Kenny (KAM.PTL)
Subject: Proposed amendment to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC)
Attachments: Proposed Oil Spill Rule.pdf

Follow Up Flag: Follow up
Flag Status: Completed

TO:
Sonja Larsen
Washington State Department of Ecology
PO Box 47600
Olympia, 98504-7600

17th Legislative District: Clark County
Representative Tim Probst
Representative Paul Harris

18th Legislative District: Clark/Cowlitz Counties
Representative Ann Rivers

19th Legislative District: Cowlitz, Lower SW Washington
Representative Brian Blake
Representative Dean Takko

49th Legislative District: Vancouver
Representative Jim Moeller
Representative Sharon Wylie

Good day,

Please find the attached letter regarding the proposed amendment to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC).

Thanks and best regards,
Kenneth L. Davais
General Manager, Marine Operations PNW
K Line America, Inc.
PMB 115
2870 NE Hogan Road, Suite E
Gresham, OR 97030-3173
Office: (503) 257-2153
Fax: (503) 257-2154
Mobile: (503) 341-3700
Group e-mail : PTLBMRN@US.KLINE.COM



October 2, 2012

Director Ted Sturdevant
Washington State Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Subject: Proposed Amendment to Oil Spill Contingency Plan Rule (Chapter 173-182 WAC)

Dear Sir,

I am writing to urge the Washington State Department of Ecology to reconsider including the Columbia River in the Proposed Amendment to Oil Spill Contingency Plan Rule -Chapter 173-182 WAC.

If this proposed rule is implemented to include the Columbia River, it has the high potential to cause the Maritime Fire and Safety Association (MFSA) to revise its contingency plan to include the purchase of additional equipment, increase the amount of training and exercises annually and retain additional assets & contractors in order to deliver the terms of the proposed rule amendments.

These proposed rules are cost prohibitive, exceed the response needs for a worst case discharge on the Columbia River and will affect both Washington and Oregon ports. It is very likely these requirements will more than double the cost of current oil spill contingency plans at the Columbia River. This is also coming at a time when overall vessel volume on the Columbia River has been declining which means there are fewer vessels to share the increasing plan costs as a result of these proposed rules.

The economy as well as the livelihoods of nearly 45,000 jobs depends upon the success of maritime commerce in the Columbia River District. The public ports of Longview, Kalama and Vancouver, WA and Astoria and Portland, OR along with several dozen private facilities located on the Lower Columbia River depend on the Columbia River Marine Transportation System.

Director Ted Sturdevant

Page 2

October 2, 2012

Finally, the Columbia River already has a well tested, environmentally responsive contingency plan that is cost effective and enables the Columbia River to remain commercially competitive. The Columbia River systems comparatively narrow width and predictable current flows make it fundamentally different than Puget Sound. Safeguards currently in place along the Columbia have successfully kept the frequency of spills and spill volume consistently low. Planning standards for the Columbia River should be appropriate to the river environment and type of petroleum products transported. The lack of heavy crude oil products and refineries and the lack of crossing situations support modification to the proposed rules for the Columbia River.

Sincerely,

A handwritten signature in blue ink, appearing to read "Kenneth L. Davais". The signature is fluid and cursive, with a large initial "K" and a stylized "D".

Kenneth L. Davais
General Manager
Pacific Northwest Marine Operations
"K" Line America, Inc.
PMB 115
2870 NE Hogan Road, Suite E
Gresham, OR 97030-3173

CC: attached



Subject: Proposed Amendment to Oil Spill Contingency Plan Rule (Chapter 173-182 WAC)

The Honorable Christine Gregoire
Legislative Building
PO Box 40002
Olympia, WA 98504-0002

Keith Phillips
Governor's Executive Policy Office
State of Washington
PO Box 43113
Olympia, WA 98504-3113

17th Legislative District: Clark County

- Senator Don Benton
- Representative Tim Probst
- Representative Paul Harris

18th Legislative District: Clark/Cowlitz Counties

- Senator Joe Zarelli
- Representative Ann Rivers
- Representative Ed Orcutt

19th Legislative District: Cowlitz, Lower SW Washington

- Senator Brian Hatfield
- Representative Brian Blake
- Representative Dean Takko

49th Legislative District: Vancouver

- Senator Craig Pridemore
- Representative Jim Moeller
- Representative Sharon Wylie



From: Jan Sundquist <stillpoint@centurylink.net>
Sent: Tuesday, October 02, 2012 1:36 PM
To: ECY RE Spills Rule Making; Larson, Sonja (ECY)
Subject: Oil Spill Contingency Plan Rule

Follow Up Flag: Follow up
Flag Status: Completed

To Whom It May Concern:

With the very real threats of a major oil spill OR a major Coal dump in San Juan County , NOW is the time to determine where & how to protect the Salish Sea and the surrounding Islands by designating San Juan County as a Staging Area for specialized equipment and trained personnel in order to reduce the impacts of these awful ecological and economic disasters.

Please pay special attention to potential spills of "sinking oils" and Group V oils, fuels and tar sands.

More & more I'm, as a resident of Lopez Island in the San Juan Islands group, afraid of what will happen WHEN (not IF) one or more of these disasters happens. The loss of wild and marine life, breeding and spawning grounds, and the beauty and pristine surroundings is beyond my ability to measure. WHEN something happens this whole area will NEVER be the same.

Please be ethical and tough about protecting these many treasures.

jan sundquist
POBox 296
#37 Cabezon Lane
Lopez Island, WA 98261
360 - 468 -3161
stillpoint@centurylink.net

From: Holden, Trish <tholden@co.clallam.wa.us>
Sent: Tuesday, October 02, 2012 1:19 PM
To: Larson, Sonja (ECY)
Subject: Oil Spill Contingency Rule and Natural Resource Damage Assessment Rule
Attachments: oil spill_20121002110450.pdf

Importance: High

Follow Up Flag: Follow up
Flag Status: Completed

Here are comments from the Board of Commissioners regarding the above rules. The original was mailed today.

<<oil spill_20121002110450.pdf>>

Trish Holden, CMC
Clerk of the Board/Public Records Officer
Commissioners' Office
223 East 4th Street, Suite 4
Port Angeles, WA 98362
P: 360.417.2234
F: 360.417.2493

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All e-mail sent to this address will be received by the Clallam County e-mail system and may be subject to Public Disclosure under Chapter 42.56 RCW and is subject to archiving and review by someone other than the recipient.



Board of Clallam County Commissioners

223 East 4th Street, Suite 4
Port Angeles, WA 98362-3015
360.417.2233 Fax: 360.417.2493

E-mail: commissioners@co.clallam.wa.us

Jim Jones, Jr., County Administrator

JIM McENTIRE, District 1
MICHAEL C. CHAPMAN, District 2
HOWARD V. DOHERTY, Jr., District 3, Chair

File: A14.09

28 September 2012

Ms. Sonja Larson
Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

RE: Proposed Oil Spill Contingency Rule and Natural Resource Damage Assessment Rule

Dear Ms. Larson:

The Clallam Board of County Commissioners is pleased to submit these comments on the proposed oil spill contingency rule and the proposed natural resource damage assessment rule.

Our County has a rich heritage of using and appreciating the natural resources along its 254 miles of marine shoreline. Sports, commercial, and native fishers enjoy a vibrant fishing and shellfish resource. Those fortunate to live here year round often do so because of the exceptional quality of life. Visitors to Clallam County spend \$72.6 million annually to enjoy the beauty of the North Olympic Peninsula and its shoreline; 9.5 percent of the workforce in Clallam County is employed in the tourism sector.

Much of this shoreline is remote and difficult to access. Through experience with past oil spills we know that adequate preparation and timely, skilled deployment are key to an effective oil spill response and recovery strategy. The potential increase in vessel traffic through the Strait of Juan de Fuca due to the anticipated transport of bitumen significantly raises the level of risk to our fish, shellfish, and other marine resources along the shoreline of the Strait.

We are encouraged to see that bitumen is discussed in the *Preliminary Cost-Benefit and Least Burdensome Alternative*, and that the \$29,000 per-barrel cleanup cost for the diluted bitumen spill in Michigan is specifically called out in Section 1.6.

Clallam County actively prepares for oil spill response. Our Emergency Management Division participates in drills; the Clallam Marine Resources Committee conducts Hazwoper and oiled wildlife recovery trainings; and the Marine Resources Committee contributes to the statewide database of trained volunteers. Regionally, the Strait Ecosystem Recovery Network Oil Spill Recovery Task Force works to minimize the likelihood of a spill and to assure that adequate resources are available should a spill occur along the Strait of Juan de Fuca.

Elements of the proposed changes that benefit the County are:

- A specified number of Vessels of Opportunity (18) for Region 1 (Cape flattery/Strait of Juan de Fuca), Minimum training standards for the crews of those vessels;
- Required wildlife drills
- Faster response times

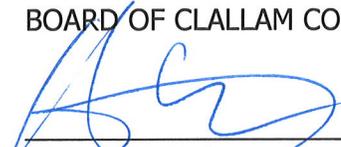
Elements we feel would offer greater protection to Clallam County shorelines include:

- Provide capacity for full response in remote areas such as Neah Bay and the outer coast
- Specifically include the role of the response tug at Neah Bay
- Specifically address diluted bitumen and bunker oils, given their potential to significantly damage fish and shellfish ecosystems.
- Increasing the equipment caches at Neah Bay and Quillayute Airport for salvage and marine fire-fighting capabilities.

We support the comments submitted by the San Juan County Council and appreciate the opportunity to comment.

Sincerely,

BOARD OF CLALLAM COUNTY COMMISSIONERS



Howard V. Doherty, Jr., Chair



Jim McEntire



Michael C. Chapman



San Juan County Council

350 Court Street No. 1
Friday Harbor, WA 98250
(360) 378 - 2898

District 1, Lovel Pratt
District 2, Rich Peterson
District 3, Howard Rosenfeld

District 4, Richard Fralick
District 5, Patty Miller
District 6, Jamie Stephens

September 25, 2012

Sonja Larson
Department of Ecology
PO Box 47600
300 Desmond Dr.
Olympia, WA 98504

RE: Comments on proposed amendments to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC)

Dear Ms. Larson,

We appreciate this opportunity to provide the following comments on proposed changes to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC).

A major oil spill is a very real threat in San Juan County, which is at the center of shipping traffic in the Salish Sea. San Juan County is surrounded by narrow shipping channels with strong currents and navigational challenges. A major oil spill in the waters surrounding San Juan County would be devastating both environmentally and economically. All forms of San Juan County's unique and diverse marine life would be severely affected. Property values and all tourism related revenues would be severely impacted. A strong and immediate response to a major oil spill with appropriate equipment and personnel is imperative.

Sinking Oils

The proposed changes to the Oil Spill Contingency Plan Rule do not adequately address the spill response capacity needed for spills of oils that can sink. New Section WAC 173-182-324 addresses Group 5 oils specifically but we question whether this new section requires any additional response capacity than that already required by federal law. Best Achievable Technology (BAT) and Best Achievable Protection (BAP) equipment and appropriate personnel must be available to respond to spills of oils that can sink, in addition to group 5 oils. In particular, these include the bunker fuels used for propulsion and diluted bitumen (an Alberta Tar Sands product).

San Juan County faces an increased risk of a major oil spill with the proposed additional shipping traffic for the transport of both coal and diluted bitumen. The proposed Gateway Pacific Terminal Project will include approximately 1000 additional transits of bulk carriers in the waters surrounding San Juan County. In addition to the coal cargo, each bulk carrier will contain up to 4 million gallons of persistent bunker fuel for propulsion. Existing vessel transport of

approximately 2 billion gallons per year of diluted bitumen (from Canada to Tacoma via Rosario Strait and from Canada to California and Asia via Haro Strait) pose an existing risk of a major spill. Kinder Morgan's proposed increased export of diluted bitumen would increase crude oil tanker calls transiting Haro Strait by over 300% by 2016. The Oil Spill Contingency Plan Rule must require that the appropriate BAT and BAP containment and recovery gear and appropriate personnel be response-ready and on-site in a timely manner to respond to spills of oil that can sink. It is imperative that WAC 173-182 specify that Alberta Tar Sands products including diluted bitumen and all forms of synthetic crude are subject to the Oil Spill Contingency Plan Rule.

The only place in any of the Oil Spill Contingency Plan Rule update documents to mention the emerging risk from sinking oils is in section 1.6 in the Preliminary Cost-Benefit and Least Burdensome Alternative Analysis. This section must be retained and expanded. While the cost comparison of the average crude oil spill in the past decade – \$2 thousand per barrel or more – with the 2010 diluted bitumen spill in Michigan – \$29 thousand per barrel – is significant, it is important to note that when this report is finalized, the cost of the diluted bitumen spill should be updated and “costs to date” be added to the text.

San Juan County Identified as a Staging Area

The Oil Spill Contingency Plan Rule must require the appropriate geographic distribution of spill response equipment and personnel. Neither Ecology nor the US Coast Guard has provided San Juan County with assurances that the appropriate spill response equipment and personnel can be on-site in the event of a major spill in Haro Strait in the four and six hour planning standard time-frames. While the new four hour and existing six hour planning standards can be legally met for the San Juan County Planning Standard Area given that equipment and personnel can reach the eastern edge of the San Juan County Planning Standard Area in the required time-frames, a major spill in Haro Strait is not assured the necessary equipment and personnel response times unless the appropriate equipment and personnel are resident. San Juan County resident personnel and equipment must be able to initiate a full response until additional equipment can cascade into the region. WAC 173-182-370 must define San Juan County as a Staging Area and must specify that the two, three, four, and six hour planning standards be resident.

Especially given the increased risk of a major spill from the increased traffic proposed by the Gateway Pacific Terminal and the increased export of diluted bitumen, having San Juan County identified as a Staging Area and having additional spill response equipment and personnel resident in San Juan County to meet the two, three, four, and six hour planning standards will significantly improve the response time and the capacity to contain and clean-up a major spill.

Another justification for San Juan County's designation as a Staging Area and requiring that the two, three, four, and six hour Planning Standards be resident is the avoided losses to endangered species. The southern resident orca whales were listed as endangered in 2005 under the federal Endangered Species Act. Haro Strait contains the orca whales' principal feeding grounds along the west side of San Juan Island. Ensuring that the appropriate BAT and BAP containment and recovery gear and personnel is response-ready and on-site in a timely manner in the event of a major spill in Haro Strait will reduce the impacts and avoid losses to the orca whales and their

entire food chain (including federally listed as endangered Chinook salmon). The value of a southern resident orca whale can be quantified and that cost must be included in the Cost-Benefit and Least Burdensome Alternative Analysis.

What will most justify San Juan County's designation as a Staging Area and requiring that the two, three, four, and six hour planning standards be resident would be the inclusion in the Cost-Benefit and Least Burdensome Alternative Analysis of the hourly cost savings of reducing spill cleanup costs over the duration of the spill in both Appendix B and the text. Hourly timeframes, not days, are necessary to quantify the importance of spill response times.

Costs Associated With Very Small Spills

The Preliminary Cost-Benefit and Least Burdensome Alternative Analysis needs to address the significant costs that can be associated with very small spills. The *Deep Sea* spill is a case in point. While the millions of dollars associated with the pollution response, vessel salvage, and vessel deconstruction costs would not be applicable in the Oil Spill Contingency Plan Rule, the very small amount of oil spilled caused at least \$1,210,000 in revenue losses to Penn Cove Shellfish (\$55,000 per day x 22 closure days) as well as the quantifiable losses related to the closure of Grasser's Lagoon in Penn Cove which is one of the most popular beaches in Washington State for recreational shellfish harvesting.

Greater Transparency

It is imperative that all contingency plans, technical manuals, and planning standards be publically available on Ecology's website. Further, the Oil Spill Contingency Plan must require that public notification, review, and comment be provided for on all proposed changes to contingency plans, technical manuals, and planning standards.

Summary

The Oil Spill Contingency Plan Rule

1. Must require that the appropriate BAT and BAP containment and recovery gear and personnel be response-ready and on-site in a timely manner to respond to spills of oil that can sink, including diluted bitumen and bunker fuels
2. Must specify state that Alberta Tar Sands products including diluted bitumen and all forms of synthetic crude are subject to the Oil Spill Contingency Plan Rule
3. Must define San Juan County as a Staging Area and must specify that the two, three, four, and six hour planning standards be resident.
4. Require that all contingency plans, technical manuals, and planning standards be publically available on Ecology's website
5. Require that public notification, review, and comment be provided for on all proposed changes to contingency plans, technical manuals, and planning standards

The Cost-Benefit and Least Burdensome Alternative Analysis

1. Is to be commended for including and must retain and expand Section 1.6 on the emerging risk from sinking oils
2. Must update the costs to date of the 2010 diluted bitumen spill in Michigan
3. Must include the significant costs that can be associated with very small spills

4. Must quantify the value of a southern resident orca whale
5. Must include the hourly cost savings of reducing spill cleanup costs over the duration of the spill in both Appendix B and the text
6. Must quantify the data provided by the San Juan County Economic Development Council and the San Juan Islands Visitors, including the press coverage San Juan County receives

In addition, we support

- The inclusion of more vessels of opportunity (VOO) distributed throughout the region
- Additional requirements in the four hour planning standard that adequately addresses storage issues and ensure continuous response capacity
- The inclusion of the Neah Bay Response Tug in the spill response task force
- The inclusion of a dedicated storage barge, combined with the Neah Bay Response Tug to enable tankers to meet upcoming changes in federal regulations associated with moving the High Volume Port Line from Port Angeles to Cape Flattery

Washington State has an admirable spill prevention and response record that spans our long history of vigilance from the late Senator Magnuson to Senator Cantwell, our Governor and legislature. However, just because we have not had a catastrophic oil spill recently does not mean that we should not be better prepared to respond to one.

Our quality of life depends upon the health of our interconnected economy and environment, both of which would be severely impacted by a major oil spill. The capacity to respond quickly and effectively to a major oil spill will determine the difference between temporary and lasting economic and environmental impacts.

Sincerely,

**COUNTY COUNCIL
SAN JUAN COUNTY, WASHINGTON**

Lovel Pratt, Member
District No. 1

Richard Peterson, Member
District No. 2

Howard Rosenfeld, Member
District No. 3

Richard Fralick, Member
District No. 4

Patty Miller, Chair
District No. 5

Jamie Stephens, Vice-Chair
District No. 6

Cc. The Honorable Maria Cantwell, US Senator
The Honorable Patty Murray, US Senator
The Honorable Rick Larsen, US Representative
The Honorable Christine Gregoire, Governor of the State of Washington
The Honorable Kevin Ranker, Washington State Senator

The Honorable Jeff Morris, Washington State Representative
The Honorable Kristine Lytton, Washington State Representative
The Honorable Billy Frank, Chairman, Northwest Indian Fisheries Commission
The Honorable Micah McCarty, Chairman, Makah Tribe
The Honorable Cliff Cultee, Chair, Lummi Nation
The Honorable Melvin R. Sheldon, Jr., Chair, Tulalip Tribes
The Honorable Brian Cladoosby, Chair, Swinomish Indian Tribal Community
The Honorable William "Ron" Allen, Chair, Jamestown S'Klallam Tribe
The Honorable Frances Charles, Chair, Lower Elwha Klallam Tribe
The Honorable Bob Kelly, Chairman, Nooksack Tribe
The Honorable Jeromy Sullivan, Chair, Port Gamble S'Klallam Tribe
The Honorable Leonard Forsman, Chair, Suquamish Tribe

From: Heather Stebbings <heather.stebbing@pnwa.net>
Sent: Tuesday, October 02, 2012 1:01 PM
To: ECY RE Spills Rule Making
Cc: Kristin Meira
Subject: PNWA Comments on Oil Spill Contingency Plan Rule
Attachments: 20121002_PNWA Comments to Washington Dept of Ecology.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Greetings.

Attached, please find our comments on the proposed amendment to the Oil Spill Contingency Plan.
Sincerely,

Heather Stebbings
Government Relations Director
Pacific Northwest Waterways Association
503-234-8553 direct // 503-307-3776 mobile
www.pnwa.net

Please note our new address: PNWA, 516 SE Morrison Street, Suite 1000, Portland OR 97214

October 2, 2012

Mr. Ted Sturdevant, Director
Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600



PNWA Comments on proposed Amendment to Oil Spill Contingency Plan Rule (Chapter 173-182 WAC) to Implement Chapter 122, 2011 Laws (E2SHB 1186) for marine vessels

Dear Mr. Sturdevant,

Thank you for the opportunity to comment. We are submitting our letter on behalf of the Pacific Northwest Waterways Association (PNWA) membership. PNWA represents over 115 member organizations including numerous Washington state ports, towboat companies, steamship operators, shippers, agricultural producers, forest products manufacturers and other navigation stakeholders. A listing of our membership is attached to this document.

We respectfully request that the Department of Ecology modify the proposed amendment to the Oil Spill Contingency Plan Rule to incorporate alternate planning standards for the Columbia River. The Columbia River currently utilizes a robust, well tested and environmentally responsive contingency plan that is cost effective for users. It enables our river system to continue as a competitive player in the global marketplace, while still ensuring there is a response mechanism in place to meet the unique needs of this dynamic system. In addition to a well-established plan, existing safeguards on the Columbia River such as its narrow channel width and predictable flows routinely lower risk and successfully keep spill volume and spill frequency low.

The economic health of our region and the State of Washington is dependent on the cargo that moves on the Columbia River. The Columbia River is the nation's largest wheat export gateway. The same is true for barley. When combined with soybeans, peas, lentils and other grains, it is the third largest grain export gateway in the world. It is number one on the west coast for paper products, forest products, and mineral bulk exports and automobile imports. Each year, approximately 42 million tons of cargo moves through the deep draft Lower Columbia River, valued at roughly \$20 billion in 2010. Over 40,000 local jobs are dependent on this trade.

In this time of economic uncertainty, we simply cannot afford to become a more expensive place to do business. The rule, as published in September, would cause a 200% increase in vessel fees. A spike in costs due to additional regulation would stifle economic growth on the river and in the state. It is our belief that the standards, while ensuring proper response to oil spills, should also support the continuation of cargo movement. We support the request of the Maritime Fire & Safety Association to suggest modifications to the proposed amendments, to better reflect the cargo, types of vessels, and existing response capabilities that are unique to the Columbia River. We need to have rules that support the environment, but also protect the livelihoods of our communities and ensure that there will be a vibrant economy in the Northwest for years to come.

We thank you for the opportunity to comment, and would welcome the opportunity to discuss this with you in more detail.

Sincerely,

A handwritten signature in black ink that reads "Kristin Meira".

Kristin Meira
Executive Director
Pacific Northwest Waterways Association

Attachment: PNWA membership listing

www.pnwa.net

PNWA Membership Roster



AECOM
Allan Rumbaugh
Alaska Assoc. of Port Managers & Harbormasters
Ball Janik LLP
Bell Buoy Crab Co.
Benton County PUD #1
BergerABAM Engineers, Inc.
Bergerson Construction
Bernert Barge Lines
BST Associates
Central Oregon Basalt Products, Inc.
Central Washington Grain Growers
Clark Public Utilities
CLD Pacific Grain
Clearwater Paper
Columbia Basin Development League
Columbia Grain
Columbia River Bar Pilots
Columbia River Pilots
Columbia River Steamship Operators Association
Cooperative Agricultural Producers
David Evans & Associates
Dunlap Towing Company
The Dutra Group
East Columbia Basin Irrigation District
EGT, LLC
Evergreen Engineering
Foss Maritime Company
Franklin PUD
Gordon Thomas Honeywell Government Affairs
Great Lakes Dredge & Dock
Hart Crowser
Wally Hickerson
ICF International
ID Wheat Commission
International Longshore and Warehouse Union (ILWU)
J.E. McAmis, Inc.
Kalama Export Company
KPFF Consulting Engineers, Inc.
Lampson International, LLC
Landau Associates, Inc.
Lewis-Clark Terminal Association
Longview Fibre Company
MacKay & Sposito, Inc.
Manson Construction
Marine Industrial Construction
Maul Foster & Alongi, Inc.
McGregor Company
McMillan
Millennium Bulk Terminals
Moffatt & Nichol
Morrow Pacific
Normandeau and Associates
Northwest Grain Growers, Inc.
Northwest Public Power Association
Oregon Business Development Department
Oregon Int'l Port of Coos Bay
OR Wheat Growers League
Pacific Northwest Farmers Cooperative
Parametrix
Parsons Brinckerhoff
PBS Engineering & Environmental
PND Engineers, Inc.
PNGC Power
Pomeroy Grain Growers
Port of Astoria
Port of Bandon
Port of Benton
Port of Camas-Washougal
Port of Cascade Locks
Port of Chelan County
Port of Chinook
Port of Clarkston
Port of Columbia County
Port of Garibaldi
Port of Hood River
Port of Humboldt Bay
Port of Ilwaco
Port of Kalama
Port of Klickitat
Port of Lewiston
Port of Longview
Port of Mattawa
Port of Morrow
Port of Newport
Port of Pasco
Port of Port Angeles
Port of Portland
Port of Ridgefield
Port of Royal Slope
Port of Seattle
Port of Siuslaw
Port of Skagit
Port of St. Helens
Port of Sunnyside
Port of Tacoma
Port of Toledo
Port of Umatilla
Port of Umpqua
Port of Vancouver
Port of Walla Walla
Port of Whitman County
Port of Woodland
Schnitzer Steel
Schwabe, Williamson & Wyatt
SDS Tug & Barge
Seattle Public Utilities
Shaver Transportation Company
Stoel Rives LLP
Strategies 360
Teevin Brothers
TEMCO, LLC
Tidewater Barge Lines
Ukiah Engineering, Inc.
United Grain
USA Dry Pea & Lentil Council
WA Association of Wheat Growers
WA Council on International Trade
WA Public Ports Association
WA State Potato Commission
WA Grain Commission
Westwood Shipping
Weyerhaeuser Company
Wildlands, Inc.

From: Ty J. Gaub <TJG@usor.com>
Sent: Tuesday, October 02, 2012 10:57 AM
To: ECY RE Spills Rule Making
Subject: U.S. Oil's Comments on Proposed Amendments to WAC 173-182
Attachments: sharpcopier_20121002_110214.pdf

Follow Up Flag: Follow up
Flag Status: Completed

The attached letter contains U.S. Oil's comments on Ecology's proposed amendments to the Washington Oil Spill Rules - WAC 173-182. A hard copy of this letter has also been mailed to Sonja Larson of Ecology. Please feel free to contact me if you have any questions or require additional information. Thanks!

Ty Gaub
U.S. Oil & Refining Co.
3001 Marshall Ave.
Tacoma, WA 98421
Phone: (253) 383-1651
Fax: (253) 272-2495
Email: tjg@usor.com

U.S. OIL & REFINING CO.

October 2, 2012

Sonja Larson
Washington Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Subject: Comments on the Revised Oil Spill Contingency Plan Regulations

Reference (a) Letter Dated September 27, 2012 from Frank Holmes of WSPA to Sonja Larson of Ecology Titled "Comments on Proposed Amendment of Washington Oil Spill Rules – WAC 173-182"

Dear Ms Larson,

U.S. Oil & Refining Co. (USOR) appreciates the opportunity to provide comments on proposed revisions to Ecology's Oil Spill Contingency Plan Rule contained in WAC 173-182. USOR owns and operates a small oil refinery located in Tacoma, Washington. The refinery consists of a crude oil processing area, tank farm area, finished product loading racks, crude oil railcar unloading racks, marine terminal, maintenance shops and office area. Also included is McChord Pipeline Co., which is a wholly owned subsidiary of USOR. Products manufactured at the refinery include gasoline, jet fuel, diesel fuel, marine fuel, gas oils (intermediate product), and emulsified and road asphalts.

USOR supports the comments provided by the reference (a) WSPA comment letter and offers the following additional specific comments for your consideration.

1. **WAC 173-182-142 (a)** USOR recommends that this paragraph be rewritten to read "Notify ecology in writing within twenty-four hours of becoming aware of the change." As a practical matter, we may not always be aware of a change when it occurs, especially for those situations that are out of our control. For example, we may not be aware of a change (especially if it involves one of USOR's primary response contractors) that occurred during a weekend or holiday break until the next business day.
2. **WAC 173-182-142 (f)(i)** As written, compliance with this broadly written provision could be interpreted to include notifications for all sorts of routine events including (but not limited to) the following examples: refinery process unit turnarounds, catalyst change outs – which affect product processing operations, taking tanks out of service for inspection/maintenance, switching around of the types/volume of crude oil/products stored in tanks, which occurs frequently in response to fluctuations in market/production conditions, changes in seasonal fuel specifications (i.e. summer versus winter gasolines), routine piping changes, receipt of any new crude oil or product cargoes regardless of their physical/chemical properties, etc.

USOR recommends that Ecology rewrite this requirement so that it better reflects Ecology's intent, adds value, is workable and doesn't become a burdensome paperwork exercise.

3. **WAC 173-182-324 (1)** The first paragraph of this new section starts out by stating that "Plan holders carrying Group 5 Oils must have a contract with a PRC that maintains....." The applicability of this section needs to be better clarified as the term "carrying" can be interpreted to encompass a broad range of transportation types. Does the term "carrying" only refer to vessels or does it also include pipelines (in-plant, transfer or transmission), trucks/railcars carrying asphalt products/heavy fuel oils, etc.? For example, while U.S. Oil manufactures Group 5 oils we are not a "carrier" of Group 5 oils *per se* even though we can transfer some heavy fuel oil products that have an API gravity of 10.0 or less to vessels at our marine terminal via our refinery-to-dock pipeline.

Please feel free to contact me at (253) 383-1651 if you have any questions or need additional information.

Sincerely,

U.S. OIL & REFINING CO.



Ty J. Gaub
Environmental Manager

cc: Sonja Larson via email: spillsrulemaking@ecy.wa.gov
Frank Holmes - WSPA
AJC, DHY, GAH, KBI, MAU

f:/gpr/eh&s/documents/tjg12040.doc

From: kenc@rockisland.com
Sent: Tuesday, October 02, 2012 9:14 AM
To: ECY RE Spills Rule Making; Larson, Sonja (ECY)
Cc: katie@sanjuans.org
Subject: Comment on the State's Updated Oil Spill Contingency Plan
Attachments: SJCC_OilSpillRuleCommentLtr_2012_9_25.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Dear Washington State Department of Ecology staff,

Thank you for making this Oil Spill Contingency Plan update available for public review. I have read the official San Juan County Council letter (attached) on this and declare my support for those findings. Why rewrite what has already been crafted so well? My only additions to this would be the following:

1) This plan needs to focus on prevention, as the consequences associated with having a disaster are tremendous and grave to our county and the surrounding Puget Sound environment. One need only refer to the recent BP oil spill in the Gulf or the Exxon disaster in Alaska for clarification. In a place like San Juan Island, as a business owner, a disaster will mean the end of our economy and potentially the end of our resident Orca population. Many more than the specific 669 tourism related jobs previously identified in San Juan County would be impacted by an environmental disaster -- the entire economy of the county depends upon tourism in some way: construction, real estate, retail shops, local government, agriculture, hotels, B&Bs, restaurants will all be impacted. If there is any additional updates or wording that can be added to stress this, it would be much appreciated.

2) Relative to the increase of intensity from the proposed Coal Transfer Station in Bellingham, it became clear to me that there are additional and preventable items to include in a contingency plan.

a) Where the material impact is justified, we should warrant that the kind of vehicle used be designed to meet the reliability and performance requirements of a modern 'double hulled' transport vessel. In the case of the Bellingham coal ships, they intend to use single hulled, end-of-life style vessels, which would have a higher degree of potential failures. As we know the Puget Sound does not leave vessels much room for failure.

b) Where the material impact is justified, we should also warrant that the ships captain has been properly educated -- certified? -- on the specific challenges of navigating the Puget sound. One suggestion would be to bring a local, experienced captain on-board to drive the ship as it passes through the sound.

3) This document should also specifically state that all Alberta Tar Sands/Canadian crude products including diluted bitumen and all forms of synthetic crude being transported by land-based pipelines also be subject to the Oil Spill Contingency Plan Rule.

4) This document should also prohibit the use of Coexit as a dispersant as has been done in the United Kingdom. There appear to be real and significant side effects to people and the environment during the recent BP disaster in the Gulf.

I appreciate the opportunity to review this update to our planning, and greatly appreciate that 'bitumin' will be factored into this planning and contingency effort.

Sincerely,

-KenC
Ken Crawbuck
37 Blue Camas Lane
Friday Harbor, WA 98250
c: 3604720304



San Juan County Council

350 Court Street No. 1
Friday Harbor, WA 98250
(360) 378 - 2898

District 1, Lovel Pratt
District 2, Rich Peterson
District 3, Howard Rosenfeld

District 4, Richard Fralick
District 5, Patty Miller
District 6, Jamie Stephens

September 25, 2012

Sonja Larson
Department of Ecology
PO Box 47600
300 Desmond Dr.
Olympia, WA 98504

RE: Comments on proposed amendments to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC)

Dear Ms. Larson,

We appreciate this opportunity to provide the following comments on proposed changes to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC).

A major oil spill is a very real threat in San Juan County, which is at the center of shipping traffic in the Salish Sea. San Juan County is surrounded by narrow shipping channels with strong currents and navigational challenges. A major oil spill in the waters surrounding San Juan County would be devastating both environmentally and economically. All forms of San Juan County's unique and diverse marine life would be severely affected. Property values and all tourism related revenues would be severely impacted. A strong and immediate response to a major oil spill with appropriate equipment and personnel is imperative.

Sinking Oils

The proposed changes to the Oil Spill Contingency Plan Rule do not adequately address the spill response capacity needed for spills of oils that can sink. New Section WAC 173-182-324 addresses Group 5 oils specifically but we question whether this new section requires any additional response capacity than that already required by federal law. Best Achievable Technology (BAT) and Best Achievable Protection (BAP) equipment and appropriate personnel must be available to respond to spills of oils that can sink, in addition to group 5 oils. In particular, these include the bunker fuels used for propulsion and diluted bitumen (an Alberta Tar Sands product).

San Juan County faces an increased risk of a major oil spill with the proposed additional shipping traffic for the transport of both coal and diluted bitumen. The proposed Gateway Pacific Terminal Project will include approximately 1000 additional transits of bulk carriers in the waters surrounding San Juan County. In addition to the coal cargo, each bulk carrier will contain up to 4 million gallons of persistent bunker fuel for propulsion. Existing vessel transport of

approximately 2 billion gallons per year of diluted bitumen (from Canada to Tacoma via Rosario Strait and from Canada to California and Asia via Haro Strait) pose an existing risk of a major spill. Kinder Morgan's proposed increased export of diluted bitumen would increase crude oil tanker calls transiting Haro Strait by over 300% by 2016. The Oil Spill Contingency Plan Rule must require that the appropriate BAT and BAP containment and recovery gear and appropriate personnel be response-ready and on-site in a timely manner to respond to spills of oil that can sink. It is imperative that WAC 173-182 specify that Alberta Tar Sands products including diluted bitumen and all forms of synthetic crude are subject to the Oil Spill Contingency Plan Rule.

The only place in any of the Oil Spill Contingency Plan Rule update documents to mention the emerging risk from sinking oils is in section 1.6 in the Preliminary Cost-Benefit and Least Burdensome Alternative Analysis. This section must be retained and expanded. While the cost comparison of the average crude oil spill in the past decade – \$2 thousand per barrel or more – with the 2010 diluted bitumen spill in Michigan – \$29 thousand per barrel – is significant, it is important to note that when this report is finalized, the cost of the diluted bitumen spill should be updated and “costs to date” be added to the text.

San Juan County Identified as a Staging Area

The Oil Spill Contingency Plan Rule must require the appropriate geographic distribution of spill response equipment and personnel. Neither Ecology nor the US Coast Guard has provided San Juan County with assurances that the appropriate spill response equipment and personnel can be on-site in the event of a major spill in Haro Strait in the four and six hour planning standard time-frames. While the new four hour and existing six hour planning standards can be legally met for the San Juan County Planning Standard Area given that equipment and personnel can reach the eastern edge of the San Juan County Planning Standard Area in the required time-frames, a major spill in Haro Strait is not assured the necessary equipment and personnel response times unless the appropriate equipment and personnel are resident. San Juan County resident personnel and equipment must be able to initiate a full response until additional equipment can cascade into the region. WAC 173-182-370 must define San Juan County as a Staging Area and must specify that the two, three, four, and six hour planning standards be resident.

Especially given the increased risk of a major spill from the increased traffic proposed by the Gateway Pacific Terminal and the increased export of diluted bitumen, having San Juan County identified as a Staging Area and having additional spill response equipment and personnel resident in San Juan County to meet the two, three, four, and six hour planning standards will significantly improve the response time and the capacity to contain and clean-up a major spill.

Another justification for San Juan County's designation as a Staging Area and requiring that the two, three, four, and six hour Planning Standards be resident is the avoided losses to endangered species. The southern resident orca whales were listed as endangered in 2005 under the federal Endangered Species Act. Haro Strait contains the orca whales' principal feeding grounds along the west side of San Juan Island. Ensuring that the appropriate BAT and BAP containment and recovery gear and personnel is response-ready and on-site in a timely manner in the event of a major spill in Haro Strait will reduce the impacts and avoid losses to the orca whales and their

entire food chain (including federally listed as endangered Chinook salmon). The value of a southern resident orca whale can be quantified and that cost must be included in the Cost-Benefit and Least Burdensome Alternative Analysis.

What will most justify San Juan County's designation as a Staging Area and requiring that the two, three, four, and six hour planning standards be resident would be the inclusion in the Cost-Benefit and Least Burdensome Alternative Analysis of the hourly cost savings of reducing spill cleanup costs over the duration of the spill in both Appendix B and the text. Hourly timeframes, not days, are necessary to quantify the importance of spill response times.

Costs Associated With Very Small Spills

The Preliminary Cost-Benefit and Least Burdensome Alternative Analysis needs to address the significant costs that can be associated with very small spills. The *Deep Sea* spill is a case in point. While the millions of dollars associated with the pollution response, vessel salvage, and vessel deconstruction costs would not be applicable in the Oil Spill Contingency Plan Rule, the very small amount of oil spilled caused at least \$1,210,000 in revenue losses to Penn Cove Shellfish (\$55,000 per day x 22 closure days) as well as the quantifiable losses related to the closure of Grasser's Lagoon in Penn Cove which is one of the most popular beaches in Washington State for recreational shellfish harvesting.

Greater Transparency

It is imperative that all contingency plans, technical manuals, and planning standards be publically available on Ecology's website. Further, the Oil Spill Contingency Plan must require that public notification, review, and comment be provided for on all proposed changes to contingency plans, technical manuals, and planning standards.

Summary

The Oil Spill Contingency Plan Rule

1. Must require that the appropriate BAT and BAP containment and recovery gear and personnel be response-ready and on-site in a timely manner to respond to spills of oil that can sink, including diluted bitumen and bunker fuels
2. Must specify state that Alberta Tar Sands products including diluted bitumen and all forms of synthetic crude are subject to the Oil Spill Contingency Plan Rule
3. Must define San Juan County as a Staging Area and must specify that the two, three, four, and six hour planning standards be resident.
4. Require that all contingency plans, technical manuals, and planning standards be publically available on Ecology's website
5. Require that public notification, review, and comment be provided for on all proposed changes to contingency plans, technical manuals, and planning standards

The Cost-Benefit and Least Burdensome Alternative Analysis

1. Is to be commended for including and must retain and expand Section 1.6 on the emerging risk from sinking oils
2. Must update the costs to date of the 2010 diluted bitumen spill in Michigan
3. Must include the significant costs that can be associated with very small spills

4. Must quantify the value of a southern resident orca whale
5. Must include the hourly cost savings of reducing spill cleanup costs over the duration of the spill in both Appendix B and the text
6. Must quantify the data provided by the San Juan County Economic Development Council and the San Juan Islands Visitors, including the press coverage San Juan County receives

In addition, we support

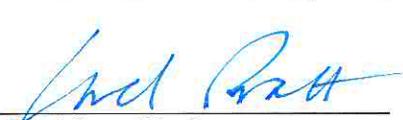
- The inclusion of more vessels of opportunity (VOO) distributed throughout the region
- Additional requirements in the four hour planning standard that adequately addresses storage issues and ensure continuous response capacity
- The inclusion of the Neah Bay Response Tug in the spill response task force
- The inclusion of a dedicated storage barge, combined with the Neah Bay Response Tug to enable tankers to meet upcoming changes in federal regulations associated with moving the High Volume Port Line from Port Angeles to Cape Flattery

Washington State has an admirable spill prevention and response record that spans our long history of vigilance from the late Senator Magnuson to Senator Cantwell, our Governor and legislature. However, just because we have not had a catastrophic oil spill recently does not mean that we should not be better prepared to respond to one.

Our quality of life depends upon the health of our interconnected economy and environment, both of which would be severely impacted by a major oil spill. The capacity to respond quickly and effectively to a major oil spill will determine the difference between temporary and lasting economic and environmental impacts.

Sincerely,

**COUNTY COUNCIL
SAN JUAN COUNTY, WASHINGTON**



Lovel Pratt, Member
District No. 1



Richard Peterson, Member
District No. 2



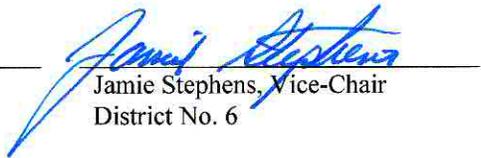
Howard Rosenfeld, Member
District No. 3



Richard Fralick, Member
District No. 4



Patty Miller, Chair
District No. 5



Jamie Stephens, Vice-Chair
District No. 6

- Cc. The Honorable Maria Cantwell, US Senator
The Honorable Patty Murray, US Senator
The Honorable Rick Larsen, US Representative
The Honorable Christine Gregoire, Governor of the State of Washington
The Honorable Kevin Ranker, Washington State Senator

The Honorable Jeff Morris, Washington State Representative
The Honorable Kristine Lytton, Washington State Representative
The Honorable Billy Frank, Chairman, Northwest Indian Fisheries Commission
The Honorable Micah McCarty, Chairman, Makah Tribe
The Honorable Cliff Cultee, Chair, Lummi Nation
The Honorable Melvin R. Sheldon, Jr., Chair, Tulalip Tribes
The Honorable Brian Cladoosby, Chair, Swinomish Indian Tribal Community
The Honorable William "Ron" Allen, Chair, Jamestown S'Klallam Tribe
The Honorable Frances Charles, Chair, Lower Elwha Klallam Tribe
The Honorable Bob Kelly, Chairman, Nooksack Tribe
The Honorable Jeromy Sullivan, Chair, Port Gamble S'Klallam Tribe
The Honorable Leonard Forsman, Chair, Suquamish Tribe

From: Stephanie Buffum <stephanie@sanjuans.org>
Sent: Monday, October 01, 2012 3:51 PM
To: Larson, Sonja (ECY)
Subject: Public Comment on the Oil Spill Contingency Planning Rule (Chapter 173-182 WAC)
Attachments: FSJ Oil spill Cmt ltr 10-1-12.docx

Follow Up Flag: Follow up
Flag Status: Completed

Sonja Larson
Department of Ecology
PO Box 47600
300 Desmond Dr.
Olympia, WA 98504

Dear Ms. Larson,

On behalf of over 2,000 members who reside in the San Juans, we appreciate the opportunity to comment on the Oil Spill Contingency Planning Rule (Chapter 173-182 WAC).

Hundreds of thousands of tourists enjoy the beauty of the San Juans annually. Families rent sailboats and yachts, children attend camps, canoes and kayakers paddle, and vacationers enjoy our local restaurants, accommodations, and shops.

Maintaining the health of these islands is critical to preserving our local and regional economy and regional Coast Salish cultural.

According to the Outdoor Industry Association, outdoor recreation supports 115,000 jobs and contributes \$11.7 billion to the state economy. In San Juan County, tourism is valued to generate over \$51 million dollars in spending and 669 jobs. International, national, and regional media and publications continually show a strong interest in the destination value of the San Juan.^[1]

A large oil spill would change this overnight.

San Juan County is surrounded by narrow shipping channels with strong currents and navigational challenges. A strong and immediate response to a major oil spill with appropriate equipment and personnel is imperative.

The San Juans are already impacted by the export of tar sands to all five refineries in Washington State. The refineries are fed by almost 100 tankers coming south through the Salish Sea from Canada every year, as well as by the Puget Sound Spur of the Trans-Mountain pipeline. Both tankers in the sound and the Trans-Mountain pipeline create the risk of a tar sands disaster in the Salish Sea.

Based on recent experience in Kalamazoo Michigan in 2010, an event involving tar sands bitumen material could be far worse than an oil spill. The Kalamazoo River tar sands bitumen disaster turned out to be the most costly onshore pipeline break in U.S history. We need to know exactly how this type of a spill would be handled in this region.

This spill was the result of a pipeline rupture from the Enbridge pipeline running through Marshall, Michigan. This spill was reported to cost \$29,000 per barrel to cleanup which makes it the most costly spill in US history. Prior to this incident, the average crude oil spill in the past decade is reported to be approximately \$2,000 per barrel.

We request that the final Cost Benefit and Least Burdensome Alternative Analysis include the cost associated with the 2010 Kalamazoo River spill in Michigan. Cleanup and restoration of the Kalamazoo River diluted bitumen spill is on-going.

The proposed pipeline expansion projects in Canada are poised to significantly increase vessel traffic carrying Alberta bitumen (tar sands) oil through the waters around the San Juan Islands and the Strait of Juan de Fuca. These vessels may be bound for Washington ports or move through our waters bound for other destinations. It is also expected that the trans-boundary pipeline between Canada and the United States will significantly increase their capacity and expand their tank farm capability accordingly.

Oil from Alberta bitumen, even once diluted, is uniquely difficult to remove after a spill, because of its properties. Alberta bitumen oils also generally sink, or some portion is expected to sink, which renders ineffective conventional techniques to contain and remove oil from the water's surface. Sinking oil poses a risk of contamination to sediments and their ecosystems, which include economically and culturally valuable shellfish and fisheries.

Increased shipping traffic from proposed coal export terminals should also be a consideration. Projections for coal ships alone moving through Washington and British Columbia waters of the San Juans (Strait of Juan de Fuca, Rosario Strait, Haro Strait, Boundary Pass, and the Strait of Georgia) could mean an additional 1,774 transits from 887^[2] cargo ships exporting from ports at March Point, Anacortes, proposed Gateway Pacific Terminal, Bellingham, and Vancouver Harbor, British Columbia.

DESIGNATE SAN JUAN COUNTY AS A STAGING AREA

Having San Juan County identified as a Staging Area and having additional spill response equipment and personnel resident in San Juan County to meet the two, three, four, and six hour planning standards will significantly improve the response time and the capacity to contain and clean-up a major spill.

The Oil Spill Contingency Plan Rule must require the appropriate geographic distribution of spill response equipment and personnel.

As a Planning Standard Area, only the resources to meet the two and three-hour required timeframe standards must be resident. To meet the four and six hour planning standard, the law only requires that equipment and personnel reach the nearest border of the Planning Standard Area in the required timeframe.

Equipment and personnel resident in Anacortes, Bellingham Bay, or Port Angeles will likely be able reach the east side of our County but there are no assurances that the two, four or six-hour planning standards can be met if there is a major spill in Haro Strait.

PROTECTING ENDANGERED SPECIES/ AVOIDING "TAKE"

Another justification for San Juan County's designation as a Staging Area and requiring that the two, three, four, and six hour Planning Standards be resident is to avoid taking species listed under the US Endangered Species Act or the Canadian Species at Risk Act, including Southern Resident killer whales (*Orcinus orca*), marbled murrelets (*Brachyramphus marmoratus*), and some ecologically significant units or species of Pacific salmon (*Onchorynchus* spp.), which traverse the boundary daily.

Ensuring that the appropriate BAT and BAP containment and recovery gear and personnel is response-ready and on-site in a timely manner in the event of a major spill in Haro Strait will reduce the impacts and avoid

losses to the orca whales and their entire food chain (including federally listed as endangered Chinook salmon). The value of a southern resident orca whale can be quantified and that cost must be included in the Cost-Benefit and Least Burdensome Alternative Analysis.

PLEASE INCORPORATE THE FOLLOWING ELEMENTS INTO THE REVISED RULE SUCH THAT AN OIL SPILL CAN BE QUICKLY CONTAINED AND CLEANED IN THE SAN JUANS:

1. Identify and designate San Juan County as a Staging Area and specify that the two, three, four, and six hour planning standards be resident;;
2. Distribute equipment and personnel to the San Juans sufficient to address the risk from oil and diluted bitumen tar sands spill;
3. Require and ensure the ability to respond, contain and cleanup spills of hydrocarbons that sink. Potentially sinking hydrocarbons include Group V oils, bunker fuels, and diluted bitumen tar sands;
4. Prohibit the use of Coexit as a dispersant;
5. Specifically require that all Alberta Tar Sands/Canadian crude products including diluted bitumen and all forms of synthetic crude being transported by land-based pipelines be subject to the Oil Spill Contingency Plan Rule;
6. Require that all contingency plans, technical manuals, and planning standards be publically available on Ecology's website;
7. Require that public review and comment be provided on all proposed changes to contingency plans, technical manuals, and planning standards.

We look forward to the State playing a lead role in helping prepare for a spill from crude transported through the San Juan archipelago.

Sincerely,

Stephanie Buffum

Stephanie Buffum
Executive Director

FRIENDS OF THE SAN JUANS
POB 1344 Friday Harbor, WA 98250
360. 378.2319 office
Stephanie@sanjuans.org

^[1] New York Times: The 41 Places to Go in 2011—listed as the number 2 place to visit in the world, in between Santiago, Chile as number 1 and Koh Samui, Thailand as number 3. (Editor's tagline related to the San Juan Islands: "Bold-face restaurateurs vie with unspoiled nature. Nature wins."), National Geographic Traveler: The world list featured San Juan Islands as number 3 in the 10 Best Trips of Summer 2011, "all about weather, whales, and water", Travel + Leisure: World's Best List in 2011 and 2010, the number 4 position for Top Islands (moving up from number 5 in 2009), Life: 100 Places to See in Your Life Time, July 2011, USA Today: Best Wildlife Watching Spots in Each State, July 2011, Lonely Planet: US Islands that Won't Break the Bank, July 2011, New York Times: A Directory of Rare Wonders, May 2011, HUFFPOST TRAVEL: 10 Best Whale Watching Destinations Around the World, April 2011, The TODAY Show, NBC: Affordable Secret Island Getaways, April 2011, AOL Travel: Six Best Beach Vacation Spots in the Pacific Northwest, February 2011, Sunset magazine: "One of the Best Coastal Vacation Spots in the West 2010"

^[2] 487 ships from Gateway Pacific Terminal in Washington, 200 ships from Roberts Bank Super Port (aka Delta Port) in BC, 200 ships from Westshore Terminal in BC. 300-470 additional large cargo vessels from BP and Tesoro at March Point, Anacortes, and Kinder Morgan in Vancouver Harbor carrying tar sands and/or bitumen blends will add additional potential for vessel traffic to the Salish Sea compounding the risk for collision, allision, oil spill and marine impacts to this fossil fuel export marine highway.



FRIENDS OF THE SAN JUANS

POB 1344 Friday Harbor, WA 98250 (360) 378-2319 www.sanjuans.org

October 1, 2012

Delivered by email: sonja.larson@ecy.wa.gov

Sonja Larson
Department of Ecology
PO Box 47600
300 Desmond Dr.
Olympia, WA 98504

Re: Public Comment on the Oil Spill Contingency Planning Rule (Chapter 173-182 WAC).

Dear Ms. Larson and the Rule Advisory Committee Members:

On behalf of over 2,000 members who reside in the San Juans, we appreciate the opportunity to comment on the Oil Spill Contingency Planning Rule (Chapter 173-182 WAC).

Hundreds of thousands of tourists enjoy the beauty of the San Juans annually. Families rent sailboats and yachts, children attend camps, canoes and kayakers paddle, and vacationers enjoy our local restaurants, accommodations, and shops.

Maintaining the health of these islands is critical to preserving our local and regional economy and regional Coast Salish cultural.

According to the Outdoor Industry Association, outdoor recreation supports 115,000 jobs and contributes \$11.7 billion to the state economy. In San Juan County, tourism is valued to generate over \$51 million dollars in spending and 669 jobs. International, national, and regional media and publications continually show a strong interest in the destination value of the San Juan.¹

A large oil spill would change this overnight.

San Juan County is surrounded by narrow shipping channels with strong currents and navigational challenges. A strong and immediate response to a major oil spill with appropriate equipment and personnel is imperative.

The San Juans are already impacted by the export of tar sands to all five refineries in Washington State. The refineries are fed by almost 100 tankers coming south through the Salish Sea from

¹ New York Times: The 41 Places to Go in 2011—listed as the number 2 place to visit in the world, in between Santiago, Chile as number 1 and Koh Samui, Thailand as number 3. (Editor's tagline related to the San Juan Islands: "Bold-face restaurateurs vie with unspoiled nature. Nature wins."), National Geographic Traveler: The world list featured San Juan Islands as number 3 in the 10 Best Trips of Summer 2011, "all about weather, whales, and water", Travel + Leisure: World's Best List in 2011 and 2010, the number 4 position for Top Islands (moving up from number 5 in 2009), Life: 100 Places to See in Your Life Time, July 2011, USA Today: Best Wildlife Watching Spots in Each State, July 2011, Lonely Planet: US Islands that Won't Break the Bank, July 2011, New York Times: A Directory of Rare Wonders, May 2011, HUFFPOST TRAVEL: 10 Best Whale Watching Destinations Around the World, April 2011, The TODAY Show, NBC: Affordable Secret Island Getaways, April 2011, AOL Travel: Six Best Beach Vacation Spots in the Pacific Northwest, February 2011, Sunset magazine: "One of the Best Coastal Vacation Spots in the West 2010"

Canada every year, as well as by the Puget Sound Spur of the Trans-Mountain pipeline. Both tankers in the sound and the Trans-Mountain pipeline create the risk of a tar sands disaster in the Salish Sea.

Based on recent experience in Kalamazoo Michigan in 2010, an event involving tar sands bitumen material could be far worse than an oil spill. The Kalamazoo River tar sands bitumen disaster turned out to be the most costly onshore pipeline break in U.S history. We need to know exactly how this type of a spill would be handled in this region.

This spill was the result of a pipeline rupture from the Enbridge pipeline running through Marshall, Michigan. This spill was reported to cost \$29,000 per barrel to cleanup which makes it the most costly spill in US history. Prior to this incident, the average crude oil spill in the past decade is reported to be approximately \$2,000 per barrel.

We request that the final Cost Benefit and Least Burdensome Alternative Analysis include the cost associated with the 2010 Kalamazoo River spill in Michigan. Cleanup and restoration of the Kalamazoo River diluted bitumen spill is on-going.

The proposed pipeline expansion projects in Canada are poised to significantly increase vessel traffic carrying Alberta bitumen (tar sands) oil through the waters around the San Juan Islands and the Strait of Juan de Fuca. These vessels may be bound for Washington ports or move through our waters bound for other destinations. It is also expected that the trans-boundary pipeline between Canada and the United States will significantly increase their capacity and expand their tank farm capability accordingly.

Oil from Alberta bitumen, even once diluted, is uniquely difficult to remove after a spill, because of its properties. Alberta bitumen oils also generally sink, or some portion is expected to sink, which renders ineffective conventional techniques to contain and remove oil from the water's surface. Sinking oil poses a risk of contamination to sediments and their ecosystems, which include economically and culturally valuable shellfish and fisheries.

Increased shipping traffic from proposed coal export terminals should also be a consideration. Projections for coal ships alone moving through Washington and British Columbia waters of the San Juans (Strait of Juan de Fuca, Rosario Strait, Haro Strait, Boundary Pass, and the Strait of Georgia) could mean an additional 1,774 transits from 887² cargo ships exporting from ports at March Point, Anacortes, proposed Gateway Pacific Terminal, Bellingham, and Vancouver Harbor, British Columbia.

DESIGNATE SAN JUAN COUNTY AS A STAGING AREA

Having San Juan County identified as a Staging Area and having additional spill response equipment and personnel resident in San Juan County to meet the two, three, four, and six hour planning standards will significantly improve the response time and the capacity to contain and clean-up a major spill.

² 487 ships from Gateway Pacific Terminal in Washington, 200 ships from Roberts Bank Super Port (aka Delta Port) in BC, 200 ships from Westshore Terminal in BC. 300-470 additional large cargo vessels from BP and Tesoro at March Point, Anacortes, and Kinder Morgan in Vancouver Harbor carrying tar sands and/or bitumen blends will add additional potential for vessel traffic to the Salish Sea compounding the risk for collision, allision, oil spill and marine impacts to this fossil fuel export marine highway.

The Oil Spill Contingency Plan Rule must require the appropriate geographic distribution of spill response equipment and personnel.

As a Planning Standard Area, only the resources to meet the two and three-hour required timeframe standards must be resident. To meet the four and six hour planning standard, the law only requires that equipment and personnel reach the nearest border of the Planning Standard Area in the required timeframe.

Equipment and personnel resident in Anacortes, Bellingham Bay, or Port Angeles will likely be able reach the east side of our County but there are no assurances that the two, four or six-hour planning standards can be met if there is a major spill in Haro Strait.

PROTECTING ENDANGERED SPECIES/ AVOIDING “TAKE”

Another justification for San Juan County’s designation as a Staging Area and requiring that the two, three, four, and six hour Planning Standards be resident is to avoid taking species listed under the US Endangered Species Act or the Canadian Species at Risk Act, including Southern Resident killer whales (*Orcinus orca*), marbled murrelets (*Brachyramphus marmoratus*), and some ecologically significant units or species of Pacific salmon (*Onchorynchus* spp.), which traverse the boundary daily.

Ensuring that the appropriate BAT and BAP containment and recovery gear and personnel is response-ready and on-site in a timely manner in the event of a major spill in Haro Strait will reduce the impacts and avoid losses to the orca whales and their entire food chain (including federally listed as endangered Chinook salmon). The value of a southern resident orca whale can be quantified and that cost must be included in the Cost-Benefit and Least Burdensome Alternative Analysis.

PLEASE INCORPORATE THE FOLLOWING ELEMENTS INTO THE REVISED RULE SUCH THAT AN OIL SPILL CAN BE QUICKLY CONTAINED AND CLEANED IN THE SAN JUANS:

1. Identify and designate San Juan County as a Staging Area and specify that the two, three, four, and six hour planning standards be resident;;
2. Distribute equipment and personnel to the San Juans sufficient to address the risk from oil and diluted bitumen tar sands spill;
3. Require and ensure the ability to respond, contain and cleanup spills of hydrocarbons that sink. Potentially sinking hydrocarbons include Group V oils, bunker fuels, and diluted bitumen tar sands;
4. Prohibit the use of Coexit as a dispersant as has been done in the United Kingdom.
5. Specifically require that all Alberta Tar Sands/Canadian crude products including diluted bitumen and all forms of synthetic crude being transported by land-based pipelines be subject to the Oil Spill Contingency Plan Rule;
6. Require that all contingency plans, technical manuals, and planning standards be publically available on Ecology’s website;
7. Require that public review and comment be provided on all proposed changes to contingency plans, technical manuals, and planning standards.

We look forward to the State playing a lead role in helping prepare for a spill from crude transported through the San Juan archipelago.

Sincerely,

Stephanie Buffum, Executive Director

From: Pauline Marchand <Pauline.Marchand@InternationalGroup.org.uk>
Sent: Monday, October 01, 2012 1:08 PM
To: Larson, Sonja (ECY)
Subject: Washington - proposed rules - public hearings

Follow Up Flag: Follow up
Flag Status: Completed

Dear Ms Larson,

I am writing from the International Group of P and I Clubs based in London.

We are currently looking at the proposed rules on spill response and NRDA and are considering whether to provide comments.

We would be interested and would find much helpful to read the outcome or have access to the reports of the three public hearings held last week.

Given the short time frame that is now left to comment, I would be much grateful if you could send me those documents, as soon as convenient.

Many thanks in advance,
I look forward to hearing from you,

Kind regards
Pauline Marchand
Legal adviser
+44 7557 283 752

From: Bill Anderson <banderson@healthybay.org>
Sent: Monday, October 01, 2012 10:29 AM
To: ECY RE Spills Rule Making
Subject: comment letter
Attachments: CHB spills comment letter.doc

Follow Up Flag: Follow up
Flag Status: Completed

I have attached a copy of a letter commenting on proposed oil spill response regulations. I've also sent a copy in the mail. Thanks for your consideration of our comments.

--

Bill Anderson
Executive Director
Citizens for a Healthy Bay
535 Dock Street, Suite 213
Tacoma, WA 98402
(253) 383-2429

www.healthybay.org



October 1, 2012

535 Dock Street
Suite 213
Tacoma, WA 98402
Phone (253) 383-2429
Fax (253) 383-2446
chb@healthybay.org
www.healthybay.org

Executive Director
Bill Anderson

Washington State Dept. of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

Dear Sir or Madam:

Citizens for a Healthy Bay (CHB) is a nonprofit environmental organization that has been protecting Commencement Bay and surrounding waters for the past 22 years. We are writing to request changes in the draft oil spill regulations, chapter 173-183 WAC, related to the phase-in of aerial surveillance and the Four Hour planning standard for higher current boom in the Commencement Bay-Quartermaster Harbor planning area.

Aerial Surveillance

As illustrated by the Dalco Passage spill a few years ago, the ability to locate and track spills at night and in foggy weather is desperately needed but is not currently in place. The availability of helicopters or fixed-wing aircraft with high technology sensing systems and infrared cameras is crucial now. We can't wait for three years for this already available technology to be in use in Washington. Proposed RCW 173-182-130 should be revised to require that FLIR and multispectral sensing be available in 18 rather than 36 months.

Commencement Bay-Quartermaster Harbor Four Hour Planning Standard

As the Department determines high current boom phase-in schedules, it should logically consider the volume of vessel traffic in certain areas of the Sound, the likelihood that a spill could adversely impact highly productive habitat and whether an area includes marine conditions (such as high currents) where equipment mandated by the Four Hour standard would be especially useful. Commencement Bay adjoins Vashon and Maury Islands and any substantial spill could impact the shores and harbors of those islands as well as Colvos Passage, between Vashon and the Peninsula.

The equipment specified in the Four Hour standard would be of particular use and importance in these areas due to their strong currents. We urge that the Department revise proposed RCW 173-182-130 to provide the same 18 month high current boom implementation schedule for Commencement Bay as is being planned for Neah Bay and the San Juans.

Thank you for your consideration of our comments.

Yours truly,

Bill Anderson
Executive Director

Board of Directors
Bonnie Becker
Cheryl Greengrove
Kathleen Hasselblad
Bruce Kilen
Melissa Braisted Nordquist
Bill Pugh
Lee Roussel
Robert Stivers
Angie Thomson
Sheri Tonn

A tax-exempt
501(c)(3) Washington
nonprofit corporation

From: Helmick, Linda (ECY)
Sent: Monday, October 01, 2012 8:59 AM
To: Larson, Sonja (ECY)
Subject: FW: Coleman, Todd - ECTS 8224 - INSYSTEM
Attachments: Coleman, Todd - ECTS 8224 - INSYSTEM.pdf

Follow Up Flag: Follow up
Flag Status: Completed

From: Lowe, Ann (ECY)
Sent: Friday, September 28, 2012 4:22 PM
To: Helmick, Linda (ECY)
Subject: Coleman, Todd - ECTS 8224 - INSYSTEM

Good afternoon:

Forwarding subject material for your program's response over Ted's signature.
Thank you.
Ann

Executive Correspondence

Log No: 8224

Gov Log No: None

Date Assigned: 09/29/2012

Date Due: 10/15/2012

Date Completed:

Constituent: Coleman, Todd

Subject: Oil Spill Contingency Plan Rule Update

Assigned to: Jensen, Dale

Organization: SPPR

Coordinate With: None Required

Signature Required: DIRECTOR

CC (To be noted on letter)

See CC's from original letter

Phone Log (If Appropriate)

Contact Person

In

Out

Helmick, Linda

Comments:

No comments at this time



Port of Vancouver USA
A CENTURY OF POSSIBILITIES.

September 28, 2012

Director Ted Sturdevant
Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

RE: Oil Spill Contingency Plan Rule Update

Dear Director Sturdevant:

As an active member of the Washington Public Ports Association (WPPA) and the Marine Fire & Safety Association (MFSA) the Port of Vancouver USA has followed development of the draft rules concerning oil spill contingency planning. We are concerned that while the Department has listened to the maritime industry and made some select changes to the proposed rules, **the most onerous, costly aspects of the draft ignore the unique nature of the Columbia River and place untenable requirements, inconsistent with those of the state of Oregon on a system struggling to stay competitive.**

Our key concerns:

- + Increased costs that could stifle export trade. Mandates in the current draft rules are conservatively estimated to add \$1,100 to each cargo vessel in the Columbia River, a 220% cost increase.
- + Our cargos are discretionary and highly cost sensitive. Significant cargo diversions will be inevitable and damaging to the regional and state economy.
- + Hard fought economic growth and the benefits from expensive transportation infrastructure improvements will not be realized.
- + The Columbia River is fundamentally different than Puget Sound. Safeguards already in place along the Columbia River have kept spill volume and frequency consistently low. Puget Sound safeguards are redundant, unnecessary and inappropriate.

The Port of Vancouver USA's location at the crossroads of ocean-bound and river shipping lanes, interstate highways, and national rail lines is one of its strongest attributes. More than 2,300 people work directly for businesses at the port and nearly 17,000 total jobs in the community and region are related to port business activity. Annually, this \$1.6 billion of overall port business activity generates nearly \$81 million in state and local tax revenue.

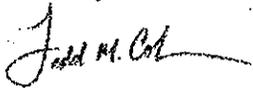
Focus, tenacity, partnership, and political and financial support have allowed the Port of Vancouver and others on the Columbia River to maintain their highest competitive advantage - transportation connections of river, road, and rail. Investments like the 43' Columbia River channel that provides over 40,000 local jobs and supports over 40 million tons of cargo each year; valued at \$20 billion in 2009. And, the same partners that championed the channel project continue to work collectively to manage a plethora of navigation, environmental, and economic needs of this critical river system across two states and with multiple federal agencies.

Eighty-five percent of the port's annual tonnage (approximately 5 million) is export cargo - bulk products like grain, minerals, and scrap metal. The port also handles wind energy, steel, wood pulp, and Subaru autos. Most of these cargos are discretionary and highly price sensitive.

We have valued the support of our congressional leadership and Governor Gregoire as we have grown - investing heavily in port and rail infrastructure and attracting nearly \$500 million in private investment over the past few years. This new business is reliant on an economical and efficient transportation system. Unnecessary requirements, particularly those that significantly drive up underlying costs, will serve to discourage this new business activity and the resulting jobs.

Governor Gregoire has stated that the Department should *"ensure state requirements protect our state's economy and that rules addressing cargo ship spill response requirements minimize potential impacts to discretionary cargo moving through our state, providing protections appropriate to the level of risk posed by different vessels and sectors."* **We believe the Department's economic analysis conducted on the rules is inadequate to date and ask that you fully vet the concerns advanced by MFSA and WPPA on our behalf.**

Sincerely,



Todd Coleman
Executive Director

Cc: Governor Gregoire
Keith Phillips, Governor's Executive Policy Office
49th District Senator Pridemore
49th District Representative Moeller
49th District Representative Wylie
18th District Senator Rivers
18th District Representative Orcutt
18th District Representative Pike
17th District Senator Benton
17th District Representative Probst
17th District Representative Harris

From: Pilkey-Jarvis, Linda (ECY)
Sent: Monday, October 01, 2012 8:14 AM
To: Helmick, Linda (ECY); Jensen, Dale (ECY); Larson, Sonja (ECY)
Cc: Aschenbrenner, Sarah (ECY)
Subject: RE: EXEC CORRESPONDENCE REPLY NEEDED BY MONDAY 10/15/12 - FW: Coleman, Todd - ECTS 8224 - INSYSTEM

I would ask Sonja to ask Bari if this should be exec correspondence or a rule comment. Think it is imperative to put it in the rule comment category, maybe treat it as both? Let's get Bari's advice on this so we don't do something wrong.

From: Helmick, Linda (ECY)
Sent: Monday, October 01, 2012 7:47 AM
To: Jensen, Dale (ECY); Pilkey-Jarvis, Linda (ECY)
Cc: Aschenbrenner, Sarah (ECY)
Subject: EXEC CORRESPONDENCE REPLY NEEDED BY MONDAY 10/15/12 - FW: Coleman, Todd - ECTS 8224 - INSYSTEM
Importance: High

Good morning. Please see the attached ECTS. A response is required by Monday, 10/15/12. Please draft a response and I will prepare for Ted's review and signature.

Thanks very much.

Linda H.

From: Lowe, Ann (ECY)
Sent: Friday, September 28, 2012 4:22 PM
To: Helmick, Linda (ECY)
Subject: Coleman, Todd - ECTS 8224 - INSYSTEM

Good afternoon:

Forwarding subject material for your program's response over Ted's signature.

Thank you.

Ann

From: Steve & Susan Bennett <slb@whidbey.com>
Sent: Sunday, September 30, 2012 10:24 AM
To: Larson, Sonja (ECY)
Subject: Oil Spill regulations

Follow Up Flag: Follow up
Flag Status: Completed

Dear Ms. Larsen,

This is in response to the request to Whidbey Audubon to comment on the proposed revisions to WAC-173-182 to comply with HB1186, the Oil Spill Bill.

Almost 30 years ago, Whidbey Island was subjected to a catastrophic oil spill in Admiralty Inlet that left over a thousand gallons of oil on our beaches. This year, the burning and sinking of the derelict boat Deep Sea was handled much more efficiently, and Audubon and Beachwatcher members are still monitoring the residual effects on local beaches and sea life.

Our only comment on that event is that perhaps State agencies might have acted before the vessel sank to remove the boat to a safer location. Perhaps the new rules will cover that eventuality.

Jerry Joyce of Seattle Audubon has submitted suggestions for changes to the proposed rules. Whidbey Audubon supports those changes enthusiastically.

We agree that Best Available Technology be used to ensure the quickest and most effective response to spills, whether on land or on water. Aerial surveillance should also apply to pipeline leaks and other land-based spills, as they affect groundwater. Clear and concise manuals should be provided to all vessels spilling or responding to spills, and the manuals should be updated regularly with the latest science on booms, oil types and properties, and cleanup materials. Volunteers should be coordinated by Department staff using the same manuals. Storage systems for collection of spilled oil should also meet the requirements of Best Available Technology, so as not to exacerbate the spill.

The 4 hour standard must reference the identification of vessels and crews for boom deployment because timing is critical, especially during adverse weather conditions. If responding vessels are unequal to the task, responding within four hours will be useless.

Finally, to my favorite requirement: education. When the regulations are adopted to implement HB1186, the public should be informed about them in clear language, as oil spill prevention is better than oil spill cleanup.

Thank you for your attention.

Susan Bennett, Co-Chair

Whidbey Audubon Conservation Committee

slb@whidbey.com

From: Betsy Rogers <BRogers@Portvanusa.com>
Sent: Friday, September 28, 2012 3:09 PM
To: Addison Jacobs; Phillips, Keith (GOV); tim.probst@leg.wa.gov; Harris, Paul; Rivers, Ann; liz.pike@leg.wa.gov; jim.moeller@leg.wa.gov; Wylie, Sharon; Sturdevant, Ted (ECY); ECY RE Spills Rule Making
Subject: Sturdevant Letter - Oil Spill Rules Letter
Attachments: Sturdevant Letter - Oil Spill Rules 10-2-12.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Please see the attached

Betsy Rogers

Administrative Supervisor

3103 NW Lower River Road, Vancouver, WA 98660

Direct: 360.992.1105

brogers@portvanusa.com | www.portvanusa.com | [available port properties](#)





Port of Vancouver USA
A CENTURY OF POSSIBILITIES.

September 28, 2012

Director Ted Sturdevant
Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

RE: Oil Spill Contingency Plan Rule Update

Dear Director Sturdevant:

As an active member of the Washington Public Ports Association (WPPA) and the Marine Fire & Safety Association (MFSA) the Port of Vancouver USA has followed development of the draft rules concerning oil spill contingency planning. We are concerned that while the Department has listened to the maritime industry and made some select changes to the proposed rules, **the most onerous, costly aspects of the draft ignore the unique nature of the Columbia River and place untenable requirements, inconsistent with those of the state of Oregon on a system struggling to stay competitive.**

Our key concerns:

- + Increased costs that could stifle export trade. Mandates in the current draft rules are conservatively estimated to add \$1,100 to each cargo vessel in the Columbia River, a 220% cost increase.
- + Our cargos are discretionary and highly cost sensitive. Significant cargo diversions will be inevitable and damaging to the regional and state economy.
- + Hard fought economic growth and the benefits from expensive transportation infrastructure improvements will not be realized.
- + The Columbia River is fundamentally different than Puget Sound. Safeguards already in place along the Columbia River have kept spill volume and frequency consistently low. Puget Sound safeguards are redundant, unnecessary and inappropriate.

The Port of Vancouver USA's location at the crossroads of ocean-bound and river shipping lanes, interstate highways, and national rail lines is one of its strongest attributes. More than 2,300 people work directly for businesses at the port and nearly 17,000 total jobs in the community and region are related to port business activity. Annually, this \$1.6 billion of overall port business activity generates nearly \$81 million in state and local tax revenue.

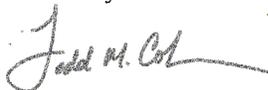
Focus, tenacity, partnership, and political and financial support have allowed the Port of Vancouver and others on the Columbia River to maintain their highest competitive advantage – transportation connections of river, road, and rail. Investments like the 43' Columbia River channel that provides over 40,000 local jobs and supports over 40 million tons of cargo each year; valued at \$20 billion in 2009. And, the same partners that championed the channel project continue to work collectively to manage a plethora of navigation, environmental, and economic needs of this critical river system across two states and with multiple federal agencies.

Eighty-five percent of the port's annual tonnage (approximately 5 million) is export cargo – bulk products like grain, minerals, and scrap metal. The port also handles wind energy, steel, wood pulp, and Subaru autos. Most of these cargos are discretionary and highly price sensitive.

We have valued the support of our congressional leadership and Governor Gregoire as we have grown - investing heavily in port and rail infrastructure and attracting nearly \$500 million in private investment over the past few years. This new business is reliant on an economical and efficient transportation system. Unnecessary requirements, particularly those that significantly drive up underlying costs, will serve to discourage this new business activity and the resulting jobs.

Governor Gregoire has stated that the Department should *"ensure state requirements protect our state's economy and that rules addressing cargo ship spill response requirements minimize potential impacts to discretionary cargo moving through our state, providing protections appropriate to the level of risk posed by different vessels and sectors."* **We believe the Department's economic analysis conducted on the rules is inadequate to date and ask that you fully vet the concerns advanced by MFSA and WPPA on our behalf.**

Sincerely,



Todd Coleman
Executive Director

Cc: Governor Gregoire
Keith Phillips, Governor's Executive Policy Office
49th District Senator Pridemore
49th District Representative Moeller
49th District Representative Wylie
18th District Senator Rivers
18th District Representative Orcutt
18th District Representative Pike
17th District Senator Benton
17th District Representative Probst
17th District Representative Harris

From: Lovel Pratt <LovelP@sanjuanco.com>
Sent: Friday, September 28, 2012 2:56 PM
To: Larson, Sonja (ECY); ECY RE Spills Rule Making
Cc: Jensen, Dale (ECY); Pilkey-Jarvis, Linda (ECY)
Subject: Oil Spill Rule comment letter
Attachments: LovelPratt_OilSpillCommentLtr_2012_9_28.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Hi Sonja,
Attached please find my comment letter for the record.
Thank you,
Lovel

Lovel Pratt
San Juan County Council, District 1
Office: 55 Second St. N., 1st Floor
Phone: 360-370-7473
Mail: 350 Court St. #1, Friday Harbor, WA 98250

Confidentiality Notice: This email message, including attachments, is subject to the Washington State Public Records Act, RCW Chapter 42.56 et al.



San Juan County Council

Office: 55 Second St. N.
Mail: 350 Court Street, No. 1
Friday Harbor, WA 98250
Email: lovelp@sanjuanco.com
Phone: 360-370-7473

Council Member Lovel Pratt
District 1

September 28, 2012

Sonja Larson
Department of Ecology
PO Box 47600
300 Desmond Dr.
Olympia, WA 98504

RE: Comments on proposed amendments to the Oil Spill Contingency Plan Rule
(Chapter 173-182 WAC)

Dear Ms. Larson,

I appreciate this opportunity to provide the following comments on proposed changes to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC). My comment letter will expand upon the letter submitted by the San Juan County Council on September 25th.

A major oil spill is a very real threat in San Juan County, which is at the center of shipping traffic in the Salish Sea. San Juan County is surrounded by narrow shipping channels with strong currents and navigational challenges. A major oil spill in the waters surrounding San Juan County would be devastating both environmentally and economically. All forms of San Juan County's unique and diverse marine life would be severely affected. Property values and all tourism related revenues would be negatively impacted. A strong and immediate response to a major oil spill with appropriate equipment and personnel is imperative.

Sinking Oils

The proposed changes to the Oil Spill Contingency Plan Rule do not adequately address the spill response capacity needed for spills of oils that can sink. New Section WAC 173-182-324 addresses Group 5 oils specifically, but we question whether this new section requires any additional response capacity than that already required by federal law. Best Achievable Technology (BAT) and Best Achievable Protection (BAP) equipment and appropriate personnel must be available to respond to spills of oils that can sink, in addition to group 5 oils. In particular, these include the bunker fuels used for propulsion and diluted bitumen (an Alberta Tar Sands product).

If new Section WAC 173-182-324 is retained in the rule, at the very least this section needs to make the following changes (underlined) to address the necessity for

continuous operations and the fact that a spill of oils that sink requires a faster response, not a slower response than that required for oils that float. Four hours, at a minimum, is required where the current draft includes 12 hours:

NEW SECTION

WAC 173-182-324 Tank vessel planning standards for Group 5 oils.

(1) All tank vessels carrying Group 5 oils must have a contract with a PRC that maintains the resources or capabilities necessary to respond to a spill of Group 5 oils. Such equipment shall include but is not limited to the following:

(a) Sonar, sampling equipment or other methods to locate the oil on the bottom or suspended in the water column;

(b) Containment boom, sorbent boom, silt curtains, or other methods for containing the petroleum oil that may remain floating on the surface or to reduce spreading on the bottom.

(c) Dredges, pumps, or other equipment necessary to recover petroleum oil from the bottom and shoreline and with the ability to conduct continuous operations;

(d) Equipment necessary to assess the impact of such discharges; and

(e) Other appropriate equipment necessary to respond to a discharge involving the type of petroleum oil handled, stored, or transported.

(2) The equipment must be suitable for the geographic area authorized for operations and these resources must be capable of being on scene within four hours of spill awareness.

San Juan County faces an increased risk of a major oil spill with the proposed additional shipping traffic for the transport of both coal and diluted bitumen. The proposed Gateway Pacific Terminal Project will include approximately 1000 additional transits of bulk carriers in the waters surrounding San Juan County. In addition to the coal cargo, each bulk carrier will contain up to 4 million gallons of persistent bunker fuel for propulsion. Existing vessel transport of approximately 2 billion gallons per year of diluted bitumen (from Canada to Tacoma via Rosario Strait and from Canada to California and Asia via Haro Strait) pose an existing risk of a major spill. Kinder Morgan's proposed increased export of diluted bitumen would increase crude oil tanker calls transiting Haro Strait by over 300% by 2016. The Oil Spill Contingency Plan Rule must require that the appropriate BAT and BAP containment and recovery gear and appropriate personnel be response-ready and on-site in a timely manner to respond to spills of oil that can sink. It is imperative that WAC 173-182 specify that Alberta Tar Sands products including diluted bitumen and all forms of synthetic crude are subject to the Oil Spill Contingency Plan Rule.

The only place in any of the Oil Spill Contingency Plan Rule update documents to mention the emerging risk from sinking oils is in section 1.6 in the Preliminary Cost-

Benefit and Least Burdensome Alternative Analysis. This section must be retained and expanded. While there is a significant cost difference in comparing the average crude oil spill in the past decade – \$2 thousand per barrel or more – with the 2010 diluted bitumen spill in Michigan – \$29 thousand per barrel – it is important to note that when this report is finalized, the cost of the diluted bitumen spill should be updated and “costs to date” be added to the text.

I can find no reference to oils by group categorization in HB 1186. Sec. 6. (1) states that “Each covered vessel shall have a contingency plan for the containment and cleanup of oil spills from the covered vessel into the waters of the state and for the protection of ...” I read this to require that the contingency plan for the containment and cleanup of oil spills will address oils that sink if the covered vessel contains oils that can sink regardless of the categorization of that oil. New section WAC 173-182-324 should not be restricted to Group 5 oils only. One recommendation in order to comply with the requirements of HB 1186 would be to have the new section WAC 173-182-324 also include sinking oils.

It came to my attention after the San Juan County Council signed our comment letter of September 25th that the Preliminary Cost-Benefit and Least Burdensome Alternative Analysis does not include the costs associated with the cleanup of spills of Alberta Tar Sands products, including diluted bitumen. The considerably higher cleanup costs, as identified in the text of the Preliminary Cost-Benefit and Least Burdensome Alternative Analysis (section 1.6), must be included in Appendix B.

San Juan County Identified as a Staging Area

The Oil Spill Contingency Plan Rule must require the appropriate geographic distribution of spill response equipment and personnel. As of September 24th, neither Ecology nor the US Coast Guard had provided San Juan County with assurances that the appropriate spill response equipment and personnel can be on-site in the event of a major spill in Haro Strait in the four and six hour planning standard time-frames. On September 24th I received from Ecology detailed deployment information for the MSRC Aleutian Tern, Cascade, Eagle Grebe, and Western Gull. This information is helpful given my concerns and questions submitted for the record in my email of March 7th. However, the timing of this information is counterproductive. Receiving this information on day 20 of the 30 day comment period and more than 6 months after my concerns and questions were raised in the Oil Spill Rule Advisory Committee does not give me adequate time to evaluate the information received before the comment period ends. I am not satisfied that the Oil Spill Rule as proposed will require an appropriate geographic distribution of spill response equipment and personnel. Having major spill response equipment and personnel staged in San Juan County, and in particular in Haro Strait, is essential given Haro Strait’s heavy traffic volume combined with the navigational challenges and environmentally significant habitat. Having major spill response equipment and personnel staged in San Juan County will significantly improve the response time and the capacity to contain and clean-up a major spill.

San Juan County resident personnel and equipment must be able to initiate a full response until additional equipment can cascade into the region especially given the increased risk of a major spill from the increased traffic proposed by the Gateway Pacific Terminal and the increased export of diluted bitumen. WAC 173-182-370 must define San Juan County as a Staging Area and must specify that the two, three, four, and six hour planning standards be resident.

Another justification for San Juan County's designation as a Staging Area and requiring that the two, three, four, and six hour Planning Standards be resident is the avoided losses to endangered species. The southern resident orca whales were listed as endangered in 2005 under the federal Endangered Species Act. Haro Strait contains the orca whales' principal feeding grounds along the west side of San Juan Island. Ensuring that the appropriate BAT and BAP containment and recovery gear and personnel is response-ready and on-site in a timely manner in the event of a major spill in Haro Strait will reduce the impacts and avoid losses to the orca whales and their entire food chain (including federally listed as endangered Chinook salmon). The value of a southern resident orca whale can be quantified and that cost must be included in the Cost-Benefit and Least Burdensome Alternative Analysis.

What will most justify San Juan County's designation as a Staging Area and requiring that the two, three, four, and six hour planning standards be resident is the inclusion in the Cost-Benefit and Least Burdensome Alternative Analysis of the hourly cost savings of reducing spill cleanup costs over the duration of the spill in both Appendix B and the text. Hourly timeframes, not days, are necessary to quantify the importance of spill response times.

Costs Associated With Very Small Spills

The Preliminary Cost-Benefit and Least Burdensome Alternative Analysis needs to address the significant costs that can be associated with very small spills. The *Deep Sea* spill is a case in point. While the millions of dollars associated with the pollution response, vessel salvage, and vessel deconstruction costs would not be applicable in the Oil Spill Contingency Plan Rule, the very small amount of oil spilled caused at least \$1,210,000 in revenue losses to Penn Cove Shellfish (\$55,000 per day x 22 closure days) as well as the quantifiable losses related to the closure of Grasser's Lagoon in Penn Cove which is one of the most popular beaches in Washington State for recreational shellfish harvesting.

Greater Transparency

It is imperative that all contingency plans, technical manuals, and planning standards be publically available on Ecology's website. Further, the Oil Spill Contingency Plan must require that public notification, review, and comment be provided for on all proposed changes to contingency plans, technical manuals, and planning standards.

At the very least, new section WAC 173-182-640 (1) should be amended as follows (changes underlined):

NEW SECTION

WAC 173-182-640 Process for public notice and opportunity for public review and comment period.

(1) The purpose of this section is to specify the procedures for notifying the public which includes interested local and tribal governments about contingency plan status and decisions in order to provide opportunities for the public to review and comment. If plan holders submit only paper copies of their contingency plan, the paper copies shall be scanned to ensure public review can occur via a secure on-line web portal. Electronic submittals shall be made available for public review via a secure on-line web portal. Interested public, local, and tribal governments can also schedule time at the ecology offices to review the plan.

Disruptions to Washington State Ferries and Other Passenger Vessel Transport

Washington State Ferries is a vital economic driver linking Puget Sound communities. Washington State Ferries links San Juan County's island community together, connects the islands to the mainland, and is a major draw for state tourism. Washington State Ferries is not just a public transportation option in San Juan County, but is an essential east/west connector in the state highway system, providing a critical lifeline for the citizens of San Juan County and the only means of travel by car from San Juan County to the rest of Washington State.

After the San Juan County Council comment letter was signed, it came to my attention that the Preliminary Cost-Benefit and Least Burdensome Alternative Analysis does not address the secondary impacts from the interruption of Washington State Ferries (and presumably other passenger vessel transport) as a result of an oil spill. These impacts would include avoided losses in tourism and avoided losses in commuter travel, including lost wages and, depending on the length of the interruption, lost employment.

Summary

The Oil Spill Contingency Plan Rule

1. Must require that the appropriate BAT and BAP containment and recovery gear and personnel be response-ready and on-site in a timely manner to respond to spills of oil that can sink, including diluted bitumen and bunker fuels;
2. Must specifically state that Alberta Tar Sands products including diluted bitumen and all forms of synthetic crude are subject to the Oil Spill Contingency Plan Rule;
3. Must define San Juan County as a Staging Area and must specify that the two, three, four, and six hour planning standards be resident;
4. Require that all contingency plans, technical manuals, and planning standards be publically available on Ecology's website;
5. Require that public notification, review, and comment be provided for on all proposed changes to contingency plans, technical manuals, and planning standards.

The Cost-Benefit and Least Burdensome Alternative Analysis

1. Is to be commended for including and must retain and expand Section 1.6 on the emerging risk from sinking oils;
2. Must update the costs to date of the 2010 diluted bitumen spill in Michigan;
3. Must include in the costs associated with the cleanup of spills of all Alberta Tar Sands products including diluted bitumen in Appendix B in addition to the text;
4. Must include the significant costs that can be associated with very small spills;
5. Must quantify the value of a southern resident orca whale;
6. Must include the hourly cost savings of reducing spill cleanup costs over the duration of the spill in both Appendix B and the text;
7. Must quantify the data provided by the San Juan County Economic Development Council and the San Juan Islands Visitors Bureau, including the press coverage San Juan County receives;
8. Must address the secondary impacts from the interruption of Washington State Ferries (and presumably other passenger vessel transport) as a result of an oil spill, including avoided losses in tourism and avoided losses in commuter travel.

In addition, I support

- The inclusion of more vessels of opportunity (VOO) distributed throughout the region;
- Additional requirements in the four hour planning standard that adequately addresses storage issues and ensure continuous response capacity;
- The inclusion of the Neah Bay Response Tug in the spill response task force;
- The inclusion of a dedicated storage barge, combined with the Neah Bay Response Tug to enable tankers to meet upcoming changes in federal regulations associated with moving the High Volume Port Line from Port Angeles to Cape Flattery.

Washington State has an admirable spill prevention and response record that spans our long history of vigilance from the late Senator Magnuson to Senator Cantwell, our Governor and legislature. However, just because we have not had a catastrophic oil spill recently does not mean that we should not be better prepared to respond to one.

Ecology has concluded in the Preliminary Cost-Benefit and Least Burdensome Alternative Analysis that the likely benefits of the rule exceed its likely costs. This comment letter outlines significant omissions in the Preliminary Cost-Benefit and Least Burdensome Alternative Analysis that, when addressed, will increase the gap between the likely benefits of the rule and its likely costs. The investment in additional BAT and BAP spill response equipment and personnel beyond what is included in the current proposed rule is warranted.

Our quality of life depends upon the health of our interconnected economy and environment, both of which would be severely impacted by a major oil spill. The capacity to respond quickly and effectively to a major oil spill will determine the difference between temporary and lasting economic and environmental impacts.

Thank you for this opportunity to provide these comments on the proposed changes to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC).

Sincerely,

A handwritten signature in black ink that reads "Lovel Pratt". The signature is written in a cursive style with a large initial 'L' and 'P'.

Lovel Pratt
San Juan County Council, District 1

From: Cynthia Olsen <doglove48@gmail.com>
Sent: Friday, September 28, 2012 10:54 AM
To: Larson, Sonja (ECY)
Subject: oil spill preparation

Follow Up Flag: Follow up
Flag Status: Completed

I think the preparation for oil spills should follow the guidelines proposed by the San Juan County Council. Actually, I believe that we simply cannot do enough to protect the Salish Sea.

From: jai boreen <jailoon@gmail.com>
Sent: Friday, September 28, 2012 9:33 AM
To: ECY RE Spills Rule Making
Subject: oil spill response

Follow Up Flag: Follow up
Flag Status: Completed

I echo and support the letter of 9/25 from the San Juan County Council, RE: Comments on proposed amendments to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC).

From: bobpatcolyer@aol.com
Sent: Friday, September 28, 2012 9:18 AM
To: Larson, Sonja (ECY)
Subject: San JUAN Islands and oil transport

Follow Up Flag: Follow up
Flag Status: Completed

I am quite disturbed to read about a proposal to route oil-bearing ships through the San Juan Islands and tentative plans to cope with oil spills. As property owners on one of the San Juans, with a gravel-sand beach a few steps from the front door, our property would suffer significant damage in case of an oil spill.

So would the bottom dwelling sea creatures and the sea grasses and algae, all of them vital to the area economy.

Where are the environmental impact studies? I've read no mention of any.

The people of our state, not just those in the San Juans, should know of this quite likely damaging proposal. I would like to be kept up to date on this issue. Pat Colyer

From: Helen Machin-Smith <stageleft@centurytel.net>
Sent: Friday, September 28, 2012 8:55 AM
To: Larson, Sonja (ECY)
Subject: oil spills - San Juan Islands

Follow Up Flag: Follow up
Flag Status: Completed

Dear Ms. Larson,

For the protection of our water, our environmental tourism and for the protection of wildlife, please ensure that the following rules are made mandatory regarding potential oil spills in San Juan County.

The Oil Spill Contingency Plan Rule:

1. Must define San Juan County as a Staging Area and must specify that the two, three, four, and six hour planning standards are resident;
2. Distribute equipment and personnel to the San Juans sufficient to address the risk from oil and diluted bitumen tar sands spill;
3. Require and ensure the ability to respond, contain and cleanup spills of oils that sink. Potentially sinking oils include Group V oils, bunker fuels, and diluted bitumen tar sands;
4. Require that all contingency plans, technical manuals, and planning standards be publicly available on Ecology's website;
5. Require that public review and comment be provided on all proposed changes to contingency plans, technical manuals, and planning standards;
6. Prohibit the use of Coexit as a dispersant as has been done in the United Kingdom; and
7. Specifically state that all Alberta Tar Sands/Canadian crude products including diluted bitumen and all forms of synthetic crude being transported by land-based pipelines also be subject to the Oil Spill Contingency Plan Rule.

Thank you for your attention to this matter.

Yours,

Helen Machin-Smith and Daniel Mayes

Island Stage Left
1062 Wold Rd
Friday Harbor, WA 98250

360 378 5649
stageleft@centurytel.net
www.islandstageleft.org

From: Marion Hanks-Bell <marionjhanksbell@mac.com>
Sent: Friday, September 28, 2012 8:12 AM
To: ECY RE Spills Rule Making
Subject: Please add these 7 items to the Oil Plan Contingency Rule

Follow Up Flag: Follow up
Flag Status: Completed

Dear Washington State Spill Contingency Agency,

I endorse the Friends of the San Juans' recommendations for oil spill preparedness in this beautiful part of the world. An oil spill could damage this incredible ecosystem in a matter of hours if we are not prepared for a spill. Clearly experience has shown that oil spills happen with tragic results. So I encourage you to add the following items to your Contingency Plan.

1. Must define San Juan County as a Staging Area and must specify that the two, three, four, and six hour planning standards are resident;
2. Distribute equipment and personnel to the San Juans sufficient to address the risk from oil and diluted bitumen tar sands spill;
3. Require and ensure the ability to respond, contain and cleanup spills of oils that sink. Potentially sinking oils include Group V oils, bunker fuels, and diluted bitumen tar sands;
4. Require that all contingency plans, technical manuals, and planning standards be publicly available on Ecology's website;
5. Require that public review and comment be provided on all proposed changes to contingency plans, technical manuals, and planning standards;
6. Prohibit the use of Coexit as a dispersant as has been done in the United Kingdom; and
7. Specifically state that all Alberta Tar Sands/Canadian crude products including diluted bitumen and all forms of synthetic crude being transported by land-based pipelines also be subject to the Oil Spill Contingency Plan Rule.

Sincerely,

Marion Hanks-Bell
8220 Orcas Road
Orcas, WA 98280

From: Frank Holmes <fholmes@wspa.org>
Sent: Thursday, September 27, 2012 5:53 PM
To: ECY RE Spills Rule Making
Cc: fholmes@wspa.org
Subject: Oil Spill Contingency Plan Rule Comments - WSPA
Attachments: WA Oil Spill Rule - WSPA Final.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Attention Sonja Larson,

Attached are comments on the WA Department of Ecology proposed amendments to the Oil Spill Contingency Planning Rule Chapter 173-182). These comments are submitted on behalf of Western States Petroleum Association (WSPA).

Thank you,

Frank E. Holmes
Director - NW Region & Marine
975 Carpenter Road - Suite 106
Lacey, Washington 98516
360-352-4506 - Office
360-789-1435 - Cell



Western States Petroleum Association
Credible Solutions • Responsive Service • Since 1907

Frank E. Holmes
Director, Northwest Region & Marine

September 27, 2012

Washington Department of Ecology
Oil Spill Program
PO Box 47600
Olympia, WA 98504-7600

Attention: Sonja Larson – via email: spillsrulemaking@ecy.wa.gov

RE: *Comments on Proposed Amendment of Washington Oil Spill Rules - WAC 173-182*

Dear Ms. Larson:

The Western States Petroleum Association (WSPA) is a non-profit trade association representing twenty-seven companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in California and five other western states. We appreciate this opportunity to comment on the text of the proposed amendments of the Washington Oil Spill Rule WAC 173-182.

General Comments

WSPA appreciates the Advisory Committee efforts that Ecology conducted to take input on the proposed rule from stakeholders. Ecology appears to have incorporated many of the stakeholder comments for the Advisory Committee process into the public draft that is now open. WSPA offers the following specific comments for your consideration.

173-182-030 Definitions

Page 2

- (3) Best Achievable protection
(c) still references “cost of measures”. This should be “cost benefit of measures”

173-182-130 Phase in language

Page 11

TYPO - (2)(c) info on products handled. Note reference is to 173-182-260 (4)(c)(ii); this should be 173-182-230

173-182-142 Significant changes to approved plans require notification

Page14

This was previously part of Section -140, now moved to stand-alone section. Main questions/comments:

(2)(b) Requires reporting for change if >10% of available equipment moved from home base. However, (c) requires notification for ANY quantity moved out of region. First, is this an issue for OSROs? If so, might suggest (b) and (c) be consolidated so that only transfers out of area of >10% of equipment type are reportable

(d) Is this about the change in numbers of personnel or equipment, about a change in the qualifications of the personnel or the type/make/mark of the equipment being changed out? Does this grant WDOE a mechanism to approve of individuals?

(i) Reads “for facilities changes in oil type handled; changes in storage, capacity and tankage; changes in handling or processing of any product” This appears way too broad and vague. For example, does this mean changes in operational use of tanks (i.e. shifting products from one tank to another)? What if a tank is out of service for storage? “Handling and processing of any product” gets into the operations of the facility. The issue here seems to be if the types of oils change, or if there are significant changes in storage capacity (which could change potential spill volumes) then these should be reported. Would suggest this section be amended to require reporting changes of >10% of storage capacity, or the addition or removal of an oil Group that is handled, processed or stored.

173-192-230 Contingency plan general content

Page 16

(3)(e)(v) Does this include the specifics of the contract such as payment or just a receipt that there is a contract available? What is the purpose of seeing the entire contract?

Page 17-18

(4)(c)(ii) Added requirement that facility plans “inventory all tanks and list tank capacity all oil(s) or product(s) handled by name and include: density, gravity (API), group.” May just need some punctuation, but is intent here to get a list of tanks and their capacities, as well as a separate list of the types of oils and products handled (not a big problem – see above) OR is the intent to link the two and get the type of product for a specific tank? The latter would be problematic in that tankage can change frequently, which would put an administrative burden on constantly updating a plan when the overall issue of oil types and spill volume potential would not be affected.

(5)(f) For vessels, replaced former language requiring listing oil types and oil volume capacity with a listing by name, density, gravity and group, as well as “amount carried as cargo or fuel”. Uncertain as to what is meant, and the amount of detail expected, for “amount carried as cargo and fuel”. Is that general ship capacity, or for each load/transit?

(6)(b) Reads “vessel diagrams indicating cargo, fuel, and ballast tanks and piping, power plants, and other oil transfer sites and operations”. Will a ship’s particulars work or is this requiring potential proprietary ship design info?

173-182-262 Vessel notification requirements (this was Section 261 in previous draft)

Page 21

(1) “Notification must be made within one hour of the discharge or substantial threat of a discharge...” Should add “discovery of” so it reads “notification within one hour of the *discovery* of a discharge.....”

(3)(b) Language doesn’t make sense. Does the phrase “The vessel owner/operator will coordinate as appropriate with”, found in (3)(a) belong at the end of (3)?

173-182-264 Notification requirements for reporting spills to ground or containment at covered facilities

Page 21

WSPA recommends the following redraft of this section.

NEW SECTION

WAC 173-182-264 Notification requirements for reporting spills to ground or containment at covered facilities. (1) Facility plans shall contain procedures for notifications for spills to ground and to permeable secondary containment.

- (a) All spills are considered reportable spills except:
 - (i) Spills which are known to be less than 42 gallons.
 - (ii) CERCLA releases.
 - (iii) Releases to atmosphere only.
 - (iv) Releases from underground storage tanks regulated under Chapter 173-360 WAC.
 - (v) Pre-existing sources of releases identified as RCRA solid waste management units.
 - (vi) Historical releases regulated under Model Toxic Control Act, Chapter 173-340 WAC.
 - (vii) Spills contained within areas controlled by NPDES permitted systems that are not likely to threaten groundwater and do not exceed applicable federal reportable quantities.

- (b) A spill is considered to have not impacted ground if it occurs on a paved surface, such as asphalt or concrete, or within engineered containment structures. A spill to dirt or gravel is considered to have impacted ground and is reportable.

(2) Plan holders must also include procedures in their plan to address spills of an unknown volume. When addressing a spill of an unknown volume, plan holders shall use best professional judgment and may consider the following circumstances in determining when to make notifications:

(a) Whether the spill is ongoing;

(b) Whether the spill is located in an area where there is a pathway to waters of the state, and the environmental conditions, such as rain events, or known shallow groundwater make impacts to waters of the state likely.

173-182-321 Aerial surveillance requirements for covered vessels

Pages 29-30

(3) “to assist in detection of slicks” should this be “location”?

(3)(a) Requires the strategic asset to be available in 8 hours. Suggest that this be changed to 12 hours, since there is already a 6-hour requirement for a tactical aircraft. The 12-hour timeframe would be more practical for getting an aircraft in area, fitting it with the required surveillance equipment, getting the qualified observer onboard, and getting the plane to the spill site.

(3)(b) While it is appreciated that WDOE listened to previous comments and listed capabilities of the IR equipment, those that are listed are too specific, do not necessarily go together, and/or are not readily available. For example, many IR systems operate in the 7 to 14 μm range, not the 8 to 14 specified in the rule. Further, optical zoom is usually not associated with IR cameras, rather with standard or HD visual cameras. This language should be made less specific, providing *performance* parameters, rather than technical specifications. For example, requiring that the IR use a short wave or long wave sensor with an effective range of x, etc.

(3)(c) Still requires “transmitting processed images and other information to the ...command post in near real time”. As has been stressed in the past, much of this processing will likely take place at the command post or elsewhere offsite, not on the aircraft. Also, not sure what the definition of “near real time” is. Keeping in mind that this is for strategic use, would suggest this be changed to allow for transmission of captured data and images to the data processing center, as soon as is safely possible to do so.

173-182-395 Neah Bay staging area

Page 37

Last line does not include the “4-hour” addition to the list of resources that must be resident. Was this oversight, or intentional?

173-182-415 Cathlamet staging area

Page 41

Typo at end of description: “hour planning standard” left off after “two and three”

173-182-710 Type and frequency of drills

Page 50

(1)(b) Refers to WRRL identification numbers for all response *actions*. This should be “resources”, not actions. (actions are not in the WRRL, just equipment)

WSPA would be happy to provide further explanation or commentary relative to the above comments. If you need to contact us, please call to me at 360-352-4506.

Sincerely,



Frank E. Holmes
Director – NW Region and Marine
Western States Petroleum Association

From: Lovel Pratt <LovelP@sanjuanco.com>
Sent: Thursday, September 27, 2012 3:52 PM
To: Larson, Sonja (ECY); ECY RE Spills Rule Making
Subject: Comment - proposed Oil Spill Contingency Plan Rule

Follow Up Flag: Follow up
Flag Status: Completed

Hi Sonja,
In the Preliminary Cost Benefit and Least Burdensome Alternative Analysis, Appendix B, Tables 11 and 12, the 'Lost Tourist Spending and Income' is listed as \$0 and is probably a rounding error.
Thank you for this opportunity to comment!
Lovel

Lovel Pratt
San Juan County Council, District 1
Office: 55 Second St. N., 1st floor
Phone: 360-370-7473
Mail: 350 Court Street, No. 1, Friday Harbor, WA 98250

Confidentiality Notice: This email message, including any attachments, is subject to the Washington State Public Records Act, RCW Chapter 42.56 et al.

From: Lovel Pratt <LovelP@sanjuanco.com>
Sent: Thursday, September 27, 2012 3:52 PM
To: Larson, Sonja (ECY); ECY RE Spills Rule Making
Subject: Comment - proposed Oil Spill Contingency Plan Rule

Follow Up Flag: Follow up
Flag Status: Completed

Hi Sonja,
In the Preliminary Cost Benefit and Least Burdensome Alternative Analysis, Appendix B, Tables 11 and 12, the 'Lost Tourist Spending and Income' is listed as \$0 and is probably a rounding error.
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Lovel Pratt
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Office: 55 Second St. N., 1st floor
Phone: 360-370-7473
Mail: 350 Court Street, No. 1, Friday Harbor, WA 98250

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From: Lovel Pratt <LovelP@sanjuanco.com>
Sent: Thursday, September 27, 2012 2:04 PM
To: Larson, Sonja (ECY); ECY RE Spills Rule Making
Cc: Jensen, Dale (ECY); Pilkey-Jarvis, Linda (ECY); Patora, Kasia (ECY)
Subject: Comments on the proposed amendments to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC) - additional comment info and links from SJC
Attachments: Economic impact from oil spills in San Juan County; RE: Request for SJC economic data/studies

Follow Up Flag: Follow up
Flag Status: Completed

Hi Sonja,

This email contains addition information and links that were referenced in the San Juan County Council's comment letter and the San Juan County Marine Resources Committee's comment letter, both of which were delivered for the record via email during the public hearing on the 25th.

Attached are the emails previously sent to Ecology that include economic data and information that need to be included in the Cost Benefit and Least Burdensome Alternative Analysis.

I also want to send the following links to two documents referenced in the San Juan County Marine Resources Committee's letter:

Puget Sound Partnership 2012 Action Agenda (see pages 331 - 342):

http://www.psp.wa.gov/downloads/AA2011/083012_final/Action%20Agenda%20Book%202_Aug%2029%202012.pdf

San Juan County's Marine Stewardship Area Plan:

<http://www.sicmrc.org/uploads/pdf/MSA%20plan%2002-Jul-2007%20Final.pdf>

Thank you for including this in the record and for this opportunity to comment on the proposed amendments to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC).

Lovel

Lovel Pratt
San Juan County Council, District 1
Office: 55 Second St. N., 1st floor
Phone: 360-370-7473
Mail: 350 Court Street, No. 1, Friday Harbor, WA 98250

Confidentiality Notice: This email message, including any attachments, is subject to the Washington State Public Records Act, RCW Chapter 42.56 et al.

From: San Juans EDC <info@sanjuansedc.org>
Sent: Tuesday, June 05, 2012 2:23 PM
To: Larson, Sonja (ECY)
Cc: Lovel Pratt
Subject: Economic impact from oil spills in San Juan County
Attachments: NOAA Econ Impact 090924.doc; Sidney Ferry Impact Summary.doc; DOE_cover_letter.docx

Dear Sonja,

San Juan County Councilmember Lovel Pratt let me know that the Department of Ecology is currently looking into potential economic impacts of an oil spill in San Juan County.

I've attached an overview letter of potential impacts, and two economic impact reports written by the San Juan County Economic Development Council which offer insight into our fragile economy.

Please let me know if you need additional information.

Victoria

Victoria Compton
Executive Director
San Juan County Economic Development Council
360-378-2906
info@sanjuansedc.org
www.sanjuansedc.org

“NOAA No-Go Zone Proposal” Economic Impact Analysis

by the
**San Juan County
Economic Development Council**

September 2009

Economic Impact Study – Purpose

This paper presents the quick assessment of the potential economic impact if the west side of San Juan Island was closed to boats and kayakers. Our understanding of the “proposal” that is being considered by NOAA, is that the west side of San Juan Island, from Mitchell Point south to Eagle Point, would be closed to all boats and kayaks within one quarter (1/2) mile of the shore line. I.E. The currently designated “voluntary no-boat zone” would be changed to a mandatory no-boat zone and enlarged. The question raised is, “What would the economic impact be of this decision?”

Economic Impact – Summary

We estimate that the only significant impacts would be to the Kayak Outfitters and to San Juan County Park. I estimate a \$4.55M loss to the local economy from a reduction in Kayak Outfitters and related business. I estimate a \$75K loss to San Juan County Parks department. Using our local “multiplier effect” of 1.4 makes the total impact of \$6.475M [(\$4,550K + \$75K) * 1.4]
(See “Other Considerations” below).

Economic Impact – Details

The following are the details that went into this assessment.

Kayaking Industry

Number of Kayakers

We estimated that 21,000 kayaking visitors come to San Juan Island (not the whole county) annually to paddle our pristine waters and to enjoy the great outdoors (annual numbers provided by several outfitters with estimates provided for those not reporting). The San Juan Islands is a world renowned, world class kayaking destination. Kayakers from around the world come to the San Juan Islands to paddle the relatively calm/protected waters of the Salish Seas and to experience the breadth and diversity of wildlife that our eco-systems offer.

Kayakers have some choice as to where they “launch” their kayaks from San Juan Island. San Juan County Park, Turn Point and Jackson Beach Boat Launch are the only public kayak launches on San Juan Island. Additionally, there is the Friday Harbor Marina, Snug Harbor, and Roche Harbor Marina that allow kayak launching, but are restricted to limited outfitters. The general public is allowed to launch kayaks from the Friday Harbor Marina and the Roche Harbor Marina for a small launch fee.

Loss to Outfitters

There are presently 11 Kayak Outfitters who are members of the San Juan Island Chamber of Commerce. If the west side of San Juan Island was closed, this would close kayak and boat launching from the San Juan County Park located within this area. Over 10,000 kayakers were estimated as launched from San Juan County Park in 2007 with over 5,000 via commercial outfitters. This does not include kayakers launched

from Roche Harbor and Snug Harbor or other locations who also visit the west side. We estimate that of the approximate 21,000 kayaking visitors to San Juan Island, 50% of these would be lost if the west side were closed to paddlers.

This would result in a loss of approximately \$1.05M of income to our local outfitters.

I suspect that this reduction would result in the elimination of about half (5) of the outfitters, causing a consolidation of this industry segment resulting in the loss of jobs and corresponding economic activities. The closure of outfitters and the corresponding loss of jobs could easily add \$400,000 of lost income bringing the total to \$1.45M.

Loss to Tourism Industry

In addition to our outfitters, we estimate that kayakers, on average, spend two nights on the islands for their trips. We propose an average spending of \$150.00 per day per kayaker toward the general economy, which includes night time accommodations, food services, and various retail items.

Assuming the 50% loss of kayakers, this would result in a loss of approximately \$3.1M from the accommodations, food services and retail trade segments of the economy of San Juan Island. Additionally, any retail trade business directed at the kayaker market would be seriously impacted by a reduction of 50% in their target customer segment, resulting most certainly in the reduction of their revenue (included in the above number) and probably in their closure (included in lost wages above).

Loss to San Juan County Parks

San Juan County Parks reports launch fees for over 10,000 kayak guests were collected in 2007, approximately 5000 through kayak outfitters who pay a launch fee, generating \$38,500 dollars of revenue for the park. This represents about 15% of the fee revenue and 7% of the operating budget for San Juan County Park in 2007. Clearly, this loss of revenue would have a significant impact on the operational bottom line of the park.

Additionally as a result of already tightening county budget constraints, the San Juan County Park Department was exploring adding launch fees for private kayakers and power boat launchers from San Juan County Park. This would have added approximately \$36,050 in additional fee revenue (5,150 * \$7) in 2010 bringing the total launch fee revenue to \$74,550.

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during the May to September closure period. It is quite difficult to estimate the reduction of this activity and the resulting economic impact (if any).

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There are 19 marine related businesses listed as members of the San Juan Island Chamber of Commerce. In conjunction with the possible reduction of sports fishers, the no-go zone closure could impact the number of general power and sail boaters that visit the waters around San Juan Island. However, there are plenty of other waters to enjoy within the general region and my assessment is that it would simply shift the activity to other areas outside of the no-go zone.

Commercial Fishers

According to the Washington State Department of Licensing, there are 24 licensed Commercial Fishing vessels in San Juan County. The impact of the no-go zone on these Commercial Fishers is difficult to assess. It would clearly increase the fishing activities in areas outside of the no-go zone, and also provide tribal commercial fishers with less direct competition within the no-go zone. Will this additional restriction push any Commercial Fisher over the edge and out of business? Or will it simply mean a shift in fishing activities to other areas? Any one's guess.

Whale Watch Industry

There are 14 members of the San Juan Island Chamber of Commerce listed under the Whale Watching category. According to Dun & Bradstreet's Million Dollar Database, there are 22 businesses listed in the state of Washington under the whale watching industry category, generating \$64M in sales. Of these 22, 3 are in Skagit, 1 in Whatcom, 6 in King and 4 in San Juan County. Sales for San Juan County businesses accounted for \$660K in sales.

The Washington State Department of Revenue states that earnings in San Juan County generated by Arts, Entertainment and Recreation (which includes Whale Watching and Kayak Outfitters) was \$6.2M in 2008. Clearly, this segment of San Juan Island's economy is a serious contributor.

However, what is the impact of the no-go zone on the Whale Watch businesses. Would it reduce the number of customers to these businesses? Would it make the Whale Watch activity in other areas more intense? Only a general prediction can be made at this time, expecting little to minimal impact to this industry as a result of the no-go zone. The Whale Watch industry would still have a significant marine area in which to observe the whales (including watching them from outside of the no-go zone while the whales are inside the no-go zone).

Shoreline Property Owners

There are 243 parcels within the no-go zone proposed by NOAA. Additionally, there are 2 marine railways, 1 improved boat ramp, 1 marina (Kanaka Bay) and 9 mooring buoys. The proposed no-go zone offers an exception to shoreline property owners by providing for perpendicular access to their property (I.E. they can access the water, but must immediately proceed directly out ½ mile perpendicular to the shoreline until the

clear the no-go zone). This exception can work perfectly well for power boaters, but requires an un-safe condition for human powered water craft.

This restricted access to the marine resource adjacent to their property could reduce the “perceived” value of their property. However, the west side of San Juan Island is not the best conditions for marine facilities due to high banks and rough waters (as supported by the lack of existing developed marine facilities). Thus I do not believe there would be a significant economic impact to shoreline property owners.

The more likely impact to west side property owners could be from increased pressure from shore-based whale watching. Already, the west side Land Bank properties are experiencing stress from public access. Lime Kiln Park is frequently full with whale watching visitors. If the shore-based whale watching offers spectators equivalent proximity to water based whale watching, then it is reasonable to assume that more will chose the free shore-based whale watching. This increased activity will stress the west side county road, street side parking and safety issues, land preservation on thin soiled shoreline banks on Land Bank properties, and Lime Kiln Park facilities and services.

**E. D. Hovee
& Company, LLC**

Economic and Development Services



**Economic & Fiscal Benefits
of the Anacortes to Sidney, B.C. Ferry**

Prepared for:

Economic Development Association of Skagit County

July 18, 2007

Funds made available through:

Washington State Department of Community, Trade and Economic Development

E. D. Hovee & Company, LLC

Economic and Development Services



MEMORANDUM

To: Don Wick, Economic Development Association of Skagit County
From: Eric Hovee & Paul Dennis, AICP
Subject: Economic & Fiscal Benefits of the Anacortes to Sidney B.C. Ferry
Date: July 18, 2007

Economic Development Association of Skagit County retained E.D. Hovee & Company, LLC to provide an economic benefit assessment of the Anacortes to Sidney, B.C. Ferry route. The Sidney route provides important tourism access both to Vancouver Island, B.C. and the Northern Puget Sound region, including Skagit County.

SUMMARY RESULTS

In summary, this analysis indicates that the following economic and fiscal benefits can be attributed to continued service of the Anacortes to Sidney B.C. Ferry.

- As of 2006, approximately 131,600 passengers rode the Anacortes to Sidney B. C. ferry. Excluding the 17% of riders within the inter-islands, fully 83% traveled the full distance between Anacortes and Sidney.
- Approximately 1,470 jobs with over \$30 million in annual payroll and nearly \$126 million in annual spending are directly and indirectly associated with this ferry service for the Northern Puget Sound Region – of Island, San Juan, Skagit, Snohomish and Whatcom Counties.
- The State of Washington receives \$4.6 million a year in taxes related to the Anacortes-Sidney B.C. ferry. Local jurisdictions collect \$1.3 million in tax receipts each year. Approximately \$45 in state and local taxes is generated in the Northern Puget Sound region for every Anacortes-Sidney B.C. ferry rider.

ECONOMIC & FISCAL METHODOLOGY

Information for this assessment has been obtained from Washington Community Trade & Economic Development (CTED), Washington State Department of Transportation (WSDOT), Skagit County Treasurer's Office, and Minnesota IMPLAN Group. CTED provides information on tourism and its impact to Skagit County/Northern Puget Sound region. Ferry traffic statistics

is derived from published WSDOT reports. IMPLAN is used to derive economic multipliers specific to this region. Tax data is obtained from the Treasurer's Office.

Multiplier estimates are made using the IMPLAN Input-Output economic model that measures inter-industry transactions between all segments of the Skagit County economy. The economic multiplier is defined as the total direct benefit plus indirect benefit divided by the direct effect. For example, a job multiplier of 2.0 means that one job is created indirectly for every new job at a project site.

TOURISM PROFILE

According to a 2001 survey conducted on behalf of CTED, 11% of visitors in the Northern Puget Sound Region (i.e. Island, San Juan, Skagit, Snohomish, Whatcom counties) originated from Canada. Five percent of all Canadian visitors arrived from Vancouver Island.

Approximately 131,600 passengers rode the Anacortes to Sidney B.C. ferry in 2006. Seventeen percent of riders (or 22,800 passengers) conducted their travels within the inter-islands of San Juan and Sidney B.C. The remaining 83% (or 108,800) went between Anacortes and Sidney B.C.

The Northern Puget Sound Region captures \$1.6 billion in annual tourism spending. Approximately 22,360 jobs are supported by tourism, with an annual payroll of \$412.1 million. The state of Washington receives \$92.3 million in annual tax receipts and local governments collect an estimated \$25.5 million.

ECONOMIC BENEFITS

Economic benefits estimated for the Anacortes-Sidney B.C. are based upon known economic activity. Additional benefits occur when new investment is made in the form of new commercial buildings, public facilities, etc that support construction jobs, payroll, and tax base for a community; these benefits are not provided as they are outside the scope of this project.

While the economic benefits presented in this analysis represent only the activity occurring in the Northern Puget Sound Region, businesses interact with other firms on a state, national, and/or global level, providing a broader economic benefit that reaches well beyond the political borders of the Northern Puget Sound region.

Economic benefits presented in this technical memorandum are substantially above those calculated with a prior 1997 assessment conducted by our firm. Due to limited data availability, previous studies have relied on generalized assumptions regarding spending potential of Anacortes-Sidney B.C. ferry travelers. The analysis presented in this updated study utilizes more detailed tourism profile data that was not previously available with prior estimates. Also noted is that the economic and fiscal benefits in this study cover the broader five-county Northern Puget Sound region and not Skagit County alone. Finally, the composition of ferry related visitor travel has changed over the last decade, with substantially greater spending on a per visitor basis.

Based on updated data and a refined estimation methodology, it is currently estimated that tourists spend \$1.6 billion annually in the Northern Puget Sound Region. Five percent of all tourism activity is directly attributable to visitors originating from Vancouver Island; Therefore, visitors riding the Anacortes-Sidney B.C. ferry generate \$80.2 million (\$1.6 billion x 5%) in tourism spending. After taking inter-business transactions (business to business activity) into account, another \$45.7 million is generated indirectly in the Northern Puget Sound economy. Ferry ridership on the Anacortes-Sidney B.C. route generates a total of \$125.9 million in tourism spending, or \$960 per rider.

Tourism generated from the Anacortes-Sidney B.C. ferry directly supports 1,120 jobs and \$20.6 million of payroll in the Northern Puget Sound Region. With a jobs multiplier of 1.31 and income multiplier of 1.47, a total of 1,470 jobs and \$30.3 million of payroll is supported throughout the Northern Puget Sound economy.

Figure 1. Annual Economic Benefits Associated with the Anacortes-Sydney Ferry

Region	Spending (\$Million)	Earnings (\$Million)	Employment (Jobs)
Northern Puget Sound Region	\$1,603.1	\$412.1	22,360
% Originating From Vancouver Island	5%	5%	5%
Direct Benefit	\$80.2	\$20.6	1,120
Multiplier	1.57	1.47	1.31
Total Benefit	\$125.9	\$30.3	1,470

Note: All estimates subject to change.

Source: E.D. Hovee & Company, LLC using CTED and IMPLAN data.

FISCAL EFFECTS

Tourism spending generated from the Anacortes-Sidney B.C. ferry provides governmental revenues to local and state agencies. Primary tax revenues include state business & occupation (B&O), sales, hotel/motel tax, and property taxes.

The state of Washington receives an estimated \$4.6 million a year in taxes related to the Anacortes-Sidney B.C. ferry. Local jurisdictions collect \$1.3 million in tax receipts each year. Approximately \$45 in taxes is generated in the Northern Puget Sound region for every Anacortes-Sidney B.C. ferry rider.

Figure 2. Annual Fiscal Benefits of the Anacortes-Sidney B.C. Ferry

Region	Local (\$Million)	State (\$Million)	Total (\$Million)
Northern Puget Sound Region	\$25.5	\$92.3	\$117.8
% Originating from Vancouver Island	5%	5%	5%
Direct Tax Benefit	\$1.3	\$4.6	\$5.9

Note: All estimates subject to change.

Source: E.D. Hovee & Company, LLC.

San Juan County
Economic Development Council

5 June 2012

Department of Ecology, Washington State
Attn: Sonja Larson, Response Technology Specialist

Dear Ms. Larson:

San Juan County has more shoreline than any other county in the continental US – over 408 linear miles.

This shoreline provides essential habitat for threatened Puget Sound Chinook salmon and Orcas, it is a draw for all of our visitors, it is the backbone of our fishing industry, it is our most precious natural resource.

The effects of an oil spill on our coastal waters would be immediate and devastating both to our natural resources and to our economy.

Over two years after the BP Gulf oil spill, the region is still struggling to recover. Consumers remain leery of Gulf seafood, tourism is still troubled. Losses could total in the *billions*, according to the University of Alabama's Center for Business Economic Research¹ and a recent study by the *Canadian Journal of Fisheries and Aquatic Sciences*.²

The Gulf oil spill has proven deadly for marine mammals as well: a recent study has shown a surge in mammalian disease and extensive zooplankton harm, which impacts the entire aquatic food chain.³ The impact of the spill will likely not be completely understood for years.

23 years after the Exxon Valdez spill of 1989, most of the marine populations and habitats harmed by the spill have yet to fully recover.⁴ There is still lingering oil in the beach sands in Prince William Sound and the Gulf of Alaska⁵ and the impacts of the spill will likely be felt by the region's economy for decades.

The San Juan Islands economy is driven mainly by tourism and real estate – both of which would be gravely impacted by harm to our shoreline. Effects of a spill would impact all strata of our local economy, however, as would a likely ferry shut-down post-spill. I've attached two economic impact studies conducted by or for the San Juan County Economic Development Council, which offer insight.

¹ http://blog.al.com/live/2011/04/oil_spills_economic_impact_nob.html, accessed 6/5/12

² <http://www.sciencedaily.com/releases/2012/02/120217115553.htm>, accessed 6/5/12

³ <http://online.wsj.com/article/SB10001424052702303624004577339943866694420.html>, accessed 6/5/12

⁴ http://www.huffingtonpost.com/richard-steiner/exxon-valdez-oil-spill_b_1377011.html, accessed 6/5/12

⁵ http://www.huffingtonpost.com/richard-steiner/exxon-valdez-oil-spill_b_1377011.html, accessed 6/5/12

The first is an economic benefit assessment done by E.D. Hovee & Company in 2007. At the time, Washington State Ferries considered eliminating the ferry run from Anacortes to Sidney. The impact from that closure would have eliminated \$4.6MM a year in taxes and would have jeopardized 1,470 jobs and \$30MM in annual payroll, and \$126MM in annual spending, directly and indirectly associated with that ferry route.

The second study is an assessment done in 2009 regarding the NOAA No-Go Zone proposal for the West Side of San Juan Island. The impacts of the proposed closure of the West Side to kayakers was startling: a loss of \$4.5MM to the local economy, and a total impact with multiplier effect of \$6.5MM. An oil spill's impact to the region's economy would be far worse.

Before the Exxon Valdez spill, the oil industry and Alaskan policy makers assured the nation that "not one drop" of oil would be spilled from tanker oil shipping. That spill ultimately was caused by a few bad policies and their breakdowns, and a complete lapse of oversight.

Clearly, it behooves our region's planners and policymakers to carefully review existing policies, emergency procedures and oversight to regional oil shipping via waterways. And, clearly, it behooves any oversight agencies to ensure that there are no lapses in monitoring tanker traffic or preparedness efforts.

Today, it is critical to ensure that a similar fate does not befall the fragile San Juan Islands coastline, nor its economy.

Sincerely,



Victoria Compton
Executive Director

From: Deborah Hopkins/San Juan Islands Visitors Bureau <deborah@visitsanjuans.com>
Sent: Friday, June 01, 2012 5:36 PM
To: Lovel Pratt; Larson, Sonja (ECY)
Subject: RE: Request for SJC economic data/studies

Hello Sonja,
Sorry for the delay in responding to this request – we've had some staff changes lately!

I have two sources of information for your study, to show the economic impact that an oil spill would have on the San Juan Islands, based on our tourism-driven economy:

- 1) The latest economic data we have shows that in 2009 visitors spent \$116.5 million in San Juan County on lodging, food services, arts, entertainment, retail, etc. You can find more data regarding Washington State tourism economic impact reports at: <http://www.experiencewa.com/industry/> in the right-hand column. I have a one sheet that I could fax to you or scan and email. If an oil spill were to occur, people would no longer wish to visit our pristine environment. Our economy is dependent on our environment here in the islands.
- 2) In addition, the media would stop writing about the beautiful San Juan Islands, and thus many people would cease to learn about us and desire to visit the islands. You can find many wonderful articles about the San Juan Islands from national and regional magazines, newspapers and other publications on our website at: http://www.visitsanjuans.com/media/san-juans-in-the-news?utm_source=www.VisitSanJuans.com&utm_medium=Teaser%2BAd&utm_content=Front%2BPage&utm_campaign=Visitors%2BBureau

Please feel free to contact me, or our new Communications Manager Barbara Marrett, with further questions. And thank you for working on this important project.

Deborah Hopkins Buchanan
Executive Director
San Juan Islands Visitors Bureau
Lopez, Orcas & San Juan Islands
(p) 360.378.3277 ext. 5 (f) 360.378.9585
PO Box 1330, 640 Mullis St. #210, Friday Harbor, WA 98250
VisitSanJuans.com
Economic Development & Stewardship Education Through Tourism



#2 on the *New York Times*' world list: "41 Places To Go In 2011"



From: Lovel Pratt [mailto:LovelP@sanjuanco.com]
Sent: Wednesday, May 23, 2012 3:30 PM
To: Victoria Compton; Deborah Hopkins/San Juan Islands Visitors Bureau; robin@visitsanjuans.com; ckf@fridayharbor.org; chamberinfo@sanjuanisland.org; lance@orcasislandchamber.com; lopezchamber@lopezisland.com; sebens@u.washington.edu; Barbara Rosenkotter; Linda Lyshall; PeteR@sanjuanco.com
Subject: Request for SJC economic data/studies

Hi all,

I am participating in the Oil Spill Rule Advisory Committee that is working on updates to the state's oil spill regulations based on the legislation passed in 2011 and the Governor's directive. For more information about this process please visit this website:

<http://www.ecy.wa.gov/programs/spills/rules/1106.html>

My reason for contacting all of you is that there will be a cost benefit analysis conducted during this process. The type of information the Department of Ecology is looking for relates to the value to the community of natural, cultural or economic resources, so that Ecology can quantify what is disrupted when oil spills occur. If there is information on something of value that can't be quantified, Ecology can count that as well (cultural value for instance).

Please send any information, data and/or studies that you believe would be relevant regarding the impacts from potential oil spills to Sonja Larsen, Response Technology Specialist, Department of Ecology Spills Prevention Preparedness and Response Programs at slar461@ecy.wa.gov. Sonja will then forward the information you send to the economist who will be conducting the cost benefit analysis. Please also copy me on any information that you send.

Please forward this email request to any SJC organizations you deem appropriate and thank you all for your attention to this!

Level

Level Pratt

San Juan County Council, District 1

Office: 55 Second St. N., 1st floor

Phone: 360-370-7473

Mail: 350 Court Street, No. 1, Friday Harbor, WA 98250

Confidentiality Notice: This email message, including any attachments, is subject to the Washington State Public Records Act, RCW Chapter 42.56 et al.

I am using the Free version of [SPAMfighter](#).
SPAMfighter has removed 2490 of my spam emails to date.

Do you have a [slow PC?](#) Try free scan!

From: Lovel Pratt <LovelP@sanjuanco.com>
Sent: Thursday, September 27, 2012 2:04 PM
To: Larson, Sonja (ECY); ECY RE Spills Rule Making
Cc: Jensen, Dale (ECY); Pilkey-Jarvis, Linda (ECY); Patora, Kasia (ECY)
Subject: Comments on the proposed amendments to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC) - additional comment info and links from SJC
Attachments: Economic impact from oil spills in San Juan County; RE: Request for SJC economic data/studies

Follow Up Flag: Follow up
Flag Status: Completed

Hi Sonja,

This email contains addition information and links that were referenced in the San Juan County Council's comment letter and the San Juan County Marine Resources Committee's comment letter, both of which were delivered for the record via email during the public hearing on the 25th.

Attached are the emails previously sent to Ecology that include economic data and information that need to be included in the Cost Benefit and Least Burdensome Alternative Analysis.

I also want to send the following links to two documents referenced in the San Juan County Marine Resources Committee's letter:

Puget Sound Partnership 2012 Action Agenda (see pages 331 - 342):

http://www.psp.wa.gov/downloads/AA2011/083012_final/Action%20Agenda%20Book%202_Aug%2029%202012.pdf

San Juan County's Marine Stewardship Area Plan:

<http://www.sicmrc.org/uploads/pdf/MSA%20plan%2002-Jul-2007%20Final.pdf>

Thank you for including this in the record and for this opportunity to comment on the proposed amendments to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC).

Lovel

Lovel Pratt
San Juan County Council, District 1
Office: 55 Second St. N., 1st floor
Phone: 360-370-7473
Mail: 350 Court Street, No. 1, Friday Harbor, WA 98250

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From: San Juans EDC <info@sanjuansedc.org>
Sent: Tuesday, June 05, 2012 2:23 PM
To: Larson, Sonja (ECY)
Cc: Lovel Pratt
Subject: Economic impact from oil spills in San Juan County
Attachments: NOAA Econ Impact 090924.doc; Sidney Ferry Impact Summary.doc; DOE_cover_letter.docx

Dear Sonja,

San Juan County Councilmember Lovel Pratt let me know that the Department of Ecology is currently looking into potential economic impacts of an oil spill in San Juan County.

I've attached an overview letter of potential impacts, and two economic impact reports written by the San Juan County Economic Development Council which offer insight into our fragile economy.

Please let me know if you need additional information.

Victoria

Victoria Compton
Executive Director
San Juan County Economic Development Council
360-378-2906
info@sanjuansedc.org
www.sanjuansedc.org

“NOAA No-Go Zone Proposal” Economic Impact Analysis

by the
**San Juan County
Economic Development Council**

September 2009

Economic Impact Study – Purpose

This paper presents the quick assessment of the potential economic impact if the west side of San Juan Island was closed to boats and kayakers. Our understanding of the “proposal” that is being considered by NOAA, is that the west side of San Juan Island, from Mitchell Point south to Eagle Point, would be closed to all boats and kayaks within one quarter (1/2) mile of the shore line. I.E. The currently designated “voluntary no-boat zone” would be changed to a mandatory no-boat zone and enlarged. The question raised is, “What would the economic impact be of this decision?”

Economic Impact – Summary

We estimate that the only significant impacts would be to the Kayak Outfitters and to San Juan County Park. I estimate a \$4.55M loss to the local economy from a reduction in Kayak Outfitters and related business. I estimate a \$75K loss to San Juan County Parks department. Using our local “multiplier effect” of 1.4 makes the total impact of \$6.475M [(\$4,550K + \$75K) * 1.4]
(See “Other Considerations” below).

Economic Impact – Details

The following are the details that went into this assessment.

Kayaking Industry

Number of Kayakers

We estimated that 21,000 kayaking visitors come to San Juan Island (not the whole county) annually to paddle our pristine waters and to enjoy the great outdoors (annual numbers provided by several outfitters with estimates provided for those not reporting). The San Juan Islands is a world renowned, world class kayaking destination. Kayakers from around the world come to the San Juan Islands to paddle the relatively calm/protected waters of the Salish Seas and to experience the breadth and diversity of wildlife that our eco-systems offer.

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Whale Watch Industry

There are 14 members of the San Juan Island Chamber of Commerce listed under the Whale Watching category. According to Dun & Bradstreet's Million Dollar Database, there are 22 businesses listed in the state of Washington under the whale watching industry category, generating \$64M in sales. Of these 22, 3 are in Skagit, 1 in Whatcom, 6 in King and 4 in San Juan County. Sales for San Juan County businesses accounted for \$660K in sales.

The Washington State Department of Revenue states that earnings in San Juan County generated by Arts, Entertainment and Recreation (which includes Whale Watching and Kayak Outfitters) was \$6.2M in 2008. Clearly, this segment of San Juan Island's economy is a serious contributor.

However, what is the impact of the no-go zone on the Whale Watch businesses. Would it reduce the number of customers to these businesses? Would it make the Whale Watch activity in other areas more intense? Only a general prediction can be made at this time, expecting little to minimal impact to this industry as a result of the no-go zone. The Whale Watch industry would still have a significant marine area in which to observe the whales (including watching them from outside of the no-go zone while the whales are inside the no-go zone).

Shoreline Property Owners

There are 243 parcels within the no-go zone proposed by NOAA. Additionally, there are 2 marine railways, 1 improved boat ramp, 1 marina (Kanaka Bay) and 9 mooring buoys. The proposed no-go zone offers an exception to shoreline property owners by providing for perpendicular access to their property (I.E. they can access the water, but must immediately proceed directly out ½ mile perpendicular to the shoreline until the

clear the no-go zone). This exception can work perfectly well for power boaters, but requires an un-safe condition for human powered water craft.

This restricted access to the marine resource adjacent to their property could reduce the “perceived” value of their property. However, the west side of San Juan Island is not the best conditions for marine facilities due to high banks and rough waters (as supported by the lack of existing developed marine facilities). Thus I do not believe there would be a significant economic impact to shoreline property owners.

The more likely impact to west side property owners could be from increased pressure from shore-based whale watching. Already, the west side Land Bank properties are experiencing stress from public access. Lime Kiln Park is frequently full with whale watching visitors. If the shore-based whale watching offers spectators equivalent proximity to water based whale watching, then it is reasonable to assume that more will chose the free shore-based whale watching. This increased activity will stress the west side county road, street side parking and safety issues, land preservation on thin soiled shoreline banks on Land Bank properties, and Lime Kiln Park facilities and services.

**E. D. Hovee
& Company, LLC**

Economic and Development Services



**Economic & Fiscal Benefits
of the Anacortes to Sidney, B.C. Ferry**

Prepared for:

Economic Development Association of Skagit County

July 18, 2007

Funds made available through:

Washington State Department of Community, Trade and Economic Development

E. D. Hovee & Company, LLC

Economic and Development Services



MEMORANDUM

To: Don Wick, Economic Development Association of Skagit County
From: Eric Hovee & Paul Dennis, AICP
Subject: Economic & Fiscal Benefits of the Anacortes to Sidney B.C. Ferry
Date: July 18, 2007

Economic Development Association of Skagit County retained E.D. Hovee & Company, LLC to provide an economic benefit assessment of the Anacortes to Sidney, B.C. Ferry route. The Sidney route provides important tourism access both to Vancouver Island, B.C. and the Northern Puget Sound region, including Skagit County.

SUMMARY RESULTS

In summary, this analysis indicates that the following economic and fiscal benefits can be attributed to continued service of the Anacortes to Sidney B.C. Ferry.

- As of 2006, approximately 131,600 passengers rode the Anacortes to Sidney B. C. ferry. Excluding the 17% of riders within the inter-islands, fully 83% traveled the full distance between Anacortes and Sidney.
- Approximately 1,470 jobs with over \$30 million in annual payroll and nearly \$126 million in annual spending are directly and indirectly associated with this ferry service for the Northern Puget Sound Region – of Island, San Juan, Skagit, Snohomish and Whatcom Counties.
- The State of Washington receives \$4.6 million a year in taxes related to the Anacortes-Sidney B.C. ferry. Local jurisdictions collect \$1.3 million in tax receipts each year. Approximately \$45 in state and local taxes is generated in the Northern Puget Sound region for every Anacortes-Sidney B.C. ferry rider.

ECONOMIC & FISCAL METHODOLOGY

Information for this assessment has been obtained from Washington Community Trade & Economic Development (CTED), Washington State Department of Transportation (WSDOT), Skagit County Treasurer's Office, and Minnesota IMPLAN Group. CTED provides information on tourism and its impact to Skagit County/Northern Puget Sound region. Ferry traffic statistics

is derived from published WSDOT reports. IMPLAN is used to derive economic multipliers specific to this region. Tax data is obtained from the Treasurer's Office.

Multiplier estimates are made using the IMPLAN Input-Output economic model that measures inter-industry transactions between all segments of the Skagit County economy. The economic multiplier is defined as the total direct benefit plus indirect benefit divided by the direct effect. For example, a job multiplier of 2.0 means that one job is created indirectly for every new job at a project site.

TOURISM PROFILE

According to a 2001 survey conducted on behalf of CTED, 11% of visitors in the Northern Puget Sound Region (i.e. Island, San Juan, Skagit, Snohomish, Whatcom counties) originated from Canada. Five percent of all Canadian visitors arrived from Vancouver Island.

Approximately 131,600 passengers rode the Anacortes to Sidney B.C. ferry in 2006. Seventeen percent of riders (or 22,800 passengers) conducted their travels within the inter-islands of San Juan and Sidney B.C. The remaining 83% (or 108,800) went between Anacortes and Sidney B.C.

The Northern Puget Sound Region captures \$1.6 billion in annual tourism spending. Approximately 22,360 jobs are supported by tourism, with an annual payroll of \$412.1 million. The state of Washington receives \$92.3 million in annual tax receipts and local governments collect an estimated \$25.5 million.

ECONOMIC BENEFITS

Economic benefits estimated for the Anacortes-Sidney B.C. are based upon known economic activity. Additional benefits occur when new investment is made in the form of new commercial buildings, public facilities, etc that support construction jobs, payroll, and tax base for a community; these benefits are not provided as they are outside the scope of this project.

While the economic benefits presented in this analysis represent only the activity occurring in the Northern Puget Sound Region, businesses interact with other firms on a state, national, and/or global level, providing a broader economic benefit that reaches well beyond the political borders of the Northern Puget Sound region.

Economic benefits presented in this technical memorandum are substantially above those calculated with a prior 1997 assessment conducted by our firm. Due to limited data availability, previous studies have relied on generalized assumptions regarding spending potential of Anacortes-Sidney B.C. ferry travelers. The analysis presented in this updated study utilizes more detailed tourism profile data that was not previously available with prior estimates. Also noted is that the economic and fiscal benefits in this study cover the broader five-county Northern Puget Sound region and not Skagit County alone. Finally, the composition of ferry related visitor travel has changed over the last decade, with substantially greater spending on a per visitor basis.

Based on updated data and a refined estimation methodology, it is currently estimated that tourists spend \$1.6 billion annually in the Northern Puget Sound Region. Five percent of all tourism activity is directly attributable to visitors originating from Vancouver Island; Therefore, visitors riding the Anacortes-Sidney B.C. ferry generate \$80.2 million (\$1.6 billion x 5%) in tourism spending. After taking inter-business transactions (business to business activity) into account, another \$45.7 million is generated indirectly in the Northern Puget Sound economy. Ferry ridership on the Anacortes-Sidney B.C. route generates a total of \$125.9 million in tourism spending, or \$960 per rider.

Tourism generated from the Anacortes-Sidney B.C. ferry directly supports 1,120 jobs and \$20.6 million of payroll in the Northern Puget Sound Region. With a jobs multiplier of 1.31 and income multiplier of 1.47, a total of 1,470 jobs and \$30.3 million of payroll is supported throughout the Northern Puget Sound economy.

Figure 1. Annual Economic Benefits Associated with the Anacortes-Sydney Ferry

Region	Spending (\$Million)	Earnings (\$Million)	Employment (Jobs)
Northern Puget Sound Region	\$1,603.1	\$412.1	22,360
% Originating From Vancouver Island	5%	5%	5%
Direct Benefit	\$80.2	\$20.6	1,120
Multiplier	1.57	1.47	1.31
Total Benefit	\$125.9	\$30.3	1,470

Note: All estimates subject to change.

Source: E.D. Hovee & Company, LLC using CTED and IMPLAN data.

FISCAL EFFECTS

Tourism spending generated from the Anacortes-Sidney B.C. ferry provides governmental revenues to local and state agencies. Primary tax revenues include state business & occupation (B&O), sales, hotel/motel tax, and property taxes.

The state of Washington receives an estimated \$4.6 million a year in taxes related to the Anacortes-Sidney B.C. ferry. Local jurisdictions collect \$1.3 million in tax receipts each year. Approximately \$45 in taxes is generated in the Northern Puget Sound region for every Anacortes-Sidney B.C. ferry rider.

Figure 2. Annual Fiscal Benefits of the Anacortes-Sidney B.C. Ferry

Region	Local (\$Million)	State (\$Million)	Total (\$Million)
Northern Puget Sound Region	\$25.5	\$92.3	\$117.8
% Originating from Vancouver Island	5%	5%	5%
Direct Tax Benefit	\$1.3	\$4.6	\$5.9

Note: All estimates subject to change.

Source: E.D. Hovee & Company, LLC.

San Juan County
Economic Development Council

5 June 2012

Department of Ecology, Washington State
Attn: Sonja Larson, Response Technology Specialist

Dear Ms. Larson:

San Juan County has more shoreline than any other county in the continental US – over 408 linear miles.

This shoreline provides essential habitat for threatened Puget Sound Chinook salmon and Orcas, it is a draw for all of our visitors, it is the backbone of our fishing industry, it is our most precious natural resource.

The effects of an oil spill on our coastal waters would be immediate and devastating both to our natural resources and to our economy.

Over two years after the BP Gulf oil spill, the region is still struggling to recover. Consumers remain leery of Gulf seafood, tourism is still troubled. Losses could total in the *billions*, according to the University of Alabama's Center for Business Economic Research¹ and a recent study by the *Canadian Journal of Fisheries and Aquatic Sciences*.²

The Gulf oil spill has proven deadly for marine mammals as well: a recent study has shown a surge in mammalian disease and extensive zooplankton harm, which impacts the entire aquatic food chain.³ The impact of the spill will likely not be completely understood for years.

23 years after the Exxon Valdez spill of 1989, most of the marine populations and habitats harmed by the spill have yet to fully recover.⁴ There is still lingering oil in the beach sands in Prince William Sound and the Gulf of Alaska⁵ and the impacts of the spill will likely be felt by the region's economy for decades.

The San Juan Islands economy is driven mainly by tourism and real estate – both of which would be gravely impacted by harm to our shoreline. Effects of a spill would impact all strata of our local economy, however, as would a likely ferry shut-down post-spill. I've attached two economic impact studies conducted by or for the San Juan County Economic Development Council, which offer insight.

¹ http://blog.al.com/live/2011/04/oil_spills_economic_impact_nob.html, accessed 6/5/12

² <http://www.sciencedaily.com/releases/2012/02/120217115553.htm>, accessed 6/5/12

³ <http://online.wsj.com/article/SB10001424052702303624004577339943866694420.html>, accessed 6/5/12

⁴ http://www.huffingtonpost.com/richard-steiner/exxon-valdez-oil-spill_b_1377011.html, accessed 6/5/12

⁵ http://www.huffingtonpost.com/richard-steiner/exxon-valdez-oil-spill_b_1377011.html, accessed 6/5/12

The first is an economic benefit assessment done by E.D. Hovee & Company in 2007. At the time, Washington State Ferries considered eliminating the ferry run from Anacortes to Sidney. The impact from that closure would have eliminated \$4.6MM a year in taxes and would have jeopardized 1,470 jobs and \$30MM in annual payroll, and \$126MM in annual spending, directly and indirectly associated with that ferry route.

The second study is an assessment done in 2009 regarding the NOAA No-Go Zone proposal for the West Side of San Juan Island. The impacts of the proposed closure of the West Side to kayakers was startling: a loss of \$4.5MM to the local economy, and a total impact with multiplier effect of \$6.5MM. An oil spill's impact to the region's economy would be far worse.

Before the Exxon Valdez spill, the oil industry and Alaskan policy makers assured the nation that "not one drop" of oil would be spilled from tanker oil shipping. That spill ultimately was caused by a few bad policies and their breakdowns, and a complete lapse of oversight.

Clearly, it behooves our region's planners and policymakers to carefully review existing policies, emergency procedures and oversight to regional oil shipping via waterways. And, clearly, it behooves any oversight agencies to ensure that there are no lapses in monitoring tanker traffic or preparedness efforts.

Today, it is critical to ensure that a similar fate does not befall the fragile San Juan Islands coastline, nor its economy.

Sincerely,



Victoria Compton
Executive Director

From: Deborah Hopkins/San Juan Islands Visitors Bureau <deborah@visitsanjuans.com>
Sent: Friday, June 01, 2012 5:36 PM
To: Lovel Pratt; Larson, Sonja (ECY)
Subject: RE: Request for SJC economic data/studies

Hello Sonja,
Sorry for the delay in responding to this request – we've had some staff changes lately!

I have two sources of information for your study, to show the economic impact that an oil spill would have on the San Juan Islands, based on our tourism-driven economy:

- 1) The latest economic data we have shows that in 2009 visitors spent \$116.5 million in San Juan County on lodging, food services, arts, entertainment, retail, etc. You can find more data regarding Washington State tourism economic impact reports at: <http://www.experiencewa.com/industry/> in the right-hand column. I have a one sheet that I could fax to you or scan and email. If an oil spill were to occur, people would no longer wish to visit our pristine environment. Our economy is dependent on our environment here in the islands.
- 2) In addition, the media would stop writing about the beautiful San Juan Islands, and thus many people would cease to learn about us and desire to visit the islands. You can find many wonderful articles about the San Juan Islands from national and regional magazines, newspapers and other publications on our website at: http://www.visitsanjuans.com/media/san-juans-in-the-news?utm_source=www.VisitSanJuans.com&utm_medium=Teaser%2BAd&utm_content=Front%2BPage&utm_campaign=Visitors%2BBureau

Please feel free to contact me, or our new Communications Manager Barbara Marrett, with further questions. And thank you for working on this important project.

Deborah Hopkins Buchanan
Executive Director
San Juan Islands Visitors Bureau
Lopez, Orcas & San Juan Islands
(p) 360.378.3277 ext. 5 (f) 360.378.9585
PO Box 1330, 640 Mullis St. #210, Friday Harbor, WA 98250
VisitSanJuans.com
Economic Development & Stewardship Education Through Tourism



#2 on the *New York Times*' world list: "41 Places To Go In 2011"



From: Lovel Pratt [mailto:LovelP@sanjuanco.com]
Sent: Wednesday, May 23, 2012 3:30 PM
To: Victoria Compton; Deborah Hopkins/San Juan Islands Visitors Bureau; robin@visitsanjuans.com; ckf@fridayharbor.org; chamberinfo@sanjuanisland.org; lance@orcasislandchamber.com; lopezchamber@lopezisland.com; sebens@u.washington.edu; Barbara Rosenkotter; Linda Lyshall; PeteR@sanjuanco.com
Subject: Request for SJC economic data/studies

Hi all,

I am participating in the Oil Spill Rule Advisory Committee that is working on updates to the state's oil spill regulations based on the legislation passed in 2011 and the Governor's directive. For more information about this process please visit this website:

<http://www.ecy.wa.gov/programs/spills/rules/1106.html>

My reason for contacting all of you is that there will be a cost benefit analysis conducted during this process. The type of information the Department of Ecology is looking for relates to the value to the community of natural, cultural or economic resources, so that Ecology can quantify what is disrupted when oil spills occur. If there is information on something of value that can't be quantified, Ecology can count that as well (cultural value for instance).

Please send any information, data and/or studies that you believe would be relevant regarding the impacts from potential oil spills to Sonja Larsen, Response Technology Specialist, Department of Ecology Spills Prevention Preparedness and Response Programs at slar461@ecy.wa.gov . Sonja will then forward the information you send to the economist who will be conducting the cost benefit analysis. Please also copy me on any information that you send.

Please forward this email request to any SJC organizations you deem appropriate and thank you all for your attention to this!

Level

Level Pratt

San Juan County Council, District 1

Office: 55 Second St. N., 1st floor

Phone: 360-370-7473

Mail: 350 Court Street, No. 1, Friday Harbor, WA 98250

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SPAMfighter has removed 2490 of my spam emails to date.

Do you have a [slow PC?](#) Try free scan!

From: Lovel Pratt <LovelP@sanjuanco.com>
Sent: Tuesday, September 25, 2012 6:46 PM
To: Larson, Sonja (ECY)
Cc: Jensen, Dale (ECY); Pilkey-Jarvis, Linda (ECY); Irwin, Nhi (ECY)
Subject: Comments on proposed amendments to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC)
Attachments: SJCC_OilSpillRuleCommentLtr_2012_9_25.pdf; MRC_OilSpillRuleCommentLetter.PDF; Hanson_et_al._2010 SRKW summer range prey .pdf; Hauser et al., 2007 SRKW summer distribution.pdf; Wiles, 2005.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Hi Sonja,

Attached please find the San Juan County Council's comment letter on the proposed amendments to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC). Also attached is a letter from San Juan County's Marine Resources Committee. The San Juan County Marine Resources Committee letter includes as attachments the 2012 San Juan County Action Agenda and the San Juan County Marine Stewardship Area Plan. Hard copies of these two very large documents will be sent by USPS. Please include these attached comment letters in the record for tonight's public hearing.

The science documents that support the identification of the west side of San Juan Island (in Haro Strait) as a unique feeding habitat for the southern residents orca whales are the attached documents authored by Hanson, Hauser, and Wiles. Please include these three science documents in the record.

Regarding the importance of salmon habit in San Juan County, please include for the record the salmon recovery shared strategy chapter on San Juan County can download it at:
http://www.psp.wa.gov/SR_map.php

Please also include, for the record, the articles in the links provided below.

Please be sure that all of the issues raised in the comment letters and the articles are addressed.

Please reply to confirm that this email and copies of all attachments have been entered into the formal record.

Thank you for this opportunity to testify via webinar at tonight's public hearing and for the opportunity to submit these comment letters and documents into the record.

Lovel

Lovel Pratt
San Juan County Council, District 1
Office: 55 Second St. N., 1st floor
Phone: 360-370-7473
Mail: 350 Court Street, No. 1, Friday Harbor, WA 98250

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The National Transportation Safety Board's complete release of over 5,000 pages of materials related to the Kalamazoo River oil spill. The complete set of documents can be accessed here:

http://www.huffingtonpost.com/2012/05/21/kalamazoo-river-oil-spill-documents_n_1533882.html

Cornell University study:

http://www.ilr.cornell.edu/globalaborinstitute/research/upload/GLI_Impact-of-Tar-Sands-Pipeline-Spills.pdf

Inside Climate News articles about the Kalamazoo River oil spill and diluted bitumen:

Timeline:

<http://insideclimatenews.org/news/20120626/timeline-dilbit-diluted-bitumen-marshall-michigan-kalamazoo-enbridge-pipeline-6b-oil-spill>

Dilbit Primer:

<http://insideclimatenews.org/news/20120626/dilbit-primer-diluted-bitumen-conventional-oil-tar-sands-Alberta-Kalamazoo-Keystone-XL-Enbridge>

Part 1:

<http://insideclimatenews.org/news/20120626/dilbit-diluted-bitumen-enbridge-kalamazoo-river-marshall-michigan-oil-spill-6b-pipeline-epa>

Part 2:

<http://insideclimatenews.org/news/20120627/dilbit-kalamazoo-marshall-oil-spill-bitumen-enbridge-patrick-daniel-6b-pipeline-epa-tar-sands>

Part 3:

<http://insideclimatenews.org/news/20120627/dilbit-kalamazoo-marshall-oil-spill-bitumen-enbridge-patrick-daniel-6b-pipeline-epa-tar-sands>

Epilogue: Cleanup, Consequences and Lives Changed in the Dilbit Disaster:

<http://insideclimatenews.org/news/20120629/enbridge-dilbit-disaster-kalamazoo-oil-spill-epilogue-tar-sands-crude-cost-liability-lives-changed>

Record Fine Against Enbridge for Michigan Oil Pipeline Spill:

<http://insideclimatenews.org/news/20120702/phmsa-civil-penalty-enbridge-2010-michigan-oil-pipeline-spill-6b-dilbit-kalamazoo>

Is Dilbit Oil? Congress and the IRS Say No:

<http://insideclimatenews.org/news/20120731/oil-spill-liability-trust-fund-coast-guard-tar-sands-refineries-excise-tax-irs-epa-enbridge>

Federal Agency Blames 'Complete Breakdown of Safety at Enbridge' for 2010 Oil Spill:

<http://insideclimatenews.org/news/20120710/national-transportation-safety-board-ntsb-kalamazoo-enbridge-6B-pipeline-marshall-michigan>

Few Oil Pipeline Spills Detected By Much-Touted Technology:

<http://insideclimatenews.org/news/20120919/few-oil-pipeline-spills-detected-much-touted-technology>

The Globe and Mail's "Enbridge cleanup plan does not take bitumen into account:"

<http://www.theglobeandmail.com/news/british-columbia/enbridge-cleanup-plan-does-not-take-bitumen-into-account/article4500233/>

Recent articles in the September 20th issue of the *Island Tides*:

http://www.islandtides.com/assets/reprint/oil_20120920b.pdf

http://www.islandtides.com/assets/reprint/oil_20120920a.pdf



San Juan County Council

350 Court Street No. 1
Friday Harbor, WA 98250
(360) 378 - 2898

District 1, Lovel Pratt
District 2, Rich Peterson
District 3, Howard Rosenfeld

District 4, Richard Fralick
District 5, Patty Miller
District 6, Jamie Stephens

September 25, 2012

Sonja Larson
Department of Ecology
PO Box 47600
300 Desmond Dr.
Olympia, WA 98504

RE: Comments on proposed amendments to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC)

Dear Ms. Larson,

We appreciate this opportunity to provide the following comments on proposed changes to the Oil Spill Contingency Plan Rule (Chapter 173-182 WAC).

A major oil spill is a very real threat in San Juan County, which is at the center of shipping traffic in the Salish Sea. San Juan County is surrounded by narrow shipping channels with strong currents and navigational challenges. A major oil spill in the waters surrounding San Juan County would be devastating both environmentally and economically. All forms of San Juan County's unique and diverse marine life would be severely affected. Property values and all tourism related revenues would be severely impacted. A strong and immediate response to a major oil spill with appropriate equipment and personnel is imperative.

Sinking Oils

The proposed changes to the Oil Spill Contingency Plan Rule do not adequately address the spill response capacity needed for spills of oils that can sink. New Section WAC 173-182-324 addresses Group 5 oils specifically but we question whether this new section requires any additional response capacity than that already required by federal law. Best Achievable Technology (BAT) and Best Achievable Protection (BAP) equipment and appropriate personnel must be available to respond to spills of oils that can sink, in addition to group 5 oils. In particular, these include the bunker fuels used for propulsion and diluted bitumen (an Alberta Tar Sands product).

San Juan County faces an increased risk of a major oil spill with the proposed additional shipping traffic for the transport of both coal and diluted bitumen. The proposed Gateway Pacific Terminal Project will include approximately 1000 additional transits of bulk carriers in the waters surrounding San Juan County. In addition to the coal cargo, each bulk carrier will contain up to 4 million gallons of persistent bunker fuel for propulsion. Existing vessel transport of

approximately 2 billion gallons per year of diluted bitumen (from Canada to Tacoma via Rosario Strait and from Canada to California and Asia via Haro Strait) pose an existing risk of a major spill. Kinder Morgan's proposed increased export of diluted bitumen would increase crude oil tanker calls transiting Haro Strait by over 300% by 2016. The Oil Spill Contingency Plan Rule must require that the appropriate BAT and BAP containment and recovery gear and appropriate personnel be response-ready and on-site in a timely manner to respond to spills of oil that can sink. It is imperative that WAC 173-182 specify that Alberta Tar Sands products including diluted bitumen and all forms of synthetic crude are subject to the Oil Spill Contingency Plan Rule.

The only place in any of the Oil Spill Contingency Plan Rule update documents to mention the emerging risk from sinking oils is in section 1.6 in the Preliminary Cost-Benefit and Least Burdensome Alternative Analysis. This section must be retained and expanded. While the cost comparison of the average crude oil spill in the past decade – \$2 thousand per barrel or more – with the 2010 diluted bitumen spill in Michigan – \$29 thousand per barrel – is significant, it is important to note that when this report is finalized, the cost of the diluted bitumen spill should be updated and “costs to date” be added to the text.

San Juan County Identified as a Staging Area

The Oil Spill Contingency Plan Rule must require the appropriate geographic distribution of spill response equipment and personnel. Neither Ecology nor the US Coast Guard has provided San Juan County with assurances that the appropriate spill response equipment and personnel can be on-site in the event of a major spill in Haro Strait in the four and six hour planning standard time-frames. While the new four hour and existing six hour planning standards can be legally met for the San Juan County Planning Standard Area given that equipment and personnel can reach the eastern edge of the San Juan County Planning Standard Area in the required time-frames, a major spill in Haro Strait is not assured the necessary equipment and personnel response times unless the appropriate equipment and personnel are resident. San Juan County resident personnel and equipment must be able to initiate a full response until additional equipment can cascade into the region. WAC 173-182-370 must define San Juan County as a Staging Area and must specify that the two, three, four, and six hour planning standards be resident.

Especially given the increased risk of a major spill from the increased traffic proposed by the Gateway Pacific Terminal and the increased export of diluted bitumen, having San Juan County identified as a Staging Area and having additional spill response equipment and personnel resident in San Juan County to meet the two, three, four, and six hour planning standards will significantly improve the response time and the capacity to contain and clean-up a major spill.

Another justification for San Juan County's designation as a Staging Area and requiring that the two, three, four, and six hour Planning Standards be resident is the avoided losses to endangered species. The southern resident orca whales were listed as endangered in 2005 under the federal Endangered Species Act. Haro Strait contains the orca whales' principal feeding grounds along the west side of San Juan Island. Ensuring that the appropriate BAT and BAP containment and recovery gear and personnel is response-ready and on-site in a timely manner in the event of a major spill in Haro Strait will reduce the impacts and avoid losses to the orca whales and their

entire food chain (including federally listed as endangered Chinook salmon). The value of a southern resident orca whale can be quantified and that cost must be included in the Cost-Benefit and Least Burdensome Alternative Analysis.

What will most justify San Juan County's designation as a Staging Area and requiring that the two, three, four, and six hour planning standards be resident would be the inclusion in the Cost-Benefit and Least Burdensome Alternative Analysis of the hourly cost savings of reducing spill cleanup costs over the duration of the spill in both Appendix B and the text. Hourly timeframes, not days, are necessary to quantify the importance of spill response times.

Costs Associated With Very Small Spills

The Preliminary Cost-Benefit and Least Burdensome Alternative Analysis needs to address the significant costs that can be associated with very small spills. The *Deep Sea* spill is a case in point. While the millions of dollars associated with the pollution response, vessel salvage, and vessel deconstruction costs would not be applicable in the Oil Spill Contingency Plan Rule, the very small amount of oil spilled caused at least \$1,210,000 in revenue losses to Penn Cove Shellfish (\$55,000 per day x 22 closure days) as well as the quantifiable losses related to the closure of Grasser's Lagoon in Penn Cove which is one of the most popular beaches in Washington State for recreational shellfish harvesting.

Greater Transparency

It is imperative that all contingency plans, technical manuals, and planning standards be publically available on Ecology's website. Further, the Oil Spill Contingency Plan must require that public notification, review, and comment be provided for on all proposed changes to contingency plans, technical manuals, and planning standards.

Summary

The Oil Spill Contingency Plan Rule

1. Must require that the appropriate BAT and BAP containment and recovery gear and personnel be response-ready and on-site in a timely manner to respond to spills of oil that can sink, including diluted bitumen and bunker fuels
2. Must specify state that Alberta Tar Sands products including diluted bitumen and all forms of synthetic crude are subject to the Oil Spill Contingency Plan Rule
3. Must define San Juan County as a Staging Area and must specify that the two, three, four, and six hour planning standards be resident.
4. Require that all contingency plans, technical manuals, and planning standards be publically available on Ecology's website
5. Require that public notification, review, and comment be provided for on all proposed changes to contingency plans, technical manuals, and planning standards

The Cost-Benefit and Least Burdensome Alternative Analysis

1. Is to be commended for including and must retain and expand Section 1.6 on the emerging risk from sinking oils
2. Must update the costs to date of the 2010 diluted bitumen spill in Michigan
3. Must include the significant costs that can be associated with very small spills

4. Must quantify the value of a southern resident orca whale
5. Must include the hourly cost savings of reducing spill cleanup costs over the duration of the spill in both Appendix B and the text
6. Must quantify the data provided by the San Juan County Economic Development Council and the San Juan Islands Visitors, including the press coverage San Juan County receives

In addition, we support

- The inclusion of more vessels of opportunity (VOO) distributed throughout the region
- Additional requirements in the four hour planning standard that adequately addresses storage issues and ensure continuous response capacity
- The inclusion of the Neah Bay Response Tug in the spill response task force
- The inclusion of a dedicated storage barge, combined with the Neah Bay Response Tug to enable tankers to meet upcoming changes in federal regulations associated with moving the High Volume Port Line from Port Angeles to Cape Flattery

Washington State has an admirable spill prevention and response record that spans our long history of vigilance from the late Senator Magnuson to Senator Cantwell, our Governor and legislature. However, just because we have not had a catastrophic oil spill recently does not mean that we should not be better prepared to respond to one.

Our quality of life depends upon the health of our interconnected economy and environment, both of which would be severely impacted by a major oil spill. The capacity to respond quickly and effectively to a major oil spill will determine the difference between temporary and lasting economic and environmental impacts.

Sincerely,

**COUNTY COUNCIL
SAN JUAN COUNTY, WASHINGTON**



Lovel Pratt, Member
District No. 1



Richard Peterson, Member
District No. 2



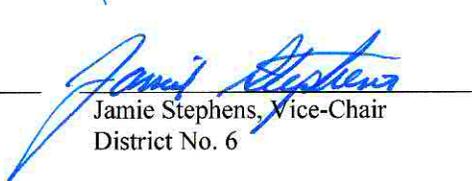
Howard Rosenfeld, Member
District No. 3



Richard Fralick, Member
District No. 4



Patty Miller, Chair
District No. 5



Jamie Stephens, Vice-Chair
District No. 6

- Cc. The Honorable Maria Cantwell, US Senator
The Honorable Patty Murray, US Senator
The Honorable Rick Larsen, US Representative
The Honorable Christine Gregoire, Governor of the State of Washington
The Honorable Kevin Ranker, Washington State Senator

The Honorable Jeff Morris, Washington State Representative
The Honorable Kristine Lytton, Washington State Representative
The Honorable Billy Frank, Chairman, Northwest Indian Fisheries Commission
The Honorable Micah McCarty, Chairman, Makah Tribe
The Honorable Cliff Cultee, Chair, Lummi Nation
The Honorable Melvin R. Sheldon, Jr., Chair, Tulalip Tribes
The Honorable Brian Cladoosby, Chair, Swinomish Indian Tribal Community
The Honorable William "Ron" Allen, Chair, Jamestown S'Klallam Tribe
The Honorable Frances Charles, Chair, Lower Elwha Klallam Tribe
The Honorable Bob Kelly, Chairman, Nooksack Tribe
The Honorable Jeromy Sullivan, Chair, Port Gamble S'Klallam Tribe
The Honorable Leonard Forsman, Chair, Suquamish Tribe



San Juan Marine Resources Committee
135 Rhone Street, P.O. Box 947
Friday Harbor WA 98250



September 25, 2012

Sonja Larson
Department of Ecology
PO Box 47600
300 Desmond Dr.
Olympia, WA 98504

Re: Comments on proposed amendments to the Oil Spill Contingency Plan Rule

Dear Ms. Larson:

The San Juan County Marine Resources Committee (MRC) supports the County Council's comments and recommendations regarding the Oil Spill Contingency Plan Rule and would like to provide some background and context for the importance of oil spill prevention in the San Juans. The MRC was started in 1996 as a grassroots effort to establish local management of marine resources and serves as an advisory committee to the San Juan County Council on marine science and policy issues. Our mission is to protect and restore the marine waters, habitats and species of the Salish Sea to achieve ecosystem health and sustainable resource use.

The San Juan archipelago is characterized by complex geography and geology, with over 400 miles of marine shorelines across hundreds of large and small islands. While predominantly rocky, the county's shorelines also support significant "soft" geomorphic shoreforms, including 90 miles of net shore drift cell systems (feeder bluffs, transport zones and accretion beaches), 48 miles of pocket beaches and nearly 20 miles of embayment estuaries and lagoons.

The County's shorelines provide important outmigrating habitat for juvenile salmon, including Chinook, coho, pink and chum from multiple Puget Sound, Fraser River and Vancouver Island stocks. Local food webs support multiple species of ecological, cultural and economic importance in the region, such as Puget Sound Chinook, rockfish, the Southern Resident Killer Whale, and seabirds such as the Marbled Murrelet. The exceptional diversity of marine flora and fauna attracts students and researchers from all over the world to the Friday Harbor Laboratories. This complexity and extent of marine shoreline, as well as the regional food web support they provide is unique within Puget Sound Counties and illustrates the importance of improved oil spill prevention and response capacity for the archipelago.

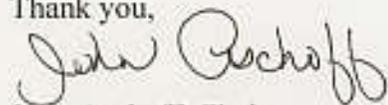
To protect the archipelagos' rich marine diversity, the San Juan Board of County Commissioners designated the County a Marine Stewardship Area in January 2004, and asked the MRC to work with scientists and community leaders to create a management plan that would achieve a healthy marine ecosystem in balance with human use and enjoyment. The County Council adopted the

San Juan Marine Stewardship Area plan in 2007 following an extensive science, stakeholder, and community-based conservation planning process that involved over 400 citizens and many others. The County's Marine Stewardship Area Plan identified large oil spills as the #1 threat to the San Juan marine ecosystem, and the San Juan Local Integrating Organization identified large oil spills as the top threat to the San Juan marine ecosystem in the Puget Sound Partnership 2012 Action Agenda.

In addition, many people who live in this island community have livelihoods directly or indirectly dependent on a healthy marine environment. A major oil spill could be devastating to both the environment and to the local economy.

We request that you please give strong consideration to the County Council's recommendations and improve much needed oil spill prevention and response capacity.

Thank you,



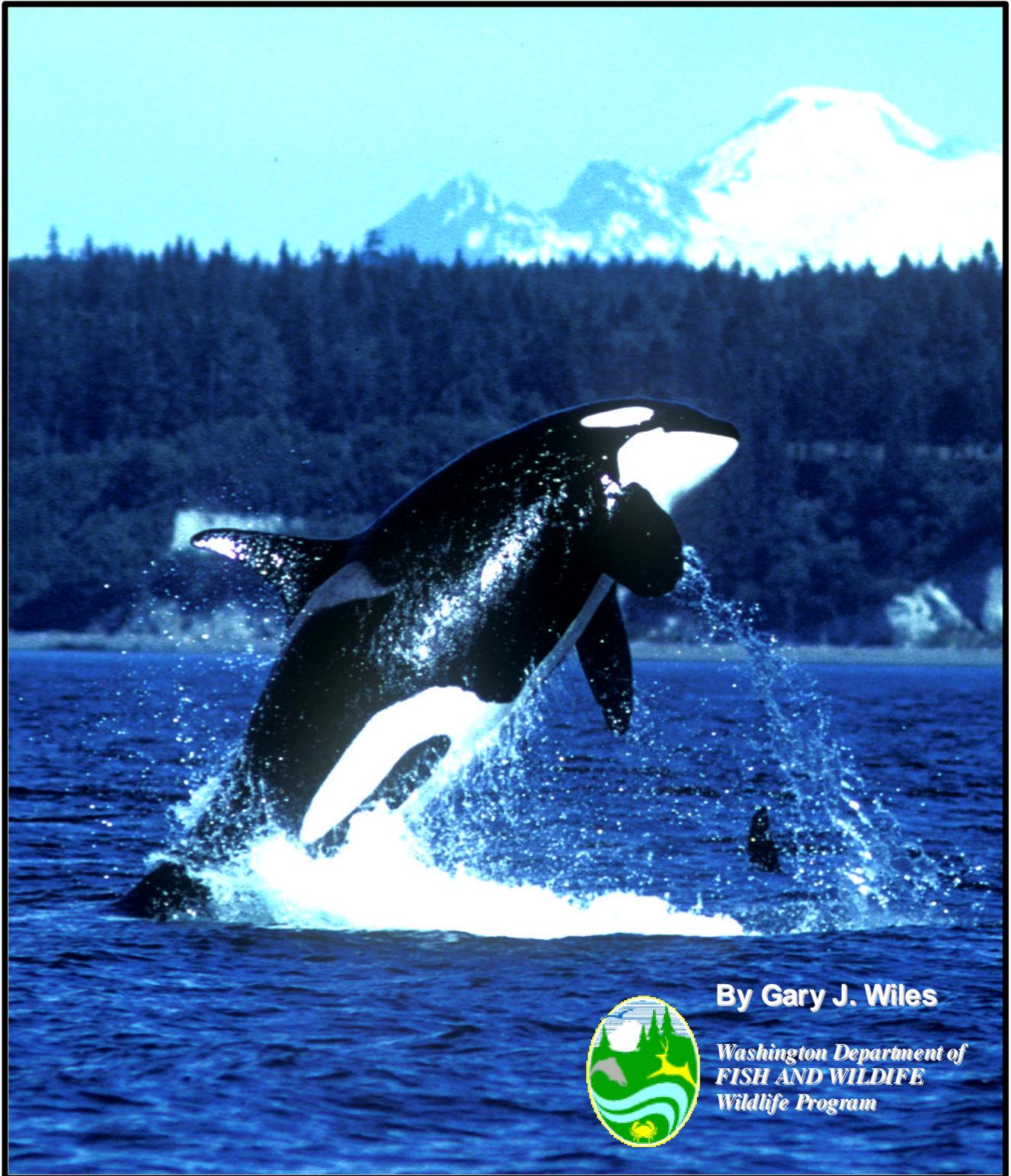
John Aschoff, Chair

On behalf of the San Juan Marine Resources Committee

STATE OF WASHINGTON

March 2004

Washington State Status Report for the Killer Whale



By Gary J. Wiles



*Washington Department of
FISH AND WILDLIFE
Wildlife Program*

The Washington Department of Fish and Wildlife maintains a list of endangered, threatened, and sensitive species (Washington Administrative Codes 232-12-014 and 232-12-011, Appendix E). In 1990, the Washington Fish and Wildlife Commission adopted listing procedures developed by a group of citizens, interest groups, and state and federal agencies (Washington Administrative Code 232-12-297, Appendix E). The procedures include how species listings will be initiated, criteria for listing and delisting, public review, and recovery and management of listed species.

The first step in the process is to develop a preliminary species status report. The report includes a review of information relevant to the species' status in Washington and addresses factors affecting its status including, but not limited to: historic, current, and future species population trends, natural history including ecological relationships, historic and current habitat trends, population demographics and their relationship to long term sustainability, known and potential threats to populations, and historic and current species management activities.

The procedures then provide for a 90-day public review opportunity for interested parties to submit new scientific data relevant to the status report, classification recommendation, and any State Environmental Policy Act findings. During the 90-day review period, the Department may also hold public meetings to take comments and answer questions. At the close of the comment period, the Department completes the Final Status Report and Listing Recommendation for presentation to the Washington Fish and Wildlife Commission. The Final Report and Recommendation are then released 30 days prior to the Commission presentation for public review.

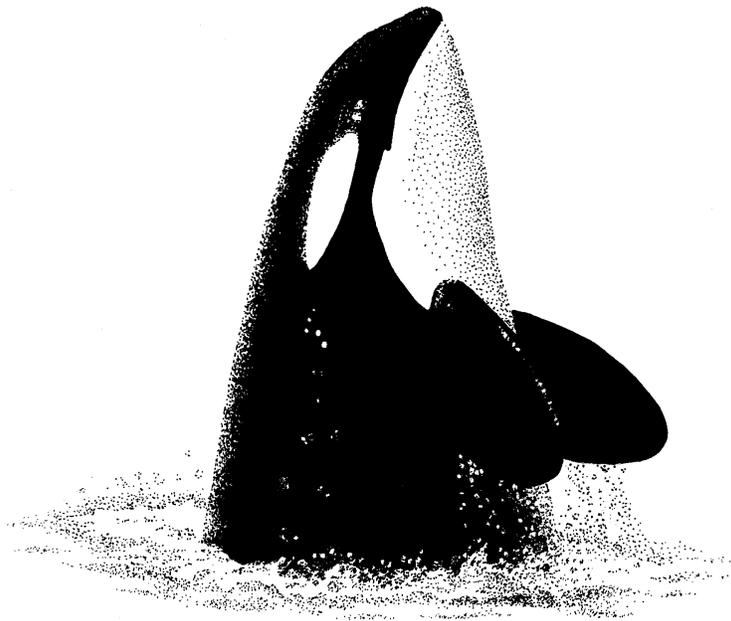
The draft status report for the killer whale was reviewed by researchers and state, provincial, and federal agencies. This review was followed by a 90-day public comment period from November 3, 2003-February 3, 2004. A public meeting was held in Mt. Vernon in January 2004. All comments received were considered in preparation of this Final Status Report for the Killer Whale. Submit written comments on this report by April 1, 2004 to: Endangered Species Section Manager, Washington Department of Fish and Wildlife, 600 Capitol Way North, Olympia, Washington 98501-1091. The Department will present the results of this status review to the Fish and Wildlife Commission for action at the April 2-3, 2004 meeting in Spokane.

This report should be cited as:

Wiles, G. J. 2004. Washington State status report for the killer whale. Washington Department Fish and Wildlife, Olympia. 106 pp.

*Cover photo: a member of L pod in the southern resident killer whale community breaches in Admiralty Inlet, Puget Sound, with Mt. Baker in the background (photo courtesy of the Center for Whale Research).
Other illustrations by Darrell Pruett.*

Washington State Status Report for the Killer Whale



Prepared by

Gary J. Wiles

Washington Department of Fish and Wildlife
Wildlife Program
600 Capitol Way North
Olympia, WA 98501-1091

March 2004

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Harriet Allen and Derek Stinson helped with many aspects of the preparation of this report. Ken Balcomb of the Center for Whale Research and John Ford of the Department of Fisheries and Oceans Canada kindly supplied their official count data for the southern and northern resident populations, respectively, and provided other information on killer whales, based on their extensive knowledge of the species. Kari Koski from the Soundwatch Boater Education Program of The Whale Museum was especially helpful during several discussions on whale watching. Rich Osborne of The Whale Museum allowed use of the data presented in Figure 5 and assisted with other information. John Calambokidis and Dave Ellifrit contributed information on regional movements and contaminants. Thanks also go to Jim Ames and Bruce Sanford for pointing out a few of the many intricacies of salmon occurrence.

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EXECUTIVE SUMMARY

Killer whales are distributed throughout the marine waters of Washington. Four populations are recognized and are referred to as southern residents, northern residents, transients, and offshores. These populations rarely interact and do not interbreed despite having largely sympatric year-round geographic ranges that extend into British Columbia and other areas along the west coast of North America. Southern resident and transient killer whales are the only populations that regularly enter the state's coastal waters, whereas offshore whales mainly inhabit open ocean off the outer coast. Northern residents are rare visitors to the state. Resident killer whales are believed to feed almost exclusively on salmon, especially chinook, and other fish. They occur in small highly stable social units known as matriline, in which all individuals are maternally related. Pods are larger social groups comprised of several matriline and typically hold about 10 to 60 whales. In contrast, transient whales feed primarily on harbor seals and other marine mammals. They also travel in small matrilineal groups, which typically contain one to six animals. Although some matriline members maintain long-term bonds, the social organization of transients is generally more flexible than in residents. Few details are known about the biology of offshore killer whales, but they commonly occur in large groups of 20-75 individuals and are believed to be mainly fish-eaters.

The southern resident population is comprised of three pods (identified as J, K, and L pods) and is most familiar to the general public. It occurs primarily in the Georgia Basin and Puget Sound from late spring to fall, when it typically comprises the majority of killer whales found in Washington. The population travels more extensively during other times of the year to sites as far north as the Queen Charlotte Islands in British Columbia and as far south as Monterey Bay in California. Southern resident population trends are unknown before 1960, when roughly 80 whales were present, but it is quite likely that numbers were at a depleted level due to indiscriminant shooting by fishermen. The population is believed to have recovered somewhat during the early and mid-1960s, but live-captures for aquaria removed or killed at least 47 of the whales during the 1960s and 1970s. The population has been closely monitored since 1974, with exact numbers of animals and other demographic details learned through annual photo-identification surveys. Membership increased from 70 to 98 whales between 1974 and 1995, but this was followed by a rapid net loss of 18 animals, or 18% of the population, from 1996-2001. J and K pods have generally maintained their numbers during the decline, with both equaling or exceeding their largest recorded sizes in 2003. However, L pod, which comprises about half of the southern resident population, has been in sharp decline since 1994. This pod's decline is especially worrisome because it involves both increased mortality of members and a reduction in birth rates.

Population trends of transient and offshore killer whales are not known because of their greater mobility and more sporadic occurrence, making it difficult for researchers to maintain detailed photographic records of both groups. Both populations cover huge geographic ranges that extend from Alaska to southern California.

Killer whales in Washington face three main potential threats, plus other risk factors, that are unlikely to diminish in the future. First, the southern residents have experienced large historic declines in their main prey, salmon. Overall salmon abundance has remained relatively stable or been increasing in Puget Sound and the Georgia Basin during the past several decades and therefore may not be responsible for the decline in L pod since 1996. However, a lack of comprehensive information on the status of all salmon runs in the range of the southern residents makes the threat of reduced prey availability difficult to dismiss. Second, recent studies have revealed that transient and southern resident whales are heavily contaminated with organochlorine pollutants, primarily PCBs and DDT residues. Both populations are now considered as among the most highly contaminated marine mammals in the world. Lastly,

increasing public interest in killer whales has fueled tremendous growth in whale watching in and around the San Juan Islands during the past two decades. As a result, southern resident whales are now followed by significant numbers of commercial and private vessels during much or all of the day when residing in this portion of their range. An important short-term risk to killer whales and their prey in the Georgia Basin and Puget Sound is the threat of sizable oil spills. Despite the great increase in killer whale research in Washington and British Columbia since the early 1970s, researchers remain divided on which of these threats are most significant to the whales. It may well be that a combination of threats are working to harm the animals, especially L pod.

For these reasons, the Department recommends that the killer whale be listed as an endangered species in the state of Washington.

INTRODUCTION

Interest in placing killer whales (*Orcinus orca*) on the Washington list of endangered, threatened, or sensitive species began with a petition to the Department from the Progressive Animal Welfare Society on 11 November 1999, pursuant to WAC 232-12-297. Rationale for the request included a 17% decline in the southern resident whale population during the previous four years, the discovery of high contaminant levels in the whales, and historic declines in salmon, which are the main food of resident whales. The Department determined that there was adequate reason to be concerned about the biological status of killer whales in Washington and placed the species on the state's candidate species list in June 2000.

On 15 August 2001, Project SeaWolf petitioned the Department to emergency list the southern resident killer whale population as endangered in Washington. Because a status review needed to be conducted first, per WAC 232-12-297, the Department responded to the petitioners that, to avoid a duplication of effort, it would wait until after the National Marine Fisheries Service (NOAA Fisheries) had completed its own review of the southern residents, which was already being conducted to determine whether they should be federally listed as endangered. The Department provided technical information and advice from the state's perspective during the federal review. That assessment was completed in December 2002 and the Department initiated its own status review in March 2003. It should be noted that under the Department's listing procedures (WAC 232-12-297), only species and subspecies may be considered for listing. Subpopulations, such as the southern residents, are not eligible for separate listing.

This report fulfills the Department's requirement to evaluate all biological information regarding the status of killer whales in Washington. It summarizes the ecology, population status, and primary threats to transboundary populations of killer whales in the state and adjoining areas of British Columbia, with additional information about the species drawn from other localities in the

northeastern Pacific Ocean and elsewhere around the world. The report begins with general descriptions of taxonomy and distribution of the species, as well as population types found in Washington and along the west coast of North America. This is followed by information on social organization, vocalizations, diet, behavior, movements, habitat use, reproduction, survival, and sources of mortality. Summaries of historic, recent, and future population trends are then presented, followed by a section on legal protection in the United States and internationally. The report identifies potential threats to killer whales in Washington and British Columbia and concludes with a listing recommendation.

TAXONOMY

Killer whales are members of the family Delphinidae, which includes 17-19 genera of marine dolphins (Rice 1998, LeDuc et al. 1999). Systematic classifications based on morphological comparisons have variously placed the genus *Orcinus* in the subfamilies Globicephalinae or Orcininae with other genera such as *Feresa*, *Globicephala*, *Orcaella*, *Peponocephala*, and *Pseudorca* (Slijper 1936, Fraser and Purves 1960, Kasuya 1973, Mead 1975, Perrin 1989, Fordyce and Barnes 1994). However, recent molecular work suggests that *Orcinus* is most closely related to the Irawaddy dolphin (*Orcaella brevirostris*), with both forming the subfamily Orcininae (LeDuc et al. 1999).

Orcinus has traditionally been considered monotypic, despite some variation in color patterns, morphology, and ecology across its distribution. No subspecies are currently recognized. In the early 1980s, Soviet scientists proposed two new species (*O. nanus* and *O. glacialis*) in Antarctica, based on their smaller sizes and other traits (Mikhalev et al. 1981, Berzin and Vladimirov 1983, Pitman and Ensor 2003). Similarly, Baird (1994, 2002) argued that resident and transient forms in the northeastern Pacific should be treated as separate species due to differences in behavior, ecology, and vocalizations. These designations have not

received wide acceptance (Hoelzel et al. 1998, Rice 1998, Barrett-Lennard 2000). Recent investigations have documented genetic distinctions among populations in the northeastern Pacific, but these were considered insufficient to warrant designation of discrete taxa (Hoelzel and Dover 1991, Hoelzel et al. 1998, Barrett-Lennard 2000, Barrett-Lennard and Ellis 2001). Worldwide populations show low diversity in mitochondrial DNA (Hoelzel et al. 2002), which is also suggestive of a lack of taxonomic differentiation within the species. Nevertheless, a number of authorities believe that the current classification of killer whales as a single species without subspecies is inaccurate (Krahn et al. 2002). For example, newly published evidence reveals the presence of three distinct forms of killer whales in Antarctica (Pitman and Ensor 2003). Thus, it seems likely that continued study, including broader application of the biological species concept, will eventually result in the recognition of additional species or subspecies of killer whales.

The name “killer whale” originates from early whalers and is appropriately based on the species’ predatory habits, as well as its large size, which distinguishes it from other dolphins. Other common names currently or formerly used in North America include “orca,” “blackfish,” “killer,” “grampus,” and “swordfish.” The name “orca” has become increasingly popular in recent decades as a less sinister alternative to “killer whale” (Spalding 1998). A variety of Native American names also exist, including *klasqo’kapix* (Makah, Olympic Peninsula), *ka-kow-wud* (Quillayute, Olympic Peninsula), *max’inux* (Kwakiutl, northern Vancouver Island), *qaqawun* (Nootka, western Vancouver Island), and *ska-ana* (Haida, Queen Charlotte Islands) (Hoyt 1990, Ford et al. 2000).

DESCRIPTION

Killer whales are the world’s largest dolphin. The sexes show considerable size dimorphism, with males attaining maximum lengths and weights of 9.0 m and 5,568 kg, respectively, compared to

7.7 m and 3,810 kg for females (Dahlheim and Heyning 1999). Adult males develop larger pectoral flippers, dorsal fins, tail flukes, and girths than females (Clark and Odell 1999). The dorsal fin reaches heights of 1.8 m and is pointed in males, but grows to only 0.7 m and is more curved in females (Figure 1). Killer whales have large paddle-shaped pectoral fins and broad rounded heads with only the hint of a facial beak. The flukes have pointed tips and form a notch at their midpoint on the trailing edge. Ten to 14 teeth occur on each side of both jaws and measure up to 13 cm in length (Eschricht 1866, Scammon 1874, Nishiwaki 1972). Skull morphology and other anatomical features are described by Tomilin (1957) and Dahlheim and Heyning (1999).

Killer whales are easily identifiable by their distinctive black-and-white color pattern, which is among the most striking of all cetaceans. Animals are black dorsally and have a white ventral region extending from the chin and lower face to the belly and anal region (Figure 1). The underside of the tail fluke is white or pale gray, and may be thinly edged in black. Several additional white or gray markings occur on the flanks and back. These include a small white oval patch behind and above the eye, a larger area of white connected to the main belly marking and sweeping upward onto the lower rear flank, and a gray or white “saddle” patch usually present behind the dorsal fin. These color patterns exhibit regional and age variation (Carl 1946, Evans et al. 1982, Baird and Stacey 1988, Ford et al. 2000, Pitman and Ensor 2003). Infants feature yellowish, rather than white, markings. Each whale has a uniquely shaped and scarred dorsal fin and saddle patch, which permits animals to be recognized on an individual basis, as depicted in photo-identification catalogs, such as those compiled for Washington and British Columbia (e.g., van Ginneken et al. 1998, 2000, Ford and Ellis 1999, Ford et al. 2000). Shape and coloration of the saddle often differs on the left and right sides of an animal (Ford et al. 2000, van Ginneken et al. 2000). Eye-patch shape is also unique among individuals (Carl 1946, Visser and Mäkeläinen 2000). In the Antarctic, several populations of killer whales display grayish dorsal “capets” extending over large portions of the back

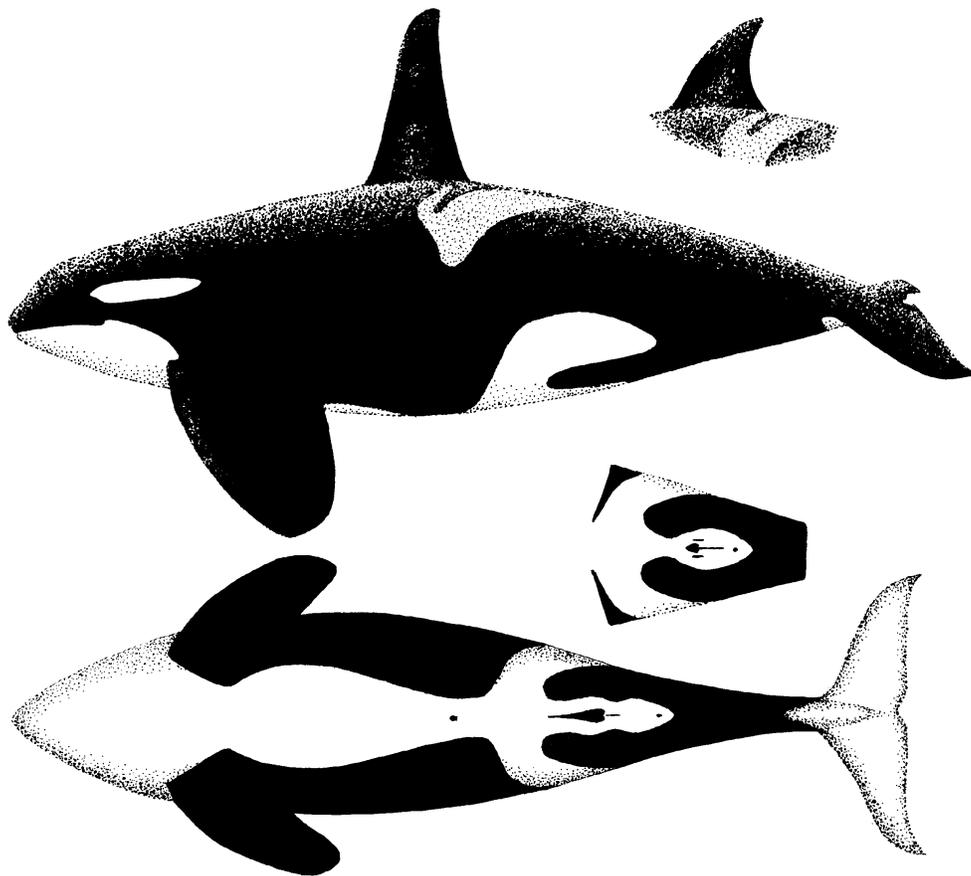


Figure 2. Lateral and ventral views of an adult male killer whale. Small insets show the dorsal fin and genital pigmentation of a female. Adapted from Dahlheim and Heyning (1999) and Ford et al. (2000).

and flanks (Evans et al. 1982, Visser 1999a, Pitman and Ensor 2003).

In addition to the characters mentioned above, male and female killer whales are distinguishable by pigmentation differences in the genital area (Figure 1; Ford et al. 2000). Females have a roughly circular or oval white patch surrounding the genital area. Within this patch, the two mammary slits are marked with gray or black and are located on either side of the genital slit, which also usually has a dark marking. Males have a

more elongated white patch surrounding the genital area, a larger darker spot at the genital slit, and lack the darkly shaded mammary slits.

When viewed at long distances, false killer whales (*Pseudorca crassidens*) and Risso's dolphins (*Grampus griseus*) can be mistaken for female and immature killer whales (Leatherwood et al. 1988). Blows of killer whales are low and bushy-shaped, reaching a height of about 1.5-2 m (Scammon 1874, Scheffer and Slipp 1948, Eder 2001). Scheffer and Slipp (1948) described the sound of

blowing as “a quick breathy puff, louder and sharper and lacking the double gasp of the harbor porpoise” (*Phocoena phocoena*).

DISTRIBUTION

Global

Killer whales have a cosmopolitan distribution considered the largest of any cetacean (Figure 2). The species occurs in all oceans, but is generally most common in coastal waters and at higher latitudes, with fewer sightings from tropical regions (Dahlheim and Heyning 1999). In the North Pacific, killer whales occur in waters off Alaska, including the Aleutian Islands and Bering

Sea (Murie 1959, Braham and Dahlheim 1982, Dahlheim 1994, Matkin and Saulitis 1994, Miyashita et al. 1995, Dahlheim 1997, Waite et al. 2002), and range southward along the North American coast and continental slope (Norris and Prescott 1961, Fiscus and Niggol 1965, Gilmore 1976, Dahlheim et al. 1982, Black et al. 1997, Guerrero-Ruiz et al. 1998). Populations are also present along the northeastern coast of Asia from eastern Russia to southern China (Tomilin 1957, Nishiwaki and Handa 1958, Kasuya 1971, Wang 1985, Miyashita et al. 1995). Northward occurrence in this region extends into the Chukchi and Beaufort Seas (Lowry et al. 1987). Sightings are generally infrequent to rare across the tropical Pacific, extending from Central and South America (Dahlheim et al. 1982, Wade and

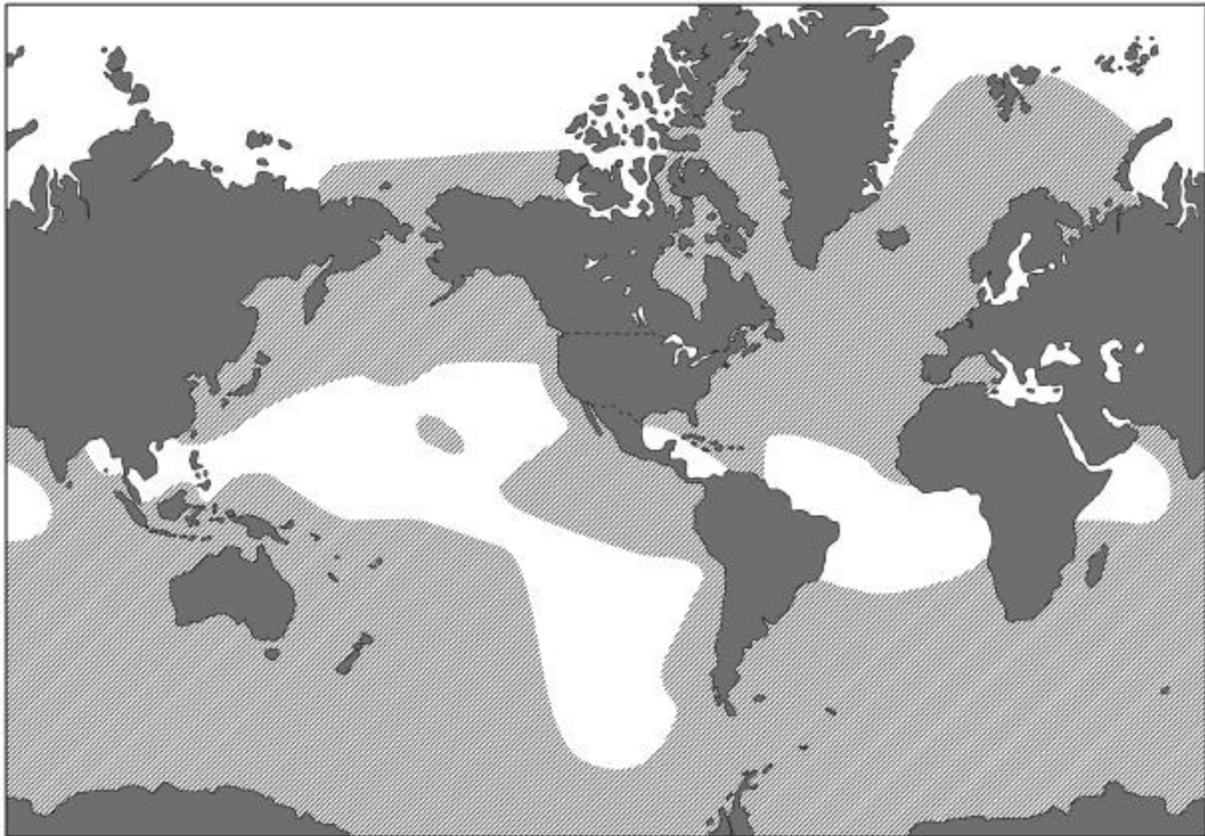


Figure 2. Worldwide range of killer whales. Hatched areas depict the distribution of known records. White areas are probably also inhabited, but documented sightings are lacking. Adapted from Miyashita et al. (1995) and Dahlheim and Heyning (1999), with additional information from Reeves and Mitchell (1988b), Wade and Gerrodette (1993), Andersen and Kinze (1999), and Reeves et al. (1999).

Gerrodette 1993) westward to much of the Indo-Pacific region (Tomich 1986, Eldredge 1991, Miyashita et al. 1995, Reeves et al. 1999, Mobley et al. 2001, Visser and Bonaccorso 2003). The species occurs widely in the North Atlantic, including the entire eastern coast of North America, parts of the Caribbean, Greenland, and from northwestern Russia and Scandinavia to Africa (Tomilin 1957, Evans 1988, Hammond and Lockyer 1988, Katona et al. 1988, Øien 1988, Mitchell and Reeves 1988, Reeves and Mitchell 1988a, 1988b, Baird 2001). Killer whales are broadly distributed in the southern oceans (Miyashita et al. 1995), being most common off Antarctica. Smaller populations are present in Australia, New Zealand, South America, and southern Africa (Jehl et al. 1980, Dahlheim 1981, Thomas et al. 1981, Dahlheim and Heyning 1999, Peddemors 1999).

Washington

Killer whales occur in marine waters throughout Washington. From late spring to fall, most whales can be found in the inland waters around the San Juan Islands, including Haro Strait, Boundary Passage, and the eastern portion of the Strait of Juan de Fuca (Heimlich-Boran 1988, Felleman et al. 1991, Olson 1998, Ford et al. 2000). Less time is generally spent elsewhere, including other parts of the Strait of Juan de Fuca, Puget Sound, and the outer coast. Movements during the winter and early spring are poorly known, but many animals shift their activity to outer coastal areas or depart the state. Accounts of the seasonal distribution of each killer whale population found in the state appear in greater detail in other sections of the text.

CLASSIFICATION OF KILLER WHALES IN THE NORTHEASTERN PACIFIC

Three distinct forms of killer whales, termed as residents, transients, and offshores, are recognized

in the northeastern Pacific Ocean. Although there is considerable overlap in their ranges, these populations display significant genetic differences due to a lack of interchange of member animals (Stevens et al. 1989, Hoelzel and Dover 1991, Hoelzel et al. 1998, Barrett-Lennard 2000, Barrett-Lennard and Ellis 2001). Important differences in ecology, behavior, and morphology also exist (Baird 2000, Ford et al. 2000). Similar differences among overlapping populations of killer whales have been found in Antarctica (Berzin and Vladimirov 1983, Pitman and Ensor 2003) and may eventually be recognized in the populations of many localities (Ford et al. 1998). The names “resident” and “transient” were coined during early studies of killer whale communities in the northeastern Pacific (Bigg 1982), but continued research has shown that neither term is particularly descriptive of actual movement patterns (Dahlheim and Heyning 1999, Baird and Whitehead 2000, Baird 2001). Both names, plus “offshore,” are currently applied only to killer whales occurring in this region, but may also be appropriate for some populations off eastern Asia (Krahn et al. 2002).

Resident Killer Whales

In the northeastern Pacific, resident killer whales are distributed from Alaska to California, with four distinct communities recognized: southern, northern, southern Alaska, and western Alaska (Krahn et al. 2002). Resident killer whales differ from transient and offshore animals by having a dorsal fin that is more curved and rounded at the tip (Ford et al. 2000). Residents also exhibit at least five patterns of saddle patch pigmentation (Baird and Stacey 1988). They feed primarily on fish, occur in large stable pods typically comprised of 10 to about 60 individuals, and also differ in vocalization patterns (Ford 1989, Felleman et al. 1991, Ford et al. 1998, 2000, Saulitis et al. 2000). A fifth resident community, known as the western North Pacific residents, is thought to occur off eastern Russia and perhaps Japan (Krahn et al. 2002).



Figure 3. Geographic ranges (light shading) of the southern resident (left) and northern resident (right) killer whale populations in the northeastern Pacific. The western pelagic boundary of the ranges is ill-defined.

Southern residents. This population consists of three pods, identified as J, K, and L pods, that reside for part of the year in the inland waterways of the Strait of Georgia, Strait of Juan de Fuca, and Puget Sound, especially during the spring, summer, and fall (Krahn et al. 2002). Pods regularly visit coastal sites off Washington and Vancouver Island (Ford et al. 2000), and are known to travel as far south as central California and as far north as the Queen Charlotte Islands (Figure 3). Winter movements and distribution are poorly understood for the population. Although

there is considerable overlap in the geographic ranges of southern and northern residents, pods from the two populations have not been observed to intermix (Ford et al. 2000). Genetic analyses using microsatellite (nuclear) DNA and mitochondrial DNA (mtDNA) further indicate that the two populations are reproductively isolated (Hoelzel et al. 1998, Barrett-Lennard 2000, Barrett-Lennard and Ellis 2001).

Northern residents. The northern resident killer whale community contains 16 pods that reside

primarily from central Vancouver Island (including the northern Strait of Georgia) to Frederick Sound in southeastern Alaska (Figure 3; Dahlheim 1997, Ford et al. 2000), although animals occasionally venture as far south as the Strait of Juan de Fuca, San Juan Islands, and probably the western Olympic Peninsula (Barrett-Lennard and Ellis 2001; J. Calambokidis, unpubl. data). From June to October, many northern resident pods congregate in the vicinity of Johnstone Strait and Queen Charlotte Strait off northeastern Vancouver Island, but movements and distribution during other times of the year are much less well known (Ford et al. 2000). In southeastern Alaska, northern residents have been seen once in association with pods from the southern Alaska resident community (Dahlheim et al. 1997) and limited gene flow may occur between these two populations (Hoelzel et al. 1998, Barrett-Lennard 2000, Barrett-Lennard and Ellis 2001).

Other residents. Southern Alaska resident killer whales inhabit the waters of southeastern Alaska and the Gulf of Alaska (including Prince William Sound and Kodiak Island), with at least 15 pods identified (Dahlheim 1997, Dahlheim et al. 1997, Matkin and Saulitis 1997). Distribution and abundance of the western Alaska residents are less understood, but their range includes coastal and offshore waters of the Bering Sea for at least part of the year (Krahn et al. 2002).

Transient Killer Whales

Transients do not associate with resident and offshore whales despite having a geographic range that is largely sympatric with both forms (Figure 4). Compared to residents, transients occur in smaller groups of usually less than 10 individuals (Ford and Ellis 1999, Baird 2000, Baird and Whitehead 2000), display a more fluid social organization, and have diets consisting largely of other marine mammals (Baird and Dill 1996, Ford et al. 1998, Saulitis et al. 2000). They also move greater distances and tend to have larger home ranges than residents (Goley and Straley 1994, Dahlheim and Heyning 1999, Baird 2000).

Morphologically, the dorsal fins of transients are straighter at the tip than in residents and offshores (Ford and Ellis 1999, Ford et al. 2000). Two patterns of saddle pigmentation are recognized (Baird and Stacey 1988). Recent genetic investigations using both nuclear DNA and mtDNA have found significant genetic differences between transients and other killer whale forms, confirming the lack of interbreeding (Stevens 1989, Hoelzel and Dover 1991, Hoelzel et al. 1998, Barrett-Lennard 2000, Barrett-Lennard and Ellis 2001). These studies also indicate that up to three genetically distinct assemblages of transient killer whales exist in the northeastern Pacific. These are identified as 1) west coast transients, which occur from southern California to southeastern Alaska (Figure 4), 2) Gulf of Alaska transients, and 3) AT1 pod, which inhabits Prince William Sound and the Kenai Fjords in the northern Gulf of Alaska and is highly threatened with just nine whales remaining (Ford and Ellis 1999, Barrett-Lennard 2000, Barrett-Lennard and Ellis 2001). Genetic evidence suggests there is little or no interchange of members among these populations (Barrett-Lennard and Ellis 2001).

Offshore Killer Whales

Due to a scarcity of sightings, much less information is available for the offshore killer whale population, which was first identified in the late 1980s (Ford et al. 1992, 1994, Walters et al. 1992). Records are distributed from southern California to Alaska (Figure 4), including many from western Vancouver Island and the Queen Charlotte Islands (Ford and Ellis 1999, Krahn et al. 2002). Recent data from Alaska has extended the population's range to the western Gulf of Alaska and eastern Aleutians (M. E. Dahlheim, pers. comm.). Offshore killer whales usually occur 15 km or more offshore, but also visit coastal waters and occasionally enter protected inshore waters. Sightings have been made up to 500 km off the Washington coast (Krahn et al. 2002). Animals typically congregate in groups of 20-75 animals and are presumed to feed primarily on fish. Intermixing with residents and transients

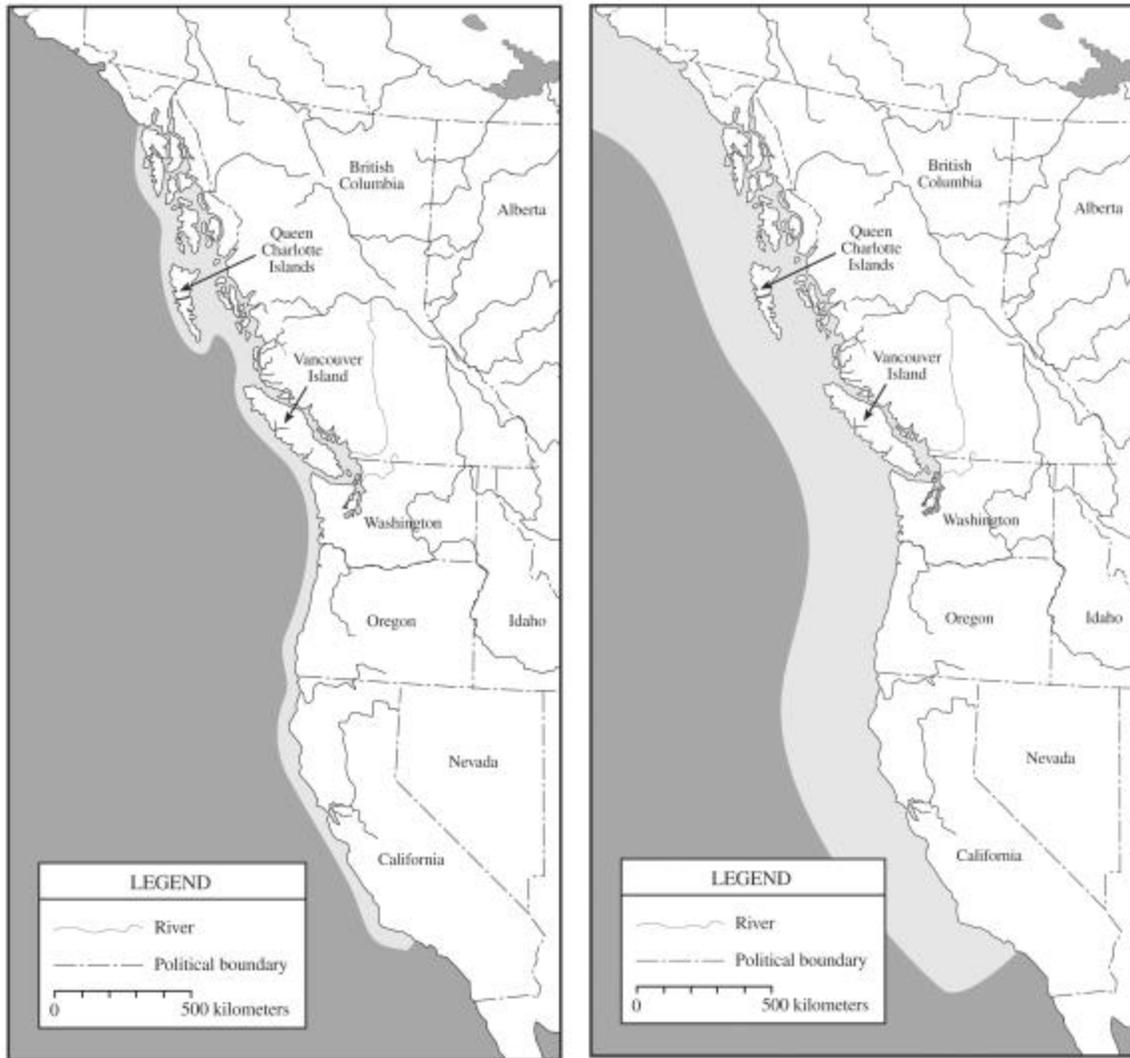


Figure 4. Geographic ranges (light shading) of the west coast transient (left) and offshore (right) killer whale populations in the northeastern Pacific. The western pelagic boundary of the ranges is ill-defined. The northern range of the offshore population extends westward to the eastern Aleutian Islands.

has not been observed. Genetic analyses indicate that offshore killer whales are reproductively isolated from other forms, but are more closely related to the southern residents (Hoelzel et al. 1998, Barrett-Lennard and Ellis 2001). Offshores are thought to be slightly smaller in body size than residents and transients, and have dorsal fins and saddle patches resembling those of residents (Walters et al. 1992, Ford et al. 2000).

Naming Systems of Killer Whales in the Northeastern Pacific

As previously noted, killer whales are individually recognizable by the unique markings and shapes of their dorsal fin, saddle patch, and eye patches. In the northeastern Pacific, researchers use several alphanumeric naming systems to maintain sighting records and other data for individual whales in each community. For resident whales in

Washington and British Columbia, animals are assigned their own alphanumeric names, based on their pod and the sequence in which they were identified (Ford and Ellis 1999, Ford et al. 2000). Thus, the whale known as “L7” was the seventh member to be documented in L pod. The system is more complicated for transients, which have a more flexible social system. All animals are assigned the letter “T” followed by a unique number (if the whale was born before the study began or has an unknown mother) or number-letter code (if the whale was born to an identified female) (Ford and Ellis 1999). Thus, “T10” was the tenth transient to be documented, “T49A” was the first known calf of “T49”, and “T49B” was the second known calf of “T49.” Offshores are designated by the letter “O” and a unique number signifying the order in which they were recorded. Thus, “O2” was the second offshore killer whale to be identified. Equivalent naming systems exist for transients and offshores in California and southeastern Alaska, with the prefix “CA” used for animals in California (Black et al. 1997) and various prefixes beginning with the letter “A” for Alaska (Dahlheim et al. 1997). Thus, individuals observed in multiple areas may have more than one name (Ford and Ellis 1999).

NATURAL HISTORY

Social Organization

Killer whales are highly social animals that occur primarily in groups or pods of up to 40-50 animals (Dahlheim and Heyning 1999, Baird 2000). Mean pod size varies among populations, but often ranges from 2 to 15 animals (Kasuya 1971, Condy et al. 1978, Mikhalev et al. 1981, Braham and Dahlheim 1982, Dahlheim et al. 1982, Baird and Dill 1996). Larger aggregations of up to several hundred individuals occasionally form, but are usually considered temporary groupings of smaller social units that probably congregate near seasonal concentrations of prey, for social interaction, or breeding (Dahlheim and Heyning 1999, Baird 2000, Ford et al. 2000). Single whales, usually adult males, also occur in many populations (Norris and Prescott 1961, Hoelzel 1993, Baird

1994). Differences in spatial distribution, abundance, and behavior of food resources probably account for much of the variation in group size among killer whale populations. For example, sympatric populations of resident and transient whales in Washington and British Columbia vary substantially in average pod size. Transients forage in small groups on wary and patchily distributed marine mammals and are presumably able to maximize their per capita energy intake through reduced competition over food (Baird and Dill 1996, Ford and Ellis 1999, Baird and Whitehead 2000). In contrast, the larger groups of resident whales may be better able to detect schools of fish, enabling individual members to increase food consumption (Ford et al. 2000).

The age and sex structure of killer whale social groups has been reported for populations at several locations. Olesiuk et al. (1990a) reported that pods in Washington and British Columbia were comprised of 19% adult males, 31% adult females, and 50% immature whales of either sex. In Alaska, 24% of the animals in pods were adult males, 47% were either adult females or subadult males, and 29% were younger animals (Dahlheim 1997, Dahlheim et al. 1997). For southern oceans, Miyazaki (1989) found that 16% of populations were adult males, 8% were adult females with calves, and 76% were immatures and adult females without calves. At Marion Island in the southern Indian Ocean, 29% of the population were adult males, 21% were adult females, 8% were calves, 25% were subadults, and 17% unidentified (Condy et al. 1978).

Some of the most detailed studies of social structure in killer whales have been made in British Columbia, Washington, and Alaska during the past few decades, with much information available on group size, structure, and stability, and vocal traits (Ford 1989, 1991, Bigg et al. 1990, Matkin et al. 1999b, Ford et al. 2000, Yurk et al. 2002). Social organization in this region is based on maternal kinship and may be characteristic of killer whale populations throughout the world (Ford 2002).

Residents. Four levels of social structure have been identified among resident killer whales. The basic social unit is the matriline, which is a highly stable hierarchical group of individuals linked by maternal descent (Baird 2000, Ford et al. 2000, Ford 2002). A matriline is usually composed of a female, her sons and daughters, and offspring of her daughters, and contains one to 17 (mean = 5.5) individuals spanning one to four (mean = 3) generations. Members maintain extremely strong bonds and individuals seldom separate from the group for more than a few hours. Permanent dispersal of individuals from resident matriline has never been recorded (Bigg et al. 1990, Baird 2000, Ford et al. 2000, Barrett-Lennard and Ellis 2001).

Groups of related matriline are known as pods. Matriline within pods share a common maternal ancestor from the recent past, making them more closely related to one another than to those of other pods (Baird 2000, Ford et al. 2000). Pods are less cohesive than matriline and member matriline may travel apart for periods of weeks or months. Nonetheless, matriline associate more often with others from their pod than with matriline from other pods. Most pods are comprised of one to four matriline, but one southern resident pod (L pod) holds 12 matriline (Table 1). Resident pods contain two to 59 whales (mean = 18) (Bigg et al. 1987; Ford et al. 2000; Ford 2002; Center for Whale Research, unpubl. data). Gradual changes in pod structure and cohesion occur through time with the deaths and

Table 1. Social hierarchy and pod sizes of southern and northern resident killer whales in Washington and British Columbia (Ford et al. 2000; Center for Whale Research, unpubl. data).

Community	Clan	Pod ^a	Matriline	No. of members per pod ^b
Southern residents	J	J	J2, J8, J9, J16	22
	J	K	K3, K4, K7, K18	21
	J	L	L2, L4, L9, L12, L21, L25, L26, L28, L32, L35, L37, L45	41
	Total			84
Northern residents	A	A1	A12, A30, A36	16
	A	A4	A11, A24	11
	A	A5	A8, A9, A23, A25	13
	A	B1	B7	7
	A	C1	C6, C10	14
	A	D1	D7, D11	12
	A	H1	H6	9
	A	I1	I1	8
	A	I2	I22	2
	A	I18	I17, I18	16
	G	G1	G3, G4, G17, G18, G29	29
	G	G12	G2, G12	13
	G	I11	I11, I15	22
	G	I31	I31	12
	R	R1	R2, R5, R9, R17	29
	R	W1	W3	3
	Total			216

^a Southern resident pods are also known as J1, K1, and L1 pods (Ford et al. 2000).

^b Pod sizes are based on annual census results from 2003 for southern residents (Center for Whale Research, unpubl. data) and from 1998 for northern residents (Ford et al. 2000).

births of members, as seen after the death of one matriarchal female, which appeared to prompt the fragmentation of her matriline (Ford et al. 2000). Such changes in association patterns caused some observers to believe that L pod had broken into three smaller pods during the 1980s (Hoelzel 1993). Within pods, some researchers recognize the existence of an intermediate type of association known as the subpod, which is defined as a grouping of matriline that spends more than 95% of their time together (Baird 2000).

Clans are the next level of social structure and are composed of pods with similar vocal dialects and a common but older maternal heritage (Ford 1991, Ford et al. 2000, Yurk et al. 2002). Those pods with similar dialects are presumably more closely related to one another than those with greater differences in their dialects (Ford 1991). However, vocalizations known as pulsed calls are not shared between different clans, indicating a lack of recent common ancestry between clans. Clans overlap in their geographic ranges and pods from different clans frequently intermingle.

Pods (and clans) that regularly associate with one another are known as communities, which represent the highest level of social organization in resident killer whale societies (Ford et al. 2000, Ford 2002). Four communities (southern, northern, southern Alaska, and western Alaska) of resident whales exist in the northeastern Pacific. Communities are based solely on association patterns rather than maternal relatedness or acoustic similarity. Ranges of neighboring communities partially overlap and member pods may or may not associate on an occasional basis with those from other communities (Baird 2000). The southern resident community is comprised of three pods and one clan (J), whereas the northern resident community has 16 pods in three clans (A, G, and R) (Table 1, Ford et al. 2000). The A clan contains 10 pods (A1, A4, A5, B1, C1, D1, H1, I1, I2, and I18), G clan consists of four pods (G1, G12, I11, and I31), and R clan holds two pods (R1 and W1) (Table 1; Ford et al. 2000).

Transients. The social organization of transients is less understood than for resident whales.

Transients also occur in fairly stable maternal groups, with some associations between individual animals exceeding 15 years (Baird 2000, Baird and Whitehead 2000). Groups are thought to usually comprise an adult female and one or two of her offspring (Ford and Ellis 1999, Baird and Whitehead 2000). Male offspring typically maintain stronger relationships with their mother than female offspring, and such bonds can extend well into adulthood. Unlike residents, extended or permanent dispersal of transient offspring away from natal matriline is common, with juveniles and adults of both sexes participating (Ford and Ellis 1999, Baird 2000, Baird and Whitehead 2000). Some males depart to become “roving” males. These individuals do not form long-term associations with other whales, but live solitarily much of the time and occasionally join groups that contain potentially reproductive females (Baird 2000, Baird and Whitehead 2000). Roving males do not associate together in all-male groups. Females that disperse from their maternal matriline appear to be more gregarious than males, but remain socially mobile (Baird and Whitehead 2000).

Transient pods are smaller than those of residents, numbering just one to four individuals (mean = 2.4) (Baird and Dill 1996, Ford and Ellis 1999, Baird and Whitehead 2000). Ford and Ellis (1999) reported that about 70% of all transient groups contained two to six animals (median = four), 17% had 7-11 animals, 10% were lone animals (these are mostly males; Baird 1994), and 3% had 12-22 individuals. Larger groups result from matriline temporarily joining each other to forage and socialize (Baird and Dill 1995, 1996, Ford and Ellis 1999, Baird and Whitehead 2000). In comparison with resident killer whales, transient matriline generally maintain more flexible association patterns with one another (Baird and Dill 1995, Baird 2000). However, some matriline associate preferentially with certain other matriline, perhaps for reasons of enhanced foraging success (Baird and Dill 1995). As in resident clans, all members of the transient community share a related acoustic repertoire, although regional differences in vocalizations have been noted (Ford 2002).

Offshores. The social structure of offshore killer whales has not been studied in detail. These whales usually occur in large groups of 20-75 animals (Walters et al. 1992, Ford et al. 2000, Krahn et al. 2002). Membership patterns within groups appear to be dynamic, with considerable interchange of animals noted between sightings (K. C. Balcomb, unpubl. data).

Vocalizations

Vocal communication is particularly advanced in killer whales and is an essential element of the species' complex social structure. Like all dolphins, killer whales produce numerous types of vocalizations that are useful in navigation, communication, and foraging (Dahlheim and Awbrey 1982, Ford 1989, Barrett-Lennard et al. 1996, Ford et al. 2000). Sounds are made by air forced through structures in the nasal passage and are enhanced and directed forward by a fatty enlargement near the top of the head, known as the melon. Most calls consist of both low- and high-frequency components (Bain and Dahlheim 1994). The low-frequency component is relatively omnidirectional, with most energy directed forward and to the sides (Schevill and Watkins 1966). A fundamental tone between 250-1,500 Hz and harmonics ranging to about 10 kHz are present in this component. Most of the energy in the high-frequency component is beamed directly ahead of the animal. This component has a fundamental tone between 5-12 kHz and harmonics ranging to over 100 kHz (Bain and Dahlheim 1994).

Newborn calves produce calls similar to adults, but have a more limited repertoire (Dahlheim and Awbrey 1982). As young animals mature, complete call repertoires are most likely developed through vocal imitation and learning from association with closely related animals rather than being genetically inherited (Bowles et al. 1988, Bain 1989, Ford 1989, 1991, Yurk et al. 2002). Regional differences in call structure and vocalization patterns have been recorded from the North Pacific, North Atlantic, and Antarctica (Jehl et al. 1980, Thomas et al. 1981, Awbrey et al. 1982).

Killer whales produce three categories of sounds: echolocation clicks, tonal whistles, and pulsed calls (Ford 1989). Clicks are brief pulses of ultrasonic sound given singly or more often in series known as click trains. They are used primarily for navigation and discriminating prey and other objects in the surrounding environment, but are also commonly heard during social interactions and may have a communicative function (Barrett-Lennard et al. 1996). Barrett-Lennard et al. (1996) suggested that killer whales share information obtained from echolocation, but further clarification of this possible function is needed (Baird 2000). Individual clicks are highly variable in structure, lasting from 0.1 to 25 milliseconds and containing a narrow to broad range of frequencies that usually range from 4-18 kHz, but extend up to 50-85 kHz (Diercks et al. 1973, Awbrey et al. 1982, Ford 1989, Barrett-Lennard et al. 1996). Most click trains last 2-8 seconds and have repetition rates of 250 clicks per second, but some exceed 10 seconds or hold as many as 300 clicks per second (Jehl et al. 1980, Ford 1989, Barrett-Lennard et al. 1996, Ford et al. 2000). Slower click trains are probably used for navigation and orientation on more distant objects, such as other whales and features on the seafloor, whereas rapid click rates appear to be used for investigating objects within 10 m (Ford 1989).

Most whistles are tonal sounds of a fundamental frequency with the addition of several harmonics (Thomsen et al. 2001). Whistles have an average dominant frequency of 8.3 kHz (range = 3-18.5 kHz), an average bandwidth of 4.5 kHz (range = 0.5-10.2 kHz), and an average of 5.0 frequency modulations per whistle (range = 0-71 frequency modulations) (Thomsen et al. 2001). Mean duration is 1.8 seconds (range = 0.06-18.3 seconds). Whistles are the primary type of vocalization produced during close-range social interactions (Thomsen et al. 2002). They are given infrequently during foraging and most types of traveling.

Pulsed calls are the most common type of vocalization in killer whales and resemble squeaks, screams, and squawks to the human ear.

Most calls are highly stereotyped and distinctive in structure, being characterized by rapid changes in tone and pulse repetition rate, with some reaching up to 4,000 or more pulses per second (Jehl et al. 1980, Ford 1989). Duration is usually less than two seconds. Call frequencies often fall between 1-6 kHz, but may reach more than 30 kHz. Three categories of pulsed calls are distinguishable: discrete, variable, and aberrant (Ford 1989). Discrete calls have received considerable study and are especially noteworthy because they are used repetitively and have stable group-specific structural traits. Discrete calls are the predominant sound type during foraging and traveling, and are used for maintaining acoustic contact with other group members, especially those out of visual range (Ford 1989, Ford et al. 2000). Variable and aberrant calls are given more frequently after animals join together and interact socially. Representative sound spectrograms of discrete calls are presented in Ford (1989, 1991).

The vocal repertoires of killer whale pods are comprised of specific numbers and types of repetitive discrete calls, which together are known as a dialect (Ford 1991). Dialects are complex and stable over time, and are unique to single pods. Individuals likely learn their dialect through contact with their mother and other pod members (Ford 1989, 1991). Dialects are probably an important means of maintaining group identity and cohesiveness. Similarity in dialects likely reflects the degree of relatedness between pods, with variation building through time as pods grow and split (Ford 1989, 1991, Bigg et al. 1990). Researchers have thus far been unable to determine whether specific calls have particular meanings or are associated with certain activities. Deecke et al. (2000) reported that some calls undergo gradual modification in structure over time, probably due to cultural drift, maturational effects, or some combination thereof.

Dialects of resident killer whale pods contain seven to 17 (mean = 11) distinctive call types (Ford 1991). Transient dialects are much different, having only four to six discrete calls, none of which are shared with residents (Ford and Ellis 1999). All members of the west coast

transient community possess the same basic dialect, as would be expected due to this population's fluid social system, although some minor regional variation in call types is evident (Ford and Ellis 1999). Preliminary research indicates that offshore killer whales have group-specific dialects unlike those of residents and transients (Ford et al. 2000).

Hearing and Other Senses

As with other delphinids, killer whales hear sounds through the lower jaw and other portions of the head, which transmit the sound signals to receptor cells in the middle and inner ears (Møhl et al. 1999, Au 2002). Killer whale hearing is the most sensitive of any odontocete tested thus far. Hearing ability extends from 1 to at least 120 kHz, but is most sensitive in the range of 18-42 kHz (Szymanski et al. 1999). The most sensitive frequency is 20 kHz, which corresponds with the approximate peak energy of the species' echolocation clicks (Szymanski et al. 1999). This frequency is lower than in many other toothed whales. Hearing sensitivity declines below 4 kHz and above 60 kHz. Killer whale vision is also considered well developed (White et al. 1971).

Diving and Swimming Behavior

Respiration rates of killer whales vary with activity level (Ford 1989). Dive cycles in transient whales average 5-8 minutes in total length and usually consist of three to five short dives lasting 10-35 seconds each followed by a longer dive averaging 4-7 minutes (range = 1-17 minutes) (Erickson 1978, Morton 1990, Ford and Ellis 1999). Surface blows following each of the short dives in a cycle last 3-4 seconds. Dive cycles in resident whales follow a similar pattern, but have long dives that are usually much briefer than in transients, averaging about 3 minutes and rarely exceeding 5 minutes (Morton 1990, Ford and Ellis 1999).

Southern residents spend 95% of their time underwater, nearly all of which is between the surface and a depth of 30 m (Baird et al. 1998, 2003, Baird 2000). Preliminary information

indicates that up to two dives per hour are made below 30 m. However, these represent fewer than 1% of all dives and occupy less than 2.5% of an animal's total dive time. In the vicinity of the San Juan Islands, maximum dive depths averaged 141 m per animal among seven individuals tagged with time-depth recorders in July 2002 (Baird et al. 2003). One juvenile whale twice exceeded 228 m, causing Baird et al. (2003) to speculate that members of this population are probably capable of diving to 350 m, which is the approximate maximum bottom depth of the core inland waters of their summer range. The deepest dive reported for a killer whale is 260 m by a trained animal (Bowers and Henderson 1972).

Killer whales normally swim at speeds of 5-10 km per hour, but can attain maximum speeds of 40 km per hour (Lang 1966, Erickson 1978, Kruse 1991, Williams et al. 2002a). Diving animals reach a velocity of 22 km per hour, or 6 m per second, during descents and ascents. Bursts in speed during dives commonly occur when prey are chased (Baird et al. 2003).

Diet and Foraging

As top-level predators, killer whales feed on a variety of marine organisms ranging from fish to squid to other marine mammal species. Some populations have specialized diets throughout the year and employ specific foraging strategies that reflect the behavior of their prey. Such dietary specialization has probably evolved in regions where abundant prey resources occur year-round (Ford 2002). Cooperative hunting, food sharing, and innovative learning are other notable foraging traits in killer whales (Smith et al. 1981, Lopez and Lopez 1985, Felleman et al. 1991, Hoelzel 1991, Jefferson et al. 1991, Hoelzel 1993, Similä and Ugarte 1993, Baird and Dill 1995, Guinet et al. 2000, Pitman et al. 2003). Cooperative hunting presumably increases hunting efficiency and prey capture success of group members and may also enhance group bonds. Additionally, group living facilitates knowledge of specialized hunting skills and productive foraging areas to be passed traditionally from generation to generation (Lopez and Lopez 1985, Guinet 1991, Guinet and Bouvier

1995, Ford et al. 1998). Some foraging styles require extensive practice and learning (e.g., Guinet 1991).

Dietary information was formerly derived primarily through examination of stomach contents from stranded whales or those killed during commercial whaling operations, but in recent years, direct observations of feeding behavior have added much new data on the species' food habits. Killer whales are the only cetacean to routinely prey on marine mammals, with attacks documented on more than 35 mammal species, including species as large as blue whales (*Balaenoptera musculus*), fin whales (*B. physalus*), and sperm whales (*Physeter macrocephalus*) (Tomilin 1957, Tarcy 1979, Hoyt 1990, Jefferson et al. 1991, Dahlheim and Heyning 1999, Pitman et al. 2001). Pinnipeds and cetaceans are major prey items for some populations (Tomilin 1957, Rice 1968, Hoelzel 1991, Jefferson et al. 1991, Baird and Dill 1996, Ford et al. 1998, Dahlheim and Heyning 1999). Because killer whales probably represent the most important predators of many marine mammals, their predation has presumably been a major evolutionary influence on the life history of these prey species (Jefferson et al. 1991, Corkeron and Conner 1999, Pitman et al. 2001, Deecke et al. 2002). Fish (including tuna, rays, and sharks) and squid are other major foods, with penguins, other seabirds, and sea turtles also taken (Tomilin 1957, Nishiwaki and Handa 1958, Caldwell and Caldwell 1969, Condy et al. 1978, Ivashin 1981, Hoyt 1990, Fertl et al. 1996, Similä et al. 1996, Ford et al. 1998, Dahlheim and Heyning 1999, Ford and Ellis 1999, Visser 1999b, Aguiar dos Santos and Haimovici 2001, Ainley 2002, Visser and Bonaccorso 2003). Killer whales also may steal fish from longlining vessels (Dahlheim 1988, Yano and Dahlheim 1995a, 1995b, Secchi and Vaske 1998, Visser 2000a), scavenge the discarded bycatch of fisheries operations (Sergeant and Fisher 1957, Dahlheim and Heyning 1999), and feed on harpooned whales under tow by whaling ships (Scammon 1874, Heptner et al. 1976, Hoyt 1990). There are no verified records of killer whales killing humans.

Residents. Fish are the major dietary component of resident killer whales in the northeastern Pacific, with 22 species of fish and one species of squid (*Gonatopsis borealis*) known to be eaten (Ford et al. 1998, 2000, Saulitis et al. 2000). Observations from this region indicate that salmon are clearly preferred as prey. Existing dietary data for southern and northern resident killer whales should be considered preliminary. Most information originates from a single study (Ford et al. 1998) in British Columbia, including southeastern Vancouver Island, that focused primarily on northern residents, relied on several field techniques susceptible to bias (e.g., surface observations and scale sampling), and reported on a relatively small sample of observations. With these limitations in mind, salmon were found to represent 96% of the prey during the spring, summer, and fall. Chinook salmon (*Oncorhynchus tshawytscha*) were selected over other species, comprising 65% of the salmonids taken. This preference occurred despite the much lower numerical abundance of chinook in the study area in comparison to other salmonids and is probably related to the species' large size, high fat and energy content (see Salmon Body Composition), and year-round occurrence in the area. Other salmonids eaten in smaller amounts included pink (*O. gorbuscha*, 17% of the diet), coho (*O. kisutch*, 6%), chum (*O. keta*, 6%), sockeye (*O. nerka*, 4%), and steelhead (*O. mykiss*, 2%) salmon (Ford et al. 1998). These data may underestimate the extent of feeding on bottom fish (Baird 2000). Species such as rockfish (*Sebastes* spp.), Pacific halibut (*Hippoglossus stenolepis*), a number of smaller flatfish, lingcod (*Ophiodon elongatus*), and greenling (*Hexagrammos* spp.) are likely consumed on a regular basis (Ford et al. 1998). Pacific herring (*Clupea pallasii*) also contribute to the diet. The conclusion that the southern residents feed largely on salmon is supported by the toxicology analyses of Krahn et al. (2002), who determined that the ratios of DDT (and its metabolites) to various PCB compounds in the whales correspond with those of Puget Sound salmon rather than those of other fish species. Resident whales have been seen to harass porpoises and harbor seals, but never kill and eat them (Ford et al. 1998). Little is known about the

winter and early spring foods of residents or whether individual pods have specific dietary preferences. Future research on the food habits of both resident populations may find meaningful deviations from the pattern described above.

Resident whales spend about 50-67% of their time foraging (Heimlich-Boran 1988, Ford 1989, Morton 1990, Felleman et al. 1991). Groups of animals often disperse over several square kilometers while searching for salmon, with members moving at roughly the same speed (range of 3-10 km/hr, mean = 6 km/hr) and direction (Ford 1989, 2002, Ford et al. 1998). Foraging episodes usually cover areas of 3-10 km² and last 2-3 hours, but may extend up to 7 hours. Individual salmon are pursued, captured, and eaten by single animals or small subgroups, usually a mother and her young offspring (Jacobsen 1986, Osborne 1986, Felleman et al. 1991, Ford 1989, Ford et al. 1998). Foraging whales commonly make two or three brief shallow dives, followed by a longer dive of 1-3 minutes (Ford et al. 2000). Several whales may occasionally work together to corral fish near the shore, but coordinated encirclement of prey has not been observed in Washington or British Columbia (Ford 1989, Ford et al. 1998). The large sizes of resident pods may benefit members by improving the success rate of locating scattered salmon (Heimlich-Boran 1988, Bigg et al. 1990, Hoelzel 1993). Prey are detected through a combination of echolocation and passive listening (Barrett-Lennard et al. 1996), whereas vision and echolocation are probably used during prey capture. Foraging animals produce rapid series of evenly spaced echolocation clicks, but whistles and pulsed calls are also emitted during this activity (Ford 1989). Most foraging is believed to occur during the day (Baird et al. 1998). There is some evidence that adult resident males forage differently than females and immatures, possibly because the larger size of males makes them less maneuverable in shallow waters (Baird 2000). Adult males have been noted to hunt in deeper waters than females and spend more time foraging on the edges of pods (Ford et al. 1998). Females and subadults occasionally attempt to capture salmon hiding in rock crevices near shore, a behavior not seen in adult males.

Piscivorous killer whales in Norway use tail lobbing, porpoising, blasts of air bubbles, and flashing of their white undersides to herd herring into tight schools near the surface (Similä and Ugarte 1993, Nøttestad and Similä 2001). The whales then stun the fish for eating by hitting the edges of the school with their tail flukes. In New Zealand, bubble releases are sometimes used to dislodge rays from the ocean floor (Visser 1999b).

Transients. The diet of transient killer whales contrasts greatly from that of residents and is focused almost entirely on marine mammals. Harbor seals are clearly the most important prey item in Washington and British Columbia. One study of transient diets reported that harbor seals were pursued in 94% of 138 feeding observations on marine mammals around southern Vancouver Island (Baird and Dill 1996). Other species attacked included harbor porpoises (2%), Dall's porpoises (1%), unidentified sea lions (1%), and northern elephant seals (1%). In a second broader study covering British Columbia, Washington, and Alaska, harbor seals were killed or attacked in 53% of nearly 200 feeding events (Ford et al. 1998). Other regular prey species included Steller's sea lions (*Eumetopias jubatus*, 13%), Dall's porpoises (*Phocoides dalli*, 12%), harbor porpoises (11%), and California sea lions (*Zalophus californianus*, 5%). Attacks were also noted on Pacific white-sided dolphins (*Lagenorhynchus obliquidens*), gray whales (*Eschrichtius robustus*), northern minke whales (*Balaenoptera acutorostrata*), and northern river otters (*Lontra canadensis*). Capture success rates were highest when directed at harbor porpoises (100%, n = 16) and harbor seals (90%, n = 80), but were successful 50% or less of the time for other species. Seven species of seabirds were harassed and sometimes killed, but were seldom eaten. Fish were never observed to be hunted or consumed. As an example of the diversity of prey consumed by individual whales, Ford and Ellis (1999) described the stomach contents of three known or probable transients found dead on Vancouver Island. One animal contained the remains of several harbor seals, a northern elephant seal (*Mirounga angustirostris*), a white-winged scoter (*Melanitta fusca*), and a squid, although the squid

may have originated from the stomach of the elephant seal. A second whale held nearly 400 harbor seal claws in its stomach, representing at least 20 seals eaten over an unknown time period, plus portions of two harbor porpoises and a sea lion. The remains of harbor seals, a gray whale, and a cormorant (*Phalacrocorax* sp.) were present in the stomach of the third individual. Additional information on predation on Steller's sea lions is provided by Heise et al. (2003). Larger cetaceans, including humpback whales (*Megaptera novaeangliae*), are seldom pursued in Washington and British Columbia (Jefferson et al. 1991, Ford 2002), but may have been hunted much more frequently in the past before overharvesting greatly reduced their populations (Springer et al. 2003). Terrestrial mammals, such as black-tailed deer (*Odocoileus hemionus*) and moose (*Alces alces*), are also preyed on in rare instances when caught while swimming between islands (Pike and MacAskie 1969, Dahlheim and Heyning 1999, Ford and Ellis 1999).

In Alaska, transients prey about equally on Dall's porpoises and harbor seals (Saulitis et al. 2000). Although highly controversial, a recent theory proposes that predation by mammal-eating killer whales, possibly transients, may have been responsible for a series of precipitous population declines in harbor seals, northern fur seals (*Callorhinus ursinus*), Steller's sea lions, and sea otters (*Enhydra lutris*) in southwestern Alaska between the 1960s and 1990s (Estes et al. 1998, Hatfield et al. 1998, Doroff et al. 2003, Springer et al. 2003). Such predation may have resulted after heavy commercial whaling decimated baleen and sperm whale numbers in the North Pacific after World War II, perhaps causing at least some killer whales to shift to other prey species (Springer et al. 2003). A recent increase in predation on belugas (*Delphinapterus leucas*) by probable transients in Cook Inlet, Alaska, may be due to similar reasons (Shelden et al. 2003).

Transients usually forage in smaller groups than residents. When hunting harbor seals, mean group size numbers three or four whales (Baird and Dill 1996, Ford et al. 1998, Saulitis et al. 2000). Individuals in groups of this size have

significantly higher energy intake rates compared to animals in smaller or larger groups, probably due to increased rates of prey encounter and capture and reduced rates of detection by prey (Baird and Dill 1996). Slightly larger groups have been recorded as prey size increases, averaging 5.0 animals when porpoises or dolphins are the target species and 5.4 animals for sea lions (Ford et al. 1998). Apparent cooperative hunting by two groups is occasionally observed, with all members of both groups sharing the prey (Baird 2000). This type of foraging association occurs most often when dangerous or difficult to capture prey are sought, but has also been noted among animals hunting seals.

Transients are stealthy hunters and often rely on surprise to capture unsuspecting prey. Unlike resident whales, they are much quieter while foraging, producing greater numbers of isolated clicks and far fewer and briefer click trains of lower intensity (Morton 1990, Felleman et al. 1991, Barrett-Lennard et al. 1996, Ford and Ellis 1999). This probably allows the whales to avoid acoustical detection by their wary mammalian prey. Experiments have shown that harbor seals recognize the calls of transients and respond by taking defensive action (Deecke et al. 2002). Transients may instead rely heavily on passive listening to detect the sounds of swimming prey (Barrett-Lennard et al. 1996). Vision may also be useful (Baird 2000). Vocalizations are given freely only in the process of killing or eating prey.

Transients spend 60-90% of daylight hours foraging and commonly hunt in both nearshore and open-water habitats (Heimlich-Boran 1988, Morton 1990, Baird and Dill 1995, Ford and Ellis 1999). When hunting for harbor seals close to shore, animals swim near one another and surface and dive in synchrony. During open-water foraging, the whales are more dispersed and usually swim abreast in a rough line and constant direction. Dall's and harbor porpoises, as well as other species, are commonly hunted in this manner. During both types of foraging, long dives of 7-10 minutes are separated by a series of three or four shallow dives, each lasting less than a minute. This pattern can continue for hours,

broken only by the pursuit of prey (Ford and Ellis 1999). Transients of all ages and both sexes participate in marine mammal attacks (Jefferson et al. 1991) and prey sharing occurs as part of most successful events (Baird and Dill 1995, Baird 2000). Harbor seals may be seized with the mouth, struck from below with the top of the head or snout, or hit several times with the tail to immobilize an animal before it is eaten (Scheffer and Slipp 1944, Ford and Ellis 1999). Seal attacks and eating of the carcass typically last from a few minutes to about half an hour (Baird and Dill 1995, 1996, Ford and Ellis 1999). Pursuit and capture of larger prey sometimes requires considerably longer periods of up to several hours, but Baird and Dill (1995) found no statistical relationship between prey size and handling time. Sea lions are usually butted with the whales' heads and slapped repeatedly with the tail flukes until the animal is sufficiently weakened to be taken underwater and drowned. However, attacks on sea lions fail in about half of all instances, with the animal escaping or the pursuit abandoned (Ford and Ellis 1999). When hunting porpoises, whales may single out an individual and take turns chasing it until it tires, then ram it or jump on it to finish the kill (Ford et al. 1998). Dall's porpoises are swift enough to evade capture in more than half of all chases. Pacific white-sided dolphins are sometimes captured by direct pursuit (Dahlheim and Towell 1994) or driven in large schools into confined bays, where individuals are trapped against the shore and killed (Ford and Ellis 1999).

Although attacks on large whales are rarely witnessed in the northeastern Pacific, the hunting tactics used probably resemble those recorded elsewhere in the world. Techniques vary but often involve vigorous coordinated attacks in which the larger whales are repeatedly rushed and bitten on the flippers, flukes, underside, flanks, lower back, and head, and gradually immobilized through blood loss (Scammon 1874, Tomilin 1957, Morejohn 1968, Rice and Wolman 1971, Tarry 1979, Whitehead and Glass 1985, Arnborn et al. 1987, Silber et al. 1990, Goley and Straley 1994, George and Suydam 1998, Pitman et al. 2001). This strategy may reduce the likelihood of injuries among the attacking killer whales (Pitman et al.

2001). In some cases, biting of the tail region may also be avoided for the same reason (Silber et al. 1990). Forcible holding underwater, body ramming, and leaping on the backs of larger whales may also be performed to induce internal injuries or drowning (Villiers 1925, Hancock 1965, Baldrige 1972, Hall 1986, Silber et al. 1990, Jefferson et al. 1991, Goley and Straley 1994). Only females and juveniles participate in some attacks, while males assist in others (Hancock 1965, Tarpay 1979, Whitehead and Glass 1985, Finley 1990, Silber et al. 1990, Jefferson et al. 1991, Pitman et al. 2001). Killer whales typically consume relatively small amounts of large cetacean carcasses before abandoning them, although this may partially result from the negative buoyancy of carcasses, which causes them to rapidly sink beyond reach (Hancock 1965, Martinez and Klinghammer 1970, Baldrige 1972, Silber et al. 1990, Guinet et al. 2000). Many accounts indicate that killer whales may preferentially feed on the tongues and lips of larger whales (Scammon 1874, Villiers 1925, Jefferson et al. 1991, George and Suydam 1998). This behavior is probably explained by the high fat content and large size (up to several metric tons) of large whale tongues (Heptner et al. 1976). Migrating gray whales with calves appear to be a favorite target, especially off California (Morejohn 1968, Jefferson et al. 1991, Goley and Straley 1994, Ford et al. 1998), with 18% of all animals (n = 316) bearing teeth marks from killer whales (Rice and Wolman 1971). According to an account by Andrews (1914), scars of this type were once present on the fins and flukes of "almost every [gray] whale." In the western North Atlantic, 33% of all humpback whales possess tooth rakes from killer whales (Katona et al. 1980). These observations indicate that many pursuits are not lethal, with such scarring perhaps resulting from killer whales testing the vulnerability of potential prey. Pitman et al. (2001) presented an especially vivid account from California of a loose aggregation of up to 35 killer whales attacking nine sperm whales aligned in a defensive rosette formation. The killer whales used a "wound and withdraw" strategy, with brief charging attacks made by four to 12 animals at a time over at least a five-hour period until two of

the sperm whales eventually became isolated from the group. At least one sperm whale was killed during the attack and several others were likely mortally wounded.

Intentional stranding is a frequent hunting tactic employed by killer whales in Argentina and some islands in the southern Indian Ocean for the purpose of capturing pinnipeds in the surf zone of beaches (Lopez and Lopez 1985, Hoelzel 1991, Guinet 1991). This method has been observed only once among transients in the northeastern Pacific (Baird and Dill 1995). Scheffer and Slipp (1948) documented a novel instance of seal hunting in Washington in which a group of killer whales intentionally rammed a log boom to knock a number of hauled-out seals into the water. Killer whales are also known to deliberately strike or tilt ice floes for the purpose of spilling seals and penguins into the water (Villiers 1925, Fraser 1949, Tomilin 1957, Pitman and Ensor 2003). Smith et al. (1981) and Pitman and Ensor (2003) described pods of killer whales swimming in unison to create waves that tipped ice floes, pitching hauled-out seals into the water.

Offshores. Little is known about the diets of offshore killer whales. They are suspected to feed primarily on fish and squid, based on their frequent use of echolocation and large group sizes (Ford et al. 2000, Heise et al. 2003).

Food requirements. Captive killer whales consume about 3.6-4% of their body weight daily (Sergeant 1969, Kastelein et al. 2000). Food intake in captive animals gradually increases from birth until about 20 years of age (Kastelein et al. 2003). For example, a captive female ate about 22 kg of fish per day at one year of age, 45 kg per day at 10 years of age, and about 56 kg per day at 18 years of age (Kastelein and Vaughan 1989, Kastelein et al. 2000). Food consumption has also been noted to increase among captive females late in pregnancy or lactating (Kastelein et al. 2003). Due to their greater activity levels, wild killer whales presumably have greater food demands than captive individuals (Kastelein et al. 2003). The energy requirements of killer whales are about 85,000 kcal per day for juveniles, 100,000 kcal per

day for immatures, 160,000 kcal per day for adult females, and 200,000 kcal per day for adult males (Kriete 1995). Baird and Dill (1996) reported a mean energy intake of 62 kcal/kg/day among wild individuals. Based on these values and an average size value for five salmon species combined, Osborne (1999) estimated that adults must consume about 28-34 adult salmon daily and that younger whales (<13 years of age) need 15-17 salmon daily to maintain their energy requirements. Extrapolation of this estimate indicates that the southern resident population eats about 750,000-800,000 adult salmon annually (Osborne 1999).

Other Behavior

In addition to foraging, killer whales spend significant amounts of time traveling, resting, and socializing (Baird and Dill 1995, Ford 2002). Limited evidence from radio-tracking and acoustic monitoring indicates that most behavior patterns are similar during day and night (Erickson 1978, Osborne 1986).

Traveling. Whales swimming in a constant direction at a slow, moderate, or rapid pace without feeding are considered to be traveling (Jacobsen 1986, Baird and Dill 1995, Ford 1989, Ford and Ellis 1999, Ford et al. 2000). This behavior is usually seen among animals moving between locations, such as desirable feeding areas. Speeds of about 10 km/hr (range = 4-20 km/hr) are maintained, which is usually significantly faster than during foraging. Traveling whales often line up abreast in fairly tight formations and commonly surface and dive in synchrony, with individuals occasionally jumping entirely out of the water. Animals are usually quite vocal while traveling, but may at times be silent. Traveling occupies about 15-31% of the total activity budget of transients, but only about 4-8% of the time of northern residents (Ford 1989, Morton 1990, Baird and Dill 1995). Southern residents reportedly spend more time traveling than northern residents (Heimlich-Boran 1988), perhaps because of longer distances between their feeding sites (Ford et al. 2000).

Resting. This behavior often follows periods of foraging. In resident groups, whales usually gather together abreast in a tight formation, with animals diving and surfacing in subdued unison (Jacobsen 1986, Osborne 1986, Baird and Dill 1995, Ford 1989, Ford et al. 2000). Individuals often arrange themselves according to matriline or pod, and offspring usually swim near or touching their mother. Forward motion is slow (mean = 3 km/hr) or stops entirely, and vocalizations often cease. Dives and surfacings become characteristically regular, with a series of several short shallow surfacings lasting 2-3 minutes followed by a longer dive of 2-5 minutes. Resting whales are usually silent, except for occasional vocalizations. Resting periods average about 2 hours, but may last from 30 minutes to 7 hours (Osborne 1986, Ford 1989). Transient whales display similar resting behavior, but spend only 2-7% of their time resting, compared to 10-21% for residents (Heimlich-Boran 1988, Ford 1989, Morton 1990, Baird and Dill 1995, Ford and Ellis 1999).

Socializing. Killer whales perform numerous displays and interactions that are categorized as socializing behaviors (Ford 1989, Ford and Ellis 1999, Ford et al. 2000). During socializing, all members of a pod may participate or just a few individuals may do so while others rest quietly at the surface or feed. Socializing behaviors are seen most frequently among juveniles and may represent a type of play (Jacobsen 1986, Osborne 1986, Ford 1989, Rose 1992). They include chasing, splashing at the surface, spyhopping, breaching, fin slapping, tail lobbing, head standing, rolling over other animals, and playing with objects such as kelp or jellyfish. Descriptions and photographs of these behaviors are presented in Jacobsen (1986) and Osborne (1986). Wave riding occasionally takes place in the wakes of vessels and on naturally generated waves (Jacobsen 1986, Ford et al. 2000), as does bow-riding in the bow waves of boats (Dahlheim 1980). Socializing behavior may involve considerable physical contact among animals. All-male subgroups commonly engage in sexual behavior, such as penile erections and nosing of genital areas (Haenel 1986, Osborne 1986, Jacobsen 1986, Ford

1989, Rose 1992). Play and sexual behavior may help adolescents, especially males, gain courtship skills (Rose 1992). Whales become especially vocal while socializing and emit a wide range of whistles and calls heard infrequently during other activities, such as foraging and resting (Ford 1989, Thomsen et al. 2002). During the summer, residents spend about 12-15% of their time engaged in socializing (Heimlich-Boran 1988, Ford 1989). Transient whales socialize less than residents and do so most often after successful hunts (Heimlich-Boran 1988, Baird and Dill 1995, Ford and Ellis 1999).

Several differences in socializing behavior have been documented among killer whale communities in the northeastern Pacific (Ford 1989, Ford et al. 2000). Beach rubbing, which involves whales visiting particular beaches to rub their bodies on smooth pebbles in shallow water (Jacobsen 1986), is common among northern residents, but has never been observed in southern residents or transients (Ford 1989, Ford et al. 2000). Southern residents perform aerial displays more frequently and with greater vigor than northern residents. They also engage more often in a greeting ceremony that occurs when pods meet after being separated for a day or more (Osborne 1986, Ford et al. 2000). During this interaction, pods approach each other in two tight lines, stop for 10-30 seconds at the surface when 10-50 m apart, then merge underwater with considerable excitement, vocalizing, and physical contact.

Courtship and mating. Courtship and mating behavior remains poorly documented among wild killer whales. Jacobsen (1986) reported some preliminary observations. In captive situations, males may court a particular estrous female for 5-10 days and have been noted to copulate with anestrous and pregnant females as well (Duffield et al. 1995). It is unknown whether similar behavior occurs in the wild.

Parturition. Stacey and Baird (1997) described various behaviors associated with the birth of a resident killer whale, which took place within a pod of 11-13 animals. An individual presumed to be the mother was seen making several rapid

rotations at the surface during a 30-second period. Birth then apparently took place underwater and was immediately followed by three pod members lifting the newborn entirely out of the water for several seconds. Unusual swimming behavior by the group, bouts of high-speed swimming and percussive activity, and additional lifting of the calf was seen during the next two hours. Bouts of nursing normally last about 5 seconds in the wild and take place both underwater and at the surface (Jacobsen 1986). In contrast, newborn calves in captivity have been observed to nurse an average of 32-34 times per day totaling 3.2-3.6 hours per day, with suckling bouts lasting a mean of 6.8-7.2 min (Kastelein et al. 2003).

Alloparental care. Non-reproductive female and male killer whales sometimes tend and give parental-like care to young animals that are not their own, a behavior known as alloparental care (Haenel 1986, Waite 1988). Older immatures are commonly the recipients of such care after their mothers give birth to new calves. Adult males have occasionally been seen to “baby-sit” groups of calves and juveniles (Haenel 1986, Jacobsen 1986).

Care-giving behavior. This behavior is directed at stricken individuals by other members of a group (Caldwell and Caldwell 1966, Tomilin 1957). Ford et al. (2000) published an account of one such incident involving a pod comprised of a male, female, and two calves in the Strait of Georgia in 1973. One of the calves was struck and severely injured by the propeller of a ferryboat. Captain D. Manuel of the ship described the event as follows:

It was a very sad scene to see. The cow and the bull cradled the injured calf between them to prevent it from turning upside-down. Occasionally the bull would lose its position and the calf would roll over on its side. When this occurred the slashes caused by our propeller were quite visible. The bull, when this happened, would make a tight circle, submerge, and rise slowly beside the calf, righting it, and then proceed with the diving

and resurfacing. While this was going on the other calf stayed right behind the injured one.

Aggressive behavior. Aggressive interactions between killer whales are rarely witnessed. Bisther (2002) reported occasional agonistic encounters involving the displacement of one killer whale pod by another at herring feeding sites in Norway, but such behavior has never been seen in the northeastern Pacific. The parallel scarring patterns seen on the backs and dorsal fins of some killer whales are suggestive of intraspecific aggression (Scheffer 1968, Greenwood et al. 1974, Jacobsen 1986, Visser 1998). However, some of these markings possibly result instead from social interactions or the defensive responses of pinnipeds (Jacobsen 1986, Ford 1989, Dahlheim and Heyning 1999).

Interactions between transients and residents. Transient killer whales are not known to interact socially with resident whales. Baird (2000) summarized evidence that members of the two communities in fact deliberately avoid one another when traveling on intersecting routes. In 11 observations where a transient and resident group approached within several kilometers of each other, the transients responded by changing their travel direction eight times, while the residents did so in three instances. However, on eight other occasions when non-intersecting courses were involved, the groups passed within several kilometers of one another without altering their paths. Reasons for avoidance are speculative, but may be related to the usually smaller group sizes of transients or to perceived threats to vulnerable calves. Residents perhaps show less evasive behavior simply because they are unaware of the presence of transient groups, which usually forage quietly. A single aggressive interaction between the two forms has been witnessed and involved about 13 residents chasing and attacking three transients (Ford and Ellis 1999).

Movements and Dispersal

Killer whale movements are generally thought to be far ranging, but detailed information on year-round travel patterns is lacking for virtually all

populations. Radio and satellite telemetry has not been used to track long-term movements because of the absence of benign techniques for restraining target animals and attaching transmitters. Researchers have instead relied on non-intrusive observational methods, especially photo-documentation and focal group following, to study population distribution and movements of individual whales. However, these techniques suffer from seasonal biases in viewing effort due to limitations in the distances that observers can travel, inclement weather, and seasonal availability of daylight (Baird 2001, Hooker and Baird 2001). A lack of photo-identification work in offshore areas is especially problematic for many monitored populations (Baird 2000). As a result, significant time gaps with few or no location data exist for all populations, including the well-studied southern and northern resident communities of Washington and British Columbia. This situation is probably responsible for some of the misperceptions regarding the migratory status of some populations.

Many killer whale populations appear to inhabit relatively well-defined seasonal home ranges linked to locations of favored prey, especially during periods of high prey abundance or vulnerability, such as fish spawning and seal pupping seasons (Jefferson et al. 1991, Reeves et al. 2002). Killer whale occurrence has been tied to migrating rorqual whales off eastern Canada (Sergeant and Fisher 1957), minke whale presence in southern oceans (Mikhalev et al. 1981, Pitman and Ensor 2003), sea lion and elephant seal pupping sites in the southwest Indian Ocean, Argentina, and North Pacific (Tomilin 1957, Norris and Prescott 1961, Condy et al. 1978, Lopez and Lopez 1985, Hoelzel 1991, Baird and Dill 1995), migrating herring (*Clupea harengus*) and other fish in the northeastern Atlantic (Jonsgård and Lyshoel 1970, Bloch and Lockyer 1988, Christensen 1988, Evans 1988, Similä et al. 1996), and returning salmon in the northeastern Pacific (Balcomb et al. 1980, Heimlich-Boran 1986a, 1988, Felleman et al. 1991, Nichol and Shackleton 1996). Defended territories have not been observed around these or other food

resources (Dahlheim and Heyning 1999, Baird 2000).

Clear evidence of annual north-south migrations has not been documented for any killer whale population (Baird 2001), although such movements are suspected among some animals visiting the Antarctic (Mikhalev et al. 1981, Visser 1999a, Pitman and Ensor 2003). Regional movement patterns are probably best known for populations in the northeastern Pacific and may be illustrative of movements occurring in other parts of the world. Both resident and transient killer whales have been recorded year-round in Washington, British Columbia, and Alaska (Heimlich-Boran 1988, Baird and Dill 1995, Olson 1998, Baird 2001). Many pods inhabit relatively small core areas for periods of a few weeks or months, but travel extensively at other times. Known ranges of some individual whales or pods extend from central California to the Queen Charlotte Islands off northern British Columbia (a distance of about 2,200 km) for southern residents, from southern Vancouver Island to southeastern Alaska (about 1,200 km) for northern residents, from southeastern Alaska to Kodiak Island (about 1,450 km) for southern Alaska residents, and from central California to southeastern Alaska (about 2,660 km) for transients (Goley and Straley 1994; Dahlheim and Heyning 1999; Krahn et al. 2002; J. K. B. Ford and G. M. Ellis, unpubl. data). Both types of whales can swim up to 160 km per day (Erickson 1978, Baird 2000), allowing rapid movements between areas. For example, members of K and L pods once traveled a straight-line distance of about 940 km from the northern Queen Charlotte Islands to Victoria, Vancouver Island, in seven days (J. K. B. Ford and G. M. Ellis, unpubl. data). Other resident pods in Alaska have journeyed 740 km in six days and made a 1,900-km round trip during a 53-day period (Matkin et al. 1997). Transients are believed to travel greater distances and have larger ranges than residents (Goley and Straley 1994, Dahlheim and Heyning 1999, Baird 2000), as reflected by maximum home range estimates of 140,000 km² for transients and

90,000 km² for residents suggested by Baird (2000). A linear distance of 2,660 km covered by three transients from Glacier Bay, Alaska, to Monterey Bay, California (Goley and Straley 1994), is the longest recorded movement by the species.

Scheffer and Slipp (1948) provided the earliest information on the areas occupied by killer whales in Washington, but were unaware at the time of the distinction between resident, transient, and offshore whales. Their report suggests that many currently preferred areas of use were also inhabited in the 1940s. They further noted that the whales moved into the waters surrounding Camano Island during salmon and herring runs, and entered Willapa Bay on rare occasions. Palo (1972) remarked that killer whales visited southern Puget Sound most often during the fall and winter. He added that the whales' preferred access route to this portion of the sound was through Colvos Passage along the west side of Vashon Island and that McNeil Island and Carr Inlet were visited annually. These sites were productive areas for salmon and herring in the 1960s (Palo 1972).

Southern residents. Photo-identification work and tracking by boats have provided considerable information on the ranges and movements of southern resident killer whales since the early 1970s. Ranges are best known from late spring to early autumn, when survey effort is greatest. During this period, all three southern resident pods are regularly present in the Georgia Basin (defined as the Georgia Strait, San Juan Islands, and Strait of Juan de Fuca) (Heimlich-Boran 1988, Felleman et al. 1991, Olson 1998, Osborne 1999), with K and L pods typically arriving in May or June and spending most of their time there until departing in October or November (Figure 5). However, during this season, both pods make frequent trips lasting a few days to the outer coasts of Washington and southern Vancouver Island (Ford et al. 2000). J pod differs considerably in its movements during this time and is present only intermittently in Georgia Basin and Puget Sound.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1976				J,K								
1977												
1978			J,K									
1979											J,K	
1980												
1981				J,K								
1982						J,K				J,K		
1983										J,K	J,K	
1984						J,K						
1985						J,K						
1986					J,K							
1987										J,K	J,K	J,K
1988					J,K							
1989			J,K							J,K	J,K	J,K
1990												
1991					J,K					J,K		
1992												
1993					J,K							
1994										J,L		
1995												
1996										J,K	J,K	
1997										J,L	J,L	
1998											J,K	
1999												
2000												
2001												
2002												
2003												J,K
2004												

Only J Pod present		Two pods present, as indicated		J, K, and L pods present		Data not available	
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Figure 5. Monthly occurrence of the three southern resident killer whale pods (J, K, and L) in the inland waters of Washington and British Columbia, 1976-2004. This geographic area is defined as the region east of Race Rocks at the southern end of Vancouver Island and Port Angeles on the Olympic Peninsula. Data come from a historical sighting archive held at The Whale Museum (2003).

While in inland waters during warmer months, all of the pods concentrate their activity in Haro Strait, Boundary Passage, the southern Gulf Islands, the eastern end of the Strait of Juan de Fuca, and several localities in the southern Georgia Strait (Figure 6; Heimlich-Boran 1988, Felleman et al. 1991, Olson 1998, Ford et al. 2000). Less time is generally spent elsewhere, including other sections of the Georgia Strait, Strait of Juan de Fuca, and San Juan Islands, Admiralty Inlet west of Whidbey Island, and Puget

Sound. Individual pods are fairly similar in their preferred areas of use (Olson 1998), although J pod is the only group to venture regularly inside the San Juan Islands (K. C. Balcomb, unpubl. data). Pods commonly seek out and forage in areas that salmon most commonly occur, especially those associated with migrating salmon (Heimlich-Boran 1986a, 1988, Nichol and Shackleton 1996). Notable locations of particularly high use include Haro Strait and Boundary Passage, the southern tip of Vancouver

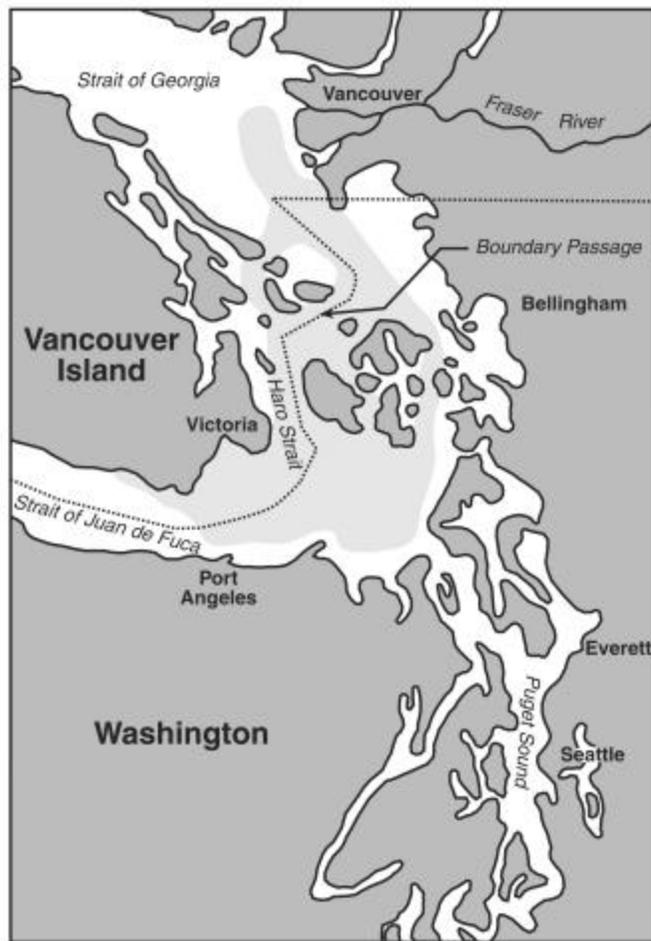


Figure 6. Primary area of occurrence (light shading) of southern resident killer whales (J, K, and L pods) when present in the Georgia Basin and Puget Sound. Adapted from Heimlich-Boran (1988), Olson (1998), and Ford et al. (2000), with additional information from D. K. Ellifrit (pers. comm.).

Island, Swanson Channel off North Pender Island, and the mouth of the Fraser River delta, which is visited by all three pods in September and October (Figure 6; Felleman et al. 1991; Ford et al. 2000; K. C. Balcomb, unpubl. data). These sites are major corridors of migrating salmon.

During early autumn, southern resident pods, especially J pod, expand their routine movements into Puget Sound to likely take advantage of chum and chinook salmon runs (Osborne 1999). In recent years, this has become the only time of year that K and L pods regularly occur in the sound. Movements into seldom-visited bodies of water may occur at this time. One noteworthy example

of such use occurred in Dyes Inlet near Bremerton in 1997. Nineteen members of L pod entered the 19-km²-sized inlet, which is surrounded by urban and residential development, on 21 October during a strong run of chum salmon into Chico Creek and remained there until 19 November, when salmon abundance finally tapered off. The reasons for this long length of residence are unclear, but may have been related to food abundance (K. C. Balcomb, pers. comm.; D. K. Ellifrit, pers. comm.) or a reluctance by the whales to depart the inlet because of the physical presence of a bridge crossing the Port Washington Narrows and associated road noise (J. Smith, pers. comm.).

Late spring to early fall movements of southern residents in the Georgia Basin have remained fairly consistent since the early 1970s, with strong site fidelity shown to the region as a whole. However, some areas of use have changed over time. Visitation of Puget Sound has diminished since the mid-1980s, whereas Swanson Channel receives noticeably more use now than in the past (K. C. Balcomb, unpubl. data). Long-term differences in the availability of salmon at particular sites are one possible explanation for these alterations. Another cause may be the deaths of certain older experienced whales that were knowledgeable of good feeding sites, but who are no longer present to direct the movements of their pods to these sites or along favored travel routes.

During the late fall, winter, and early spring, the ranges and movements of the southern residents are much more poorly known. J pod continues to occur intermittently in the Georgia Basin and Puget Sound throughout this time (Figure 5), but its location during apparent absences is unknown (Osborne 1999). Prior to 1999, K and L pods followed a general pattern in which they spent progressively smaller amounts of time in inland waters during October and November and departed them entirely by December of most years (Figure 5; Osborne 1999). Sightings of both groups passing through the Strait of Juan de Fuca in late fall suggested that activity shifted to the outer coasts of Vancouver Island and Washington, although it was unclear if the whales spent a substantial portion of their time in this area or were simply in transit to other locations (Krahn et al. 2002). Since the winter of 1999-2000, K and L pods have extended their use of inland waters until January or February each year (Figure 5). The causes behind this change are unknown, but may relate to greater food availability resulting from, for example, increased abundance of chum or hatchery chinook, or to reduced food resources along the outer coast (R. W. Osborne, pers. comm.). Thus, since 1999, both pods are completely absent from the Georgia Basin and Puget Sound only from about early or mid-February to May or June.

Areas of activity by K and L pods are virtually unknown during their absences. A small number of verified sightings of both pods have occurred along the outer coast from January to April 1976-2003, including one off Vancouver Island and two each off Washington, Oregon, and Monterey Bay, California (Black et al. 2001, Krahn et al. 2002, Monterey Bay Whale Watch 2003). There have also been several sightings of resident whales that were most likely these pods near the Columbia River mouth during April in recent years (K. C. Balcomb, unpubl. data). Almost all of these records have occurred since 1996, but this is perhaps more likely due to increased viewing effort along the coast rather than a recent change in the pattern of occurrence for this time of year. The southern residents were formerly thought to range southward along the coast only to about Grays Harbor (Bigg et al. 1990) or the mouth of the Columbia River (Ford et al. 2000). However, recent sightings of members of K and L pods in Oregon (L pod at Depoe Bay in April 1999 and Yaquina Bay in March 2000) and California (17 members of L pod and four members of K pod at Monterey Bay on 29 January 2000, and L71 and probably other L pod members at the same site on 13 March 2003) have considerably extended the southern limit of their known range (Black et al. 2001, Krahn et al. 2002, Monterey Bay Whale Watch 2003). Both Monterey sightings coincided with large runs of chinook salmon, with feeding on chinook witnessed in 2000 (K. C. Balcomb, unpubl. data).

Available information suggests that K and L pods travel to northern Vancouver Island and occasionally to the Queen Charlotte Islands during May and June. K pod has been sighted once near Tofino on the west-central coast of Vancouver Island in early May (Krahn et al. 2002). K and L pods sometimes make their initial spring entry into the Strait of Georgia via Johnstone Strait (Ford et al. 2000), implying regular movement around the northern end of Vancouver Island. On 28 May 2003, members of both pods were identified for the first time in the Queen Charlottes, when a group of 30 or more whales was viewed off Langara Island (54°15'N, 133°02'W) at the north end of the island group about 46 km south of

Alaska (J. K. B. Ford and G. M. Ellis, unpubl. data). Other records from this region include the carcass of an unidentified southern resident (recognized through genetic testing) that was found on the west coast of the Queen Charlottes in June 1995 (Ford et al. 2000) and another dead individual found off Cape Scott at the northwestern tip of Vancouver Island in May 1996 (J. K. B. Ford, pers. comm.).

Due to extensive changes in many salmon stocks along the North American west coast during the past 150 years, it is possible that the current movement patterns of the southern residents are somewhat different from those of several centuries ago. In particular, the whales may have once been regularly attracted to the Columbia River mouth, where immense numbers of salmon previously returned during their spawning migrations (K. C. Balcomb, pers. comm.).

Northern residents. This community is distributed from the Olympic Peninsula to southeastern Alaska. Some pods are seen most predictably from June to October in western Johnstone Strait and Queen Charlotte Strait, where occurrence is closely associated with salmon congregating to enter spawning rivers (Morton 1990, Nichol and Shackleton 1996, Ford et al. 2000). However, the majority of animals occur farther north during this season in passages and inlets of the central and northern British Columbia coast, in Hecate Strait and Queen Charlotte Islands, and reaching Frederick Sound in southeastern Alaska (Nichol and Shackleton 1996, Dahlheim 1997, Ford et al. 2000). Less information is available on the winter distribution of northern residents. Use of Johnstone Strait and neighboring areas declines markedly during this time (Morton 1990, Nichol and Shackleton 1996).

Most northern resident pods travel extensively within the community's overall range, as illustrated by the members of G12 pod, who moved between the Queen Charlotte Islands and Strait of Juan de Fuca from July to October 1999 (Ford et al. 2000). Some pods regularly enter the northern Georgia Strait, but movements into the southern Georgia Strait and Strait of Juan de Fuca

are quite unusual. In the summer of 2000, about 50 northern residents from C, D, H, I1, I2, and I18 pods spent several days at the southern end of Vancouver Island (Barrett-Lennard and Ellis 2001; D. K. Ellifrit, unpubl. data). The animals ventured into Washington's waters when they transited the San Juan Islands and visited the eastern end of the Strait of Juan de Fuca (D. K. Ellifrit, unpubl. data). There have also been several verified and probable sightings of the northern residents in the transboundary region off the west coasts of the Olympic Peninsula and Vancouver Island between June and October from 1996 and 2001 (J. Calambokidis, unpubl. data). Neither of the two verified sightings (involving members of C, D, G1, G12, and I11 pods) actually occurred within Washington's waters, although one was just 10 km north of the border. However, both probable records were located inside Washington, with the southernmost made about 70 km west of Ocean Shores. Northern and southern residents normally maintain separate geographic ranges during much of the year. The two communities occur sympatrically at times during the spring, when some southern residents visit northern Vancouver Island and the Queen Charlotte Islands (Osborne 1999, Ford et al. 2000).

Transients. The west coast transient community is distributed from the Los Angeles area of southern California to the Icy Strait and Glacier Bay region of southeastern Alaska (Ford and Ellis 1999; Baird 2001; Barrett-Lennard and Ellis 2001; N. A. Black, pers. comm.). Transients are considered farther ranging and more unpredictable in their daily movements than residents, but detailed information on seasonal movements is not available because of the relatively few identifications made of nearly all individuals. In contrast to the southern residents, transient patterns of occurrence show less seasonal change in abundance and distribution, which probably relates to the year-round presence of their marine mammal prey (Ford and Ellis 1999). Most sightings in Washington and around Vancouver Island occur in the summer and early fall, when viewing effort is greatest and harbor seals pup. Smaller numbers of encounters continue through

the rest of the year (Morton 1990, Baird and Dill 1995, Olson 1998, Ford and Ellis 1999).

Photo-identification records indicate some transients are regularly seen in particular sub-regions, suggesting that they inhabit preferred seasonal or annual home ranges, whereas other individuals travel across much of the community's geographic range (Ford and Ellis 1999). For example, some transient groups are encountered almost entirely within moderately sized areas of British Columbia and southeastern Alaska, with few sightings made elsewhere (Ford and Ellis 1999). The extensive movements of the T49 group illustrate a sharp contrast with this pattern. From June 1995 to April 1996, this group traveled a minimum of 5,000 km from Glacier Bay, Alaska, to the Queen Charlotte Islands and southeastern Vancouver Island, then returned to Sitka, Alaska, and finally reappeared along the west-central coast of Vancouver Island. Regional-scale movements are evident in many of the transients identified in British Columbia or Washington, with slightly more than half (111 of 206 animals) having been sighted in southeastern Alaska (Dahlheim et al. 1997, Ford and Ellis 1999). About 13% of the individuals photographed off California have been observed in Washington, British Columbia, or Alaska (Black et al. 1997). Documented examples of movements of this scale include a trip of 1,445 km between Alaska and the San Juan Islands made by two adults and a three-year-old calf during a 3.5-month span (Leatherwood et al. 1984) and another of 2,660 km between Alaska and California made by three whales (T132, T134, and T135) over a nearly three-year period (Goley and Straley 1994). Observations that some groups enter the Georgia Basin primarily in August and September during the harbor seal pupping season, while others were present throughout the year (Baird and Dill 1995), are consistent with this travel scenario. These records further suggest that some transients move in relation to specific seasonal food sources. Long gaps of many years between sighting records indicates that some transients make long-term shifts in ranges (Ford and Ellis 1999).

Transient sightings in the Georgia Basin and Puget Sound are concentrated around southeastern Vancouver Island, the San Juan Islands, and the southern edge of the Gulf Islands, with reduced activity occurring in Puget Sound and elsewhere in the Strait of Juan de Fuca and Georgia Strait (Olson 1998; K. C. Balcomb, unpubl. data). Erickson (1978) described the movements of two radio-tagged individuals (T13, T14) in this region (also see Ford and Ellis 1999). The pair was originally captured at Budd Inlet near Olympia in March 1976 and held in captivity for seven weeks during which time they were transported to Kanaka Bay on San Juan Island. Upon release, the whales traveled extensively in and around the vicinity of the San Juan and Gulf Islands during a 10-day tracking period in April and May. Daily travel distances averaged 126 km (range = 107-138 km). The animals continued to be seen off and on in the same area through September, but were also viewed at Sequim Bay and the Fraser River mouth.

One of the most interesting observations of transient occurrence in recent years in Washington was an assemblage of 11 animals from the T13, T73, and T123 groups that inhabited Hood Canal from 2 January to 3 March 2003. Hood Canal is a natural fjord-like inlet that opens into northwestern Puget Sound and measures 108 km in length by 2-4 km in width. The whales repeatedly traveled up and down much of the canal during their stay, but concentrated their activity along a stretch of important harbor seal haulouts between the Skokomish River mouth and Quilcene Bay (S. Jeffries, unpubl. data). The whales' long period of residence was likely related to the canal's large population of seals, estimated at about 1,000-1,200 animals (S. Jeffries, unpubl. data). Predation by the whales is believed to have significantly reduced seal abundance during the two-month period (J. M. London, unpubl. data). Although there was some speculation that the Hood Canal bridge at the northern end of the canal may have impeded the whales' departure, this was doubtful given the abundance of prey in the area (K. C. Balcomb, pers. comm.; S. Jeffries, pers. comm.). Prior records of killer whales in the canal are rare and involved only a few transients that remained

for short periods (J. M. London, unpubl. data). Another noteworthy facet of the visit was that it involved an adult male (T14) captured at Budd Inlet in 1976 and fitted with a radio transmitter (Erickson 1978, Ford and Ellis 1999).

Offshores. The offshore community is distributed from the area north of Los Angeles in southern California to the eastern Aleutian Islands (Ford and Ellis 1999; M. E. Dahlheim, unpubl. data; N. A. Black, pers. comm.), but movements are poorly understood due to the small numbers of verified observations. At least 20 of the approximately 200 individuals photographed in Washington, British Columbia, and Alaska have been sighted in California (Black et al. 1997; M. E. Dahlheim, unpubl. data), indicating that extensive movements may be normal in some animals. Offshore killer whales primarily inhabit offshore locations, but are also seen in nearshore coastal waters and occasionally in inland waters. Sightings were made several times in the Georgia Basin up through the mid-1990s (e.g., Walters et al. 1992), but have become annual occurrences in the past few years (K. C. Balcomb, unpubl. data). Two separate groups of offshores were recorded in late April and early May 2003, with one group of about 40 animals seen near the San Juan Islands (D. K. Ellifrit, unpubl. data; K. C. Balcomb, unpubl. data) and the other off Johnstone Strait (J. K. B. Ford, unpubl. data). Similar types of sightings are known from the inland waters of southeastern Alaska (Dahlheim et al. 1997; M. E. Dahlheim, unpubl. data) and northwestern British Columbia (J. K. B. Ford, unpubl. data).

Dispersal among residents and transients. Social dispersal, in which an animal more-or-less permanently departs its natal group to live alone or in association with unrelated individuals while remaining part of the breeding population, is believed to occur commonly in transient killer whales, with juveniles and adults of both sexes participating (Ford and Ellis 1999, Baird 2000, Baird and Whitehead 2000). In doing so, dispersing transients continue to occupy their large natal geographic ranges throughout their lives.

By comparison, resident killer whales occur in highly stable social groups and dispersal away from natal groups has never been recorded (Bigg et al. 1990, Baird 2000, Ford et al. 2000). Several instances of young solitary resident killer whales found away from their natal pods have been recorded in Washington and British Columbia (Balcomb 2002), but likely represent orphaned or poorly nurtured individuals that became separated from their pods rather than true examples of dispersal. Animals such as these are believed to usually die rather than reestablish permanent bonds with other resident whales. A73, a one-year old northern resident female, appeared in Puget Sound in late 2001 or early 2002 far from its expected range and eventually took up residence near Seattle. It remained there until being captured in June 2002, after which it was translocated back to its natal pod in Johnstone Strait. This individual suffered from declining health prior to its capture and would have likely died without human intervention. L98, a southern resident male, was discovered in Nootka Sound on western Vancouver Island in July 2001 after apparently becoming separated from L pod at about 2 years of age and has since resided alone there. It has remained healthy throughout this time, but is more threatened by interactions with humans.

Habitat Use

Killer whales frequent a variety of marine habitats with adequate prey resources and do not appear to be constrained by water depth, temperature, or salinity (Baird 2000). Although the species occurs widely as a pelagic inhabitant of open ocean, many populations spend large amounts of time in shallower coastal and inland marine waters, foraging even in inter-tidal areas in just a few meters of water. Killer whales tolerate a range of water temperatures, occurring from warm tropical seas to polar regions with ice floes and near-freezing waters. Brackish waters and rivers are also occasionally entered (Scheffer and Slipp 1948, Tomilin 1957). Individual knowledge of productive feeding areas and other special habitats (e.g., beach rubbing sites in the Johnstone Strait) is probably an important determinant in the selection

of locations visited and is likely a learned tradition passed from one generation to the next (Ford et al. 1998).

Residents. Resident and transient killer whales exhibit somewhat different patterns of habitat use while in protected inland waters, where most observations are made (Heimlich-Boran 1988, Morton 1990, Felleman et al. 1991, Baird and Dill 1995). Residents generally spend more time in deeper water and only occasionally enter water less than 5 m deep (Heimlich-Boran 1988, Baird 2000, 2001). Distribution is strongly associated with areas of greater salmon abundance (Heimlich-Boran 1986a, 1988, Felleman et al. 1991, Nichol and Shackleton 1996), but research to date has yielded conflicting information on preferred foraging habitats. Several studies have reported that southern residents feed heavily in areas characterized by high-relief underwater topography, such as subsurface canyons, seamounts, ridges, and steep slopes (Heimlich-Boran 1988, Felleman et al. 1991). Such features may limit fish movements, thereby resulting in greater prey availability, and be used by the whales as underwater barriers to assist in herding fish (Heimlich-Boran 1988). The primary prey at greater depths may be chinook salmon, which swim at depths averaging 25-80 m and extending down to 300-400 m (Candy and Quinn 1999). Other salmonids mostly inhabit the upper 30 m of the water column (Quinn and terHart 1987, Quinn et al. 1989, Ruggerone et al. 1990).

In contrast, Hoelzel (1993) reported no correlation between the feeding behavior of residents and bottom topography, and found that most foraging took place over deep open water (41% of sightings), shallow slopes (32%), and deep slopes (19%). Ford et al. (1998) described residents as frequently foraging within 50-100 m of shore and using steep nearshore topography to corral fish. Both of these studies, plus those of Baird et al. (1998, 2003), have reported that most feeding and diving activity occurs in the upper 30 m of the water column, where most salmon are distributed (Stasko et al. 1976, Quinn and terHart 1987, Quinn et al. 1989, Ruggerone et al. 1990, Olson and Quinn 1993, Nichol and Shackleton 1996,

Candy and Quinn 1999, Baird 2000). Additionally, chinook salmon occupy nearshore habitats more so than other salmonids (Stasko et al. 1976, Quinn et al. 1989). Reasons for the discrepancies between studies are unclear, but may result from interpod variation and differences in study methodology (Nichol and Shackleton 1996, Baird 2001).

Other behaviors, such as resting and socializing, are performed in open water with varied bathymetry (Heimlich-Boran 1988, Felleman et al. 1991). Habitat use patterns are poorly understood for southern resident pods visiting the outer coast.

Transients. Transient whales also occupy a wide range of water depths, including deep areas exceeding 300 m. However, transients show greater variability in habitat use than residents, with some groups spending most of their time foraging in shallow waters close to shore and others hunting almost entirely in open water (Heimlich-Boran 1988, Felleman et al. 1991, Baird and Dill 1995). Small bays and narrow passages are entered, in contrast to residents (Morton 1990). Groups using nearshore habitats often feed primarily on seals and sea lions, and concentrate their activity in shallow waters near haul-out sites. While foraging, these whales often closely follow the shoreline, entering small bays and narrow passages, circling small islets and rocks, and exploring inter-tidal areas at high tides. Transients that spend more time in open water probably prey more frequently on porpoises as well as pinnipeds.

Use of rivers. Killer whales in the northeastern Pacific occasionally enter the lower reaches of rivers while foraging. Several older instances of whales ascending up to 180 km up the Columbia River are known (Scheffer and Slipp 1948). These included a 4.1-m female that was present at Portland for several weeks in October 1931 before being killed (Shepherd 1932), two whales estimated at 6 m in length seen near Swan Island and Vancouver in October 1940, and a third possible record of a single individual near the St. John's district of Portland in March 1942. It is not known whether these animals were resident or transient whales. Use of the lower Fraser River by

resident killer whales has been reported (Baird 2001, pers. comm.) and may have involved animals in pursuit of salmon. Transients have been recently recorded in several rivers or river mouths in Oregon, including the Nehalem, Yaquina, and Coos Rivers (K. C. Balcomb, unpubl. data).

Reproduction and Growth

Much of the information on reproduction and growth in killer whales comes either from observations of animals held in captivity or from long-term photo-identification studies of the resident whale communities in Washington and British Columbia (Olesiuk et al. 1990a). Variation in these parameters can be expected in other populations (Ford 2002).

Mating system. Killer whales are polygamous (Dahlheim and Heyning 1999). Recent paternity analyses using microsatellite DNA indicate that males nearly always mate with females outside of their own pods, thereby reducing the risks of inbreeding (Barrett-Lennard 2000, Barrett-Lennard and Ellis 2001). Differences in dialects very likely assist animals in determining the degree of relatedness among prospective mating partners, with female choice probably being the major factor in the mating success of males (Ford 1989, 1991, Ford et al. 2000, Yurk et al. 2002).

Mating season and estrous activity. Most mating in the North Pacific is believed to occur from May to October (Nishiwaki 1972, Olesiuk et al. 1990a, Matkin et al. 1997). However, small numbers of conceptions apparently happen year-round, as evidenced by births of calves in all months. Data on breeding dates are ambiguous for other parts of the world (Olesiuk et al. 1990a), but can be estimated from information on parturition period.

Captive adult females experience periods of multiple estrous cycling interspersed with intervals of non-cycling (Walker et al. 1988, Robeck et al. 1993, Duffield et al. 1995). The lengths of these periods are highly variable, both within an individual and a population. Estrous cycle lengths average 42-44 days (range = 18-91 days), with an

average of four cycles (range = 1-12 cycles) during polyestrous. Non-cycling intervals last an average of 7-8 months (range = 3-16 months) (Robeck et al. 1993, Duffield et al. 1995). Profiles of reproductive hormones during ovarian cycles and pregnancy in captive females are presented by Walker et al. (1988) and Duffield et al. (1995).

Calving interval. Estimates of calving intervals, defined as the length of time between the births of surviving calves, average about 5.3 years (range = 2-14 years) in the northeastern Pacific (Olesiuk et al. 1990a, Matkin and Saulitis 1994) and range from 3.0-8.3 years in the North Atlantic and Antarctica (Christensen 1984, Perrin and Reilly 1984). Females in captivity have produced calves 2.7-4.8 years apart (Duffield et al. 1995), while Hoyt (1990) cited a captive female that gave birth 19 months after the death of her previous newborn calf. Jacobsen (1986) observed copulation in a wild female that had given birth to and then lost a calf the previous year. Several authors have suggested that birth rates in some populations may be density dependent (Fowler 1984, Kasuya and Marsh 1984, Brault and Caswell 1993, Dahlheim and Heyning 1999). However, no study has confirmed this trait among resident whales in Washington and British Columbia (Olesiuk et al. 1990a, Taylor and Plater 2001). Olesiuk et al. (1990a) reported mean annual pregnancy rates of 52.8% for females of reproductive age and 35.4% for all mature females in Washington and British Columbia. These rates are substantially higher than those published for Norway (26.3%) and the southern hemisphere (19.2%) by Dahlheim and Heyning (1999), which were calculated by different procedures.

Gestation period. Gestation periods in captive killer whales average about 17 months (mean \pm SD = 517 \pm 20 days, range = 468-539 days) (Asper et al. 1988, Walker et al. 1988, Duffield et al. 1995). Fetal development and morphology have been described in several studies (Turner 1872, Guldberg and Nansen 1894, Benirschke and Cornell 1987).

Calving season and characteristics of newborns. Among resident killer whales in the northeastern

Pacific, births occur largely from October to March, but may take place during any month (Olesiuk et al. 1990a). Parturition dates are thought to be mainly from November to February in the North Atlantic (Jonsgård and Lyshoel 1970, Evans 1988) and from January to April in the Antarctic, which corresponds there to the late austral summer (Anderson 1982). Only single calves are born. Several previous reports of twins (e.g., Olesiuk et al. 1990a, Baird 2000) have proven erroneous (Ford and Ellis 1999). Nearly all calves are born tail-first (Duffield et al. 1995). Newborns measure 2.2-2.7 m long and weigh about 200 kg (Nishiwaki and Handa 1958, Olesiuk et al. 1990a, Clark et al. 2000, Ford 2002). Heyning (1988) reported a mean length of 2.36 m in northeastern Pacific calves. Sex ratios at birth are probably 1:1 (Dahlheim and Heyning 1999). Taylor and Plater (2001) reported a sex ratio of 57% males among 65 southern resident calves born after 1973, but this did not differ significantly from a 1:1 sex ratio.

Development and growth of young. Calves remain close to their mothers during their first year of life, often swimming slightly behind and to the side of the mother's dorsal fin. Weaning age remains unknown, but nursing probably ends at 1-2 years of age (Haenel 1986, Kastelein et al. 2003). Tooth eruption begins from several to 11 weeks of age, which is about the time that calves begin taking solid food from their mothers (Haenel 1986, Asper et al. 1988, Heyning 1988, Kastelein et al. 2003). Asper et al. (1988) reported a captive calf that consumed 6.6 kg of fish per day at 5 months of age and 22 kg per day of fish and squid at 15 months of age. Another captive animal increased its food consumption from about 22 kg per day at one year of age to about 45 kg at 10 years of age (Kastelein and Vaughan 1989). As young killer whales grow older, they spend increasing amounts of time with siblings and other pod members (Haenel 1986). Juveniles are especially active and curious. They regularly join subgroups of several other youngsters and participate in chasing, leaping, and high-speed porpoising. Young males of 2-6 years of age also engage in displays of sexual behavior. Among resident whales, maternal associations slowly weaken as juveniles

reach adolescence (Haenel 1986), but typically continue well into adulthood.

Studies to date have yielded somewhat contradictory information on growth patterns of killer whales, which may partially reflect population differences and whether or not the animals were wild or captive. Christensen (1984) indicated that males and females displayed similar growth rates up to about 15 years of age, but Clark et al. (2000) found that males had lower growth rates than females during the ages of one to six. Several studies have reported linear growth rates during the first nine to 12 years for females and first 12 to 16 years in males, after which growth slows in both sexes (Bigg 1982, Duffield and Miller 1988). Annual growth rates for captive juveniles originating from the northeastern Pacific averaged 38 cm per year (range = 26-52 cm per year), but fell into two categories for animals from the North Atlantic, averaging 21 cm per year (range = 17-25 cm per year) in one group and 39 cm per year (range = 31-48 cm per year) in a second group (Duffield and Miller 1988). For youngsters one to six years of age, Clark et al. (2000) reported mean growth rates of 28 cm and 182 kg per year for males and 36 cm and 248 kg per year for females. Based on whaling data, Christensen (1984) suggested that male killer whales enter a period of sudden growth during adolescence. The validity of this finding has been questioned (Duffield and Miller 1988, Baird 2000), but measurements taken by Clark and Odell (1999) support Christensen's (1984) hypothesis. Both sexes continue to grow until physical maturity is reached at about 19-25 years of age (Olesiuk et al. 1990a, Christensen 1984, Kastelein et al. 2000). Bigg and Wolman (1975) calculated the relationship between body length and weight in both sexes of killer whale as being: $\text{weight} = 0.000208 \text{ length}^{2.577}$ (weight in kg, length in cm). Kastelein et al. (2003) noted a similar growth pattern among captive animals.

Characteristics of reproductive adults. Females achieve sexual maturity at lengths of 4.6-5.4 m, depending on geographical region (Perrin and Reilly 1984). Wild females from the northeastern Pacific give birth to their first surviving calf

between the ages of 12 and 16 years (mean = 14.9 years), but when adjusted for the high mortality rate among newborns, the probable mean age at first birth of either a viable or non-viable calf is reduced to 13.1 years (Olesiuk et al. 1990a). This latter age corresponds to a probable mean age at first conception of 11.7 years. Pubescent females may ovulate several times before conceiving, thus average age at first ovulation is probably even younger (Olesiuk et al. 1990a). Duffield et al. (1995) reported similar ages for initial births among captive females from this region, but noted a captive-born female that gave birth when 8 years old. Somewhat younger ages of 7-14 years have been reported for North Atlantic females becoming sexually mature or bearing their first calf (Christensen 1984, Duffield et al. 1995, Kastelein et al. 2003). Females produce an average of 5.4 surviving calves during a reproductive life span lasting about 25 years (Olesiuk et al. 1990a). Breeding ends at about 40 years of age. Females then enter a post-reproductive period that continues until their death. This averages about 10 years in length, but extends more than 30 years in a few individuals. Males become sexually mature at body lengths ranging from 5.2-6.4 m, which corresponds to ages of 10 to 17.5 years (mean = about 15 years) (Christensen 1984, Perrin and Reilly 1984, Duffield and Miller 1988, Olesiuk et al. 1990a). Males are presumed to remain sexually active throughout their adult lives (see Olesiuk et al. 1990a).

Survival, Longevity, and Natural Mortality

Survival. Population demography in the species is best understood for the two resident communities of Washington and British Columbia. The detailed information presented by Olesiuk et al. (1990a) was gathered when both populations were generally expanding in size. However, Krahn et al.'s (2002) recent investigation of the southern resident population, which included data from the most recent decline, demonstrated that some of these parameters are no longer accurate (see *Status in Washington and Southern British Columbia: 1974-2003*). Mortality curves are U-shaped for both sexes, although the curve is narrower for

males (Olesiuk et al. 1990a). Mortality is extremely high during the first six months of life, when 37-50% of all calves die (Bain 1990, Olesiuk et al. 1990a). Annual death rates for juveniles decline steadily thereafter, falling to 0.5% for both sexes from 10.5 to 14.5 years of age, and an estimated 77% of viable calves reach adulthood. Death rates remain low among females of reproductive age, averaging just 0-1.7% per year between 15.5 and 44.5 years (Olesiuk et al. 1990a). Mortality increases dramatically among older females, especially those beyond 65 years of age. After reaching sexual maturity, death rates for males increase throughout life, reaching 7.1% annually among individuals older than 30 years. Life history tables for the resident populations of Washington and British Columbia are presented in Olesiuk et al. (1990a).

Seasonal mortality rates among resident whales have not been analyzed, but are believed to be highest during the winter and early spring, based on the numbers of animals missing from pods returning to inland waters each spring (J. K. B. Ford, pers. comm.; K. C. Balcomb, pers. comm.).

Comparable data for transients are not available because of the difficulty in closely monitoring their population, but death rates are perhaps similar to those of residents (Ford and Ellis 1999). Killer whales held in captivity suffer considerably higher overall rates of mortality of 6.2-8.9% per year (DeMaster and Drevenak 1988, Duffield and Miller 1988, Small and DeMaster 1995).

Longevity. At birth, the average life expectancy of resident killer whales is about 29 years for females and 17 years for males (Olesiuk et al. 1990a). However, for animals that survive their first six months, mean life expectancy increases to about 50-60 years for females and 29 years for males. Life expectancy at sexual maturity (about 15 years of age in both sexes) averages about 63 years for females and 36 years for males. Maximum life span is estimated to be 80-90 years for females and 50-60 years for males (Olesiuk et al. 1990a). Reasons for the shorter longevity of males are unknown, but are probably linked to sexual selection (Baird 2000).

Natural mortality. Natural causes of death in killer whales remain largely unidentified, even in the well-investigated resident populations of Washington and British Columbia. Animals usually sink after dying, giving researchers little opportunity to conduct post-mortem examinations of carcasses. Thus, reasons for the high mortality rates among calves are not known (Baird 2000). Killer whales have no predators other than humans (Baird 2000, Ford 2002). Field observations and the lack of shark-induced scars, such as those seen on some dolphin species (Corkeron et al. 1987, Heithaus 2001), suggest that shark predation is insignificant even on young animals (Baird 2000). Visible signs of emaciation are rarely seen among resident and transient whales in Washington and British Columbia (K. C. Balcomb, pers. comm.; J. K. B. Ford, pers. comm.; R. W. Baird, pers. comm.), thus it is unknown whether these populations experience annual periods of food scarcity that might contribute to increased mortality.

Individual and mass strandings of killer whales are considered rare (Dahlheim and Heyning 1999) and usually end in the deaths of the animals. Strandings are sometimes caused when whales foraging in shallow waters become accidentally trapped by a receding tide, but other problems such as disease, parasitism, and intense human-generated sound may be involved in some cases (Perrin and Geraci 2002). Only about a dozen records of mass strandings existed worldwide through the mid-1980s, but four of these occurred in British Columbia during the 1940s (Pike and MacAskie 1969, Mitchell and Reeves 1988). These included 11 whales stranded near Masset in the Queen Charlotte Islands in January 1941 (Cameron 1941), “a number” of whales temporarily stranded at Cherry Point on Vancouver Island in September 1944 (Carl 1946), 20 whales stranded near Estevan Point on western Vancouver Island in June 1945 (Carl 1946), and five whales stranded in Von Donnop Lagoon on Cortez Island near Campbell River, Vancouver Island, in March 1949 (Pike and MacAskie 1969). Mass strandings have never been reported from Washington, but live strandings of one or two individuals occur on a rare basis. In recent years,

these have included a 2.8-m female at Port Madison in August 1970, a 4.8-m female at Ocean City in March 1973, and two adult transients (one was rescued) at Dungeness Spit in January 2002.

Killer whales inhabiting high latitudes occasionally become entrapped by wind-blown or fast-forming ice. This can force animals to remain in small pools of open water for prolonged periods (Taylor 1957, Reeves et al. 2002) and probably results in some deaths (Mitchell and Reeves 1988).

Diseases. Causes of death have been reported for killer whales held in captivity, but may not be representative of mortality in the wild. Deaths of 32 captive individuals were attributed to pneumonia (25%), systemic mycosis (22%), other bacterial infections (16%), mediastinal abscesses (9%), and undiagnosed causes (28%) (Greenwood and Taylor 1985). Little is known about infectious diseases of wild killer whales or the threat that they pose to populations. Sixteen pathogens have been identified from captive and free-ranging animals, including nine types of bacteria, four viruses, and three fungi (Gaydos et al., in press). Three of these, marine *Brucella*, *Edwardsiella tarda*, and cetacean poxvirus, were detected in wild individuals. Marine *Brucella* and cetacean poxvirus have the potential to cause mortality in calves and marine *Brucella* may cause abortion (Miller et al. 1999, Van Bresseem et al. 1999). Cetacean poxvirus also produces skin lesions, but probably does not cause many deaths in cetaceans (Van Bresseem et al. 1999). Antibodies to *Brucella* spp. were detected in a female transient that stranded at Dungeness Spit in January 2002 (Gaydos et al., in press). In 2000, a male southern resident died from a severe infection caused by *E. tarda* (Ford et al. 2000). Gaydos et al. (in press) identified an additional 27 pathogens (12 fungi, 11 bacteria, and four viruses) from other species of toothed whales that are sympatric with the southern residents and considered these as potentially transmittable to killer whales. Several, including porpoise morbillivirus, dolphin morbillivirus, and herpesviruses, are highly virulent and have the capacity to cause large-scale disease outbreaks in some related species. Disease epidemics have never been reported in killer

whales in the northeastern Pacific (Gaydos et al., in press).

Killer whales are susceptible to other forms of disease, including Hodgkin's disease and severe atherosclerosis of the coronary arteries (Roberts et al. 1965, Yonezawa et al. 1989). Tumors and bone fusion have also been recorded (Tomilin 1957). Jaw abscesses and dental disease are common problems caused by heavy tooth wear down to the gum line, resulting in exposure and infection of the pulp cavity and surrounding tissue (Carl 1946, Tomilin 1957, Caldwell and Brown 1964). Noticeable tooth wear can occur even in some younger animals (Carl 1946). Captive animals commonly suffer from abscessed vestigial hair follicles on the rostrum, a condition that can eventually spread over the entire skin surface (Simpson and Gardner 1972).

A genetic disorder known as Chediak-Higashi syndrome was diagnosed in a young transient killer whale from southern Vancouver Island in the early 1970s (Haley 1973, Taylor and Farrell 1973, Hoyt 1990, Ford and Ellis 1999). The syndrome causes partial albinism, susceptibility to infections, and a reduction in life span. Occasional reports of albino killer whales in British Columbia and Washington prior to 1960 (Scheffer and Slipp 1948, Carl 1959), including another juvenile associated with the same transient pod (Ford and Ellis 1999), likely involved other individuals with this disorder (Matkin and Leatherwood 1986).

The collapsed dorsal fins commonly seen in captive killer whales (Hoyt 1992) do not result from a pathogenic condition, but are instead thought to most likely originate from an irreversible structural change in the fin's collagen over time (B. Hanson, pers. comm.). Possible explanations for this include (1) alterations in water balance caused by the stresses of captivity or dietary changes, (2) lowered blood pressure due to reduced activity patterns, or (3) overheating of the collagen brought on by greater exposure of the fin to the ambient air. Collapsed or collapsing dorsal fins are rare in most wild populations (Hoyt 1992, Ford et al. 1994, Visser 1998, Ford and Ellis 1999)

and usually result from a serious injury to the fin, such as from being shot or colliding with a vessel. Matkin and Saulitis (1997) reported that the dorsal fins of two male resident whales in Alaska began to fold soon after their pod's exposure to oil during the *Exxon Valdez* spill in 1989 and were completely flattened within two years. Both animals were suspected to be in poor health and subsequently died.

Parasites. Relatively little information is available on the parasites of killer whales. Known endoparasites include *Fasciola skrjabini*, *Leucasiella subtilla*, and *Oschmarinella albamarina* (Trematoda), *Trigonocotyle spasskyi* and *Phyllobothrium* sp. (Cestoda), *Anasakis simplex* and *A. pacificus* (Nematoda), and *Bolbosoma physeteris* and *B. nipponicum* (Acanthocephala) (Dailey and Brownell 1972, Heptner et al. 1976, Heyning 1988, Gibson and Bray 1997). These are transmitted primarily through the ingestion of infected prey (Baird 2000). An estimated 5,000 unidentified nematodes were reported in the stomach of a resident whale from Washington (Scheffer and Slipp 1948). The forestomach of a calf estimated at 1-2 months of age in California contained numerous *Anasakis simplex* worms, indicating that infections can begin at an early age (Heyning 1988). Ectoparasites are infrequently found and include the whale lice *Cyamus orcini*, *C. antarcticensis*, and *Isocyamus delphinii* (Amphipoda) (Leung 1970, Berzin and Vlasova 1982, Wardle et al. 2000). Most external parasites are probably transmitted through body contact with other individuals, such as during social encounters and mother-young interactions (Baird 2000). No severe parasitic infestations have been reported in killer whales in the northeastern Pacific.

Several types of commensal organisms associate with killer whales. Barnacles (*Xenobalanus globicipitis* and *Cryptolepas rhachianecti*) growing on the rostrum and trailing edges of the flukes and dorsal fin are rare in most populations (Samaras 1989, Dahlheim and Heyning 1999), but are present on many Mexican killer whales (Guerrero-Ruiz 1997, Black et al. 1997). Remoras

rarely attach themselves to killer whales (Fertl and Landry 1999, Guerrero-Ruiz and Urbán 2000). Diatoms have also been found on the skin (Hart 1935, Nemoto et al. 1980).

Human-Related Sources of Mortality and Live-Captures

Aboriginal harvest. The extent that indigenous peoples hunted killer whales in the past is poorly documented. There is no tradition of hunting killer whales in the Canadian Arctic (Reeves and Mitchell 1988b) or along the Pacific coast (Olesiuk et al. 1990a). Hoyt (1990) stated that a general taboo against killing the species was widespread among coastal North American tribes, based on the fear that surviving whales would avenge the deaths of pod members. Nevertheless, the Makah in Washington are known to have occasionally caught killer whales and considered their meat and fat superior to that of baleen whales (Scammon 1874). The species was not hunted by the neighboring Quillayute (Scheffer and Slipp 1948). Carl (1946) reported that the Nootka on Vancouver Island ate the meat and oil from killer whales, but it was unclear whether these were obtained through active hunting or only from beached animals. Small-scale harvesting of killer whales continues in Greenland (Heide-Jørgensen 1988, MacLean et al. 2002), Indonesia (Ellis 2002), St. Vincent and the Grenadines in the Caribbean (International Whaling Commission 2003), and perhaps elsewhere (Reeves and Leatherwood 1994). This is generally accepted as a form of subsistence harvest even though native hunters have increasingly adopted modern weaponry and forms of transport and sold their products for cash.

Commercial exploitation. The first records of commercial hunting of killer whales date back to the 1700s in Japan (Ohsumi 1975). During the 19th and early 20th centuries, the global whaling industry harvested immense numbers of baleen and sperm whales, but largely ignored killer whales because of their limited amounts of recoverable oil, their smaller populations, and the difficulty that whalers had in capturing them (Scammon 1874, Scheffer and Slipp 1948, Budker

1958, Reeves and Mitchell 1988a). Killer whales were taken once in a while during lulls in the hunting of other species, mainly to keep whaling crews active or to help offset the financial loss of a voyage (Bockstoce 1986, Reeves and Mitchell 1988a). No killer whales were reported among the nearly 25,000 whales processed by coastal whaling stations in British Columbia from 1908-1967 (Gregs et al. 2000). Similarly, none were among the 2,698 whales handled at the Bay City whaling plant in Grays Harbor, Washington, during its 14 years of operation from 1911-1925 (Scheffer and Slipp 1948, Crowell 1983).

Tomilin (1957) reported that medium to large-sized killer whales produce 750-950 kg (4.4-5.6 barrels) of oil per animal. However, as pointed out by Reeves and Mitchell (1988a), this was the amount obtained from the processing of an entire carcass, as performed on Russian whaling ships in the 20th century. Whalers during the 19th century were capable of rendering only the blubber into oil, resulting in a more typical yield of two barrels per whale. Both amounts were far less than the average of 30-45 barrels of whale oil derived from sperm whales and most baleen whales in the 1800s (Bockstoce 1986).

From the 1920s to 1940s, small whaling fisheries were developed or became more sophisticated in several countries, primarily Norway, the Soviet Union, and Japan, resulting in greater hunting pressure on smaller whales, dolphins, and killer whales (Jonsgård and Lyshoel 1970, Mitchell 1975, Ohsumi 1975, Øien 1988). Available harvest statistics indicate that each of these countries killed an average of about 43-56 killer whales annually from the 1940s to 1981, with most animals taken from the North Atlantic (total = 2,435 whales), Antarctic and southern oceans (1,681 whales), Japanese coastal waters (1,534 whales), and Soviet far east (301 whales) (Ohsumi 1975, Øien 1988, Hoyt 1990). An exceptional harvest of 916 whales in the Antarctic by the Soviets during the 1979-1980 whaling season (Berzin and Vladimirov 1983) resulted in the International Whaling Commission (IWC) establishing a moratorium on the taking of killer whales by factory ships the following year

(Anonymous 1981). It should be noted that some of the official harvest data from this era are erroneous. Between the late 1940s and early 1970s, the Soviet Union over-reported the number of killer whales harvested (482 animals reported as taken versus 124 animals actually taken) to conceal massive illegal catches of more desirable baleen species (Brownell and Yablokov 2002). Japan also falsified (i.e., probably under-reported) catch statistics on a smaller scale for some species, which may have included killer whales. Furthermore, catch data would likely exclude any wounded animals that escaped and eventually died. Norway and Russia discontinued their harvests in the early 1980s and Japan did so in the early 1990s. The only killer whales reported as commercially taken in the northeastern Pacific from the 1940s to early 1980s were a single animal in British Columbia in 1955 (Pike and MacAskie 1969) and five whales in California between 1962 and 1967 (Carretta et al. 2002). Although the commercial harvests of this period likely reduced killer whale abundance in some regions of the world, they probably had no impact on most populations in the northeastern Pacific. The current numbers of killer whales hunted for profit are probably quite small (Reeves and Leatherwood 1994, Baird 2001), but documentation is lacking. Several countries belonging to the IWC, such as Japan, may not include killer whales in their harvest reports because they are considered “small cetaceans” outside the jurisdiction of the IWC (Baird 2001). A few animals may also be killed by non-IWC countries and go unreported.

Killer whales taken by small whale fisheries generated several products of minor economic importance. In Norway and Russia, the meat was used as animal feed, while the oil and skin had other uses (Tomilin 1957, Jonsgård and Lyshoel 1970). In Japan, the fresh meat was utilized for human consumption, whereas aged meat and viscera were used as fertilizer and bait (Nishiwaki and Handa 1958, Ohsumi 1975).

Mortality associated with killer whale depredation. As with other large and highly visible predators, killer whales historically

generated a variety of negative emotions among people, ranging from general dislike to fear and outright hatred. Such feelings were most prevalent among fishermen, whalers, sealers, and sportsmen, and largely stemmed from perceived competition over prey resources, damage caused to fishing gear and captured baleen whales, and the belief that killer whales scared off other marine mammals that were potentially harvestable. As a result, killer whales were widely persecuted to varying extents. Shooting was probably the most popular method of responding to nuisance animals (Bennett 1932, Budker 1958, Heptner et al. 1976) and likely resulted in the loss of substantial numbers of whales in some localities so that significant population declines may have occurred (Lien et al. 1988, Olesiuk et al. 1990a). Governments sometimes supported the use of lethal control measures on killer whales, as seen in the establishment of a bounty in Greenland from 1960-1975 (Heide-Jørgensen 1988), the recommendations of Russian scientists to conduct large-scale culling programs to protect seal populations for human harvest (Tomilin 1957), and the opportunistic shooting of whales by fisheries department personnel in British Columbia (Ford et al. 2000, Baird 2001). Animosity against killer whales reached an extreme in the mid-1950s, when the U.S. military reportedly killed “hundreds” over a several-year period in Icelandic waters at the request of the Icelandic government in an effort to reduce predation on herring and damage to fishing equipment (Anonymous 1954, 1956, Vangstein 1956, Dahlheim 1981, Hoyt 1990). Hoyt (1990) also reported that the U.S. Air Force practiced strafing runs against killer whales in the North Atlantic in 1964.

Negative attitudes toward killer whales have abated in recent decades, but often persist where interference with fishing activities occurs (Klinowska 1991, Matkin and Saulitis 1997). Conflicts with longline fishing operations are common in a number of regions (Rice and Saayman 1987, Yano and Dahlheim 1995a, 1995b, Ashford et al. 1996, Secchi and Vaske 1998, Visser 2000a, Whale and Dolphin Conservation Society 2002), but net fisheries are also affected,

including gillnetting and purse seining (Young et al. 1993). Longline losses to whales can be extensive and reach 50-100% of the catch in extreme cases. As a result, fishermen frequently resort to shooting at killer whales or harassing them with small underwater explosives (“seal bombs”) in an effort to drive off the whales (Matkin 1986, Hoyt 1990, Dahlheim and Matkin 1994, Yano and Dahlheim 1995a, Visser 2000a). Many bullet wounds are probably non-fatal, but accurate information on wounding and killing rates is difficult to obtain.

Deaths from deliberate shooting were probably once relatively common in Washington and British Columbia (Scheffer and Slipp 1948, Pike and MacAskie 1969, Haley 1970, Olesiuk et al. 1990a, Baird 2001). As an indication of the intensity of shooting that occurred until fairly recently, about 25% of the killer whales captured in Puget Sound for aquaria through 1970 bore bullet scars (Hoyt 1990). Shootings have tapered off since then (Hoyt 1990, Olesiuk et al. 1990a, Baird 2001) and only several resident animals currently show evidence of bullet wounds to their dorsal fins (Bigg et al. 1987, Ford et al. 2000). One northern resident, a matriarchal female, died from being shot in 1983 (Ford et al. 2000). Deliberate killings associated with fishery interactions are currently considered insignificant at a population level throughout the northeastern Pacific (Young et al. 1993, Carretta et al. 2001), but may be more prevalent than reported.

Incidental human-related mortality. Drowning from accidental entanglement in nets and longlines is an additional minor source of fishing-related mortality in killer whales. Scheffer and Slipp (1948) documented several deaths of animals caught in gillnets and salmon traps in Washington between 1929 and 1943. Whales are occasionally observed near fishing gear in Washington, British Columbia, and much of Alaska, but current evidence indicates that entanglements and deaths are rare (Bigg and Wolman 1975, Barlow et al. 1994, Matkin and Saulitis 1994, Pierce et al. 1996, Carretta et al. 2001, 2002). One individual is known to have contacted a salmon gillnet in British Columbia in 1994, but did not entangle

(Guenther et al. 1995). Typically, killer whales are able to avoid nets by swimming around or underneath them (Jacobsen 1986). Not all entanglements result in death.

In rare instances, killer whales are injured or killed by collisions with passing ships and powerboats, primarily from being struck by the propeller blades (Visser 1999c, Visser and Fertl 2000, Baird 2001, Carretta et al. 2001). Some animals with severe injuries eventually make full recoveries, such as a female described by Ford et al. (2000) that showed healed wounds extending almost to her backbone. Only one mortality from a vessel collision is known to have occurred in Washington and British Columbia during the past 40 years (Baird 2002). Two accidents between vessels and killer whales were documented in the region during the 1990s (Baird 2001). One took place on the Washington side of Haro Strait in 1998 and involved a slow moving boat that apparently did not injure the whale. In 1995, a northern resident was struck by a speedboat, causing a wound to the dorsal fin that quickly healed.

Major oil spills are potentially catastrophic to killer whales and their environment. During the three years following the massive *Exxon Valdez* oil spill in Prince William Sound, Alaska, in 1989, the main resident pod frequenting the spill area lost 14 of its 36 members, a mortality rate that is unprecedented for the northeastern Pacific (Dahlheim and Matkin 1994, Matkin et al. 1994). However, because carcasses of missing animals were never located and other causes of death, such as natural mortality and killing by fishermen, could not be ruled out, researchers were unable to directly attribute the deaths to oil contamination. A transient group (the AT1 pod) that lived near the spill also lost at least nine of its members within 1-2 years (Matkin and Saulitis 1997). However, five other resident pods seen swimming through oil-sheened waters did not experience losses during the same period.

Live-captures for aquaria. Interest in the live-capture of killer whales for public display in aquaria began in southern California in 1961, when Marineland of the Pacific captured a

disoriented individual in California, which died shortly after (Bigg and Wolman 1975). An attempt to obtain a replacement animal followed at Haro Strait in 1962, but this ended in the deaths of a female and possibly an accompanying male (Hoyt 1990). However, in 1964 and 1965, single whales were caught and held for periods of 3 and 12 months at the Vancouver Public Aquarium and Seattle Marine Aquarium, respectively, resulting in much publicity and demonstrating the species' highly appealing qualities when held in captivity. The development of a netting technique in 1965, the initiation of commercial netting operations in 1968, and an immediate demand for captive animals led to large increases in capture effort in Washington and British Columbia beginning in 1967 (Bigg and Wolman 1975).

Operators captured most whales by following a pod until it entered an appropriate bay, where netting could be done (Bigg and Wolman 1975). Nets were then quickly placed across the bay's entrance or pursed around the pod. The whales were held for several days or longer, which allowed them to calm down and be sorted for permanent keeping or release. Puget Sound was preferred as a capture site because it offered fewer escape routes and a number of bays with shallower waters, both of which aided netting efforts, and it had a large network of shore-based observers that provided movement updates on the whales (Bigg and Wolman 1975). Important capture sites (Table 2) included Penn Cove on Whidbey Island (102-113 whales captured), Carr Inlet at the southern end of the Kitsap Peninsula (60-70 whales captured), and Yukon Harbor on the eastern side of the Kitsap Peninsula (40-48 whales captured). During these efforts, many individual whales were caught multiple times.

From 1962-1977, 275-307 whales were captured in Washington and British Columbia, of which 55 were transferred to aquaria, 12 or 13 died during capture operations, and 208-240 were released or escaped back into the wild (Table 2). However, these figures exclude a few additional deaths that were never made public (K. C. Balcomb, pers. comm.). Most (224-256) of the captures occurred in Washington, with 31 whales collected for

aquaria and at least 11 dying (Table 2). Peak harvest years occurred from 1967-1971, when 80% of the retained whales were caught. Due to public opposition (e.g., Haley 1970), capture operations declined significantly after 1971, with only eight whales removed beyond this date. The British Columbia provincial government prohibited further live-captures in 1975, although an injured female calf was sent to an aquarium for permanent rehabilitation in August 1977 (Hoyt 1990, Dahlheim and Heyning 1999). In 1982, the British Columbia government issued a final license to capture killer whales in Pedder Bay, but the license holder was unable to catch any whales because none entered the bay (R. W. Baird, pers. comm.). The Washington State Senate passed a resolution (Senate Resolution 1976-222) requesting the U.S. federal government to establish a moratorium on harassment, hunting, and live-capture of the species in 1976 after six transient whales were caught in Budd Inlet, Olympia (see Hoyt [1990] for an account of the events surrounding this capture). The total revenue generated from the sale of captured whales probably exceeded \$1,000,000, with the prices of individual animals ranging from about \$8,000 in 1965 to \$20,000 in 1970 (Bigg and Wolman 1975).

Based on slightly updated information from that presented by Olesiuk et al. (1990a), 70% (47 or 48 animals) of the whales retained or killed were southern residents, 22% (15 animals) were northern residents, and 7% (5 animals) were transients. For the southern resident community, collections and deaths were biased toward immature animals (63% of the total) and males (57% of identified animals). Removed whales included 17 immature males, 10 immature females, nine mature females, seven or eight mature males, and four (three immatures, one adult) individuals of unknown sex. Only 15 of the whales were subsequently identified by pod, with nine animals coming from K pod, five from L pod, and one from J pod (Bigg 1982). These removals substantially reduced the size of the southern resident population, which did not recover to estimated precapture numbers until 1993 (Baird 2001). Furthermore, selective removal of younger

Table 2. Number of killer whales captured, retained for captivity, and killed during capture from 1962-1977 in Washington and British Columbia (Bigg and Wolman 1975, Asper and Cornell 1977, Hoyt 1990, Olesiuk et al. 1990a).

Date ^a	Location	No. of whales caught ^b	No. of whales retained	No. of whales dying
<u>Southern residents</u>				
Sept 1962	Haro Strait, Wash. ^c	1 ^{d,e}	0	1-2 ^{d,e}
Oct 1965	Carr Inlet, Wash.	15	1	1
Feb 1967	Yukon Harbor, Wash.	15 ^e	5	3
Feb 1968	Vaughn Bay, Wash.	12-15	2	0
Oct 1968	Yukon Harbor, Wash.	25-33	5	0
Apr 1969	Carr Inlet, Wash.	11 ^e	2	0
Oct 1969	Penn Cove, Wash.	7-9 ^e	0	1
Feb 1970	Carr Inlet, Wash.	6-14 ^e	1	0
Aug 1970	Penn Cove, Wash.	80	7	4
Aug 1970	Port Madison, Wash.	1 ^{e,f}	1	0
Aug 1971	Penn Cove, Wash.	15-24	3	0
Nov 1971	Carr Inlet, Wash.	19	2	0
Mar 1972	Carr Inlet, Wash.	9-11	1	0
Mar 1973	Ocean City, Wash.	1 ^f	1	0
Jul 1964	Saturna Island, B.C.	1	1	0
Jul 1966	Steveston, B.C.	1 ^e	0	1
Aug 1973	Pedder Bay, B.C.	2	1	0
Aug 1973	Pedder Bay, B.C.	2	2	0
Aug 1977	Menzies Bay, B.C.	1 ^e	1	0
	Subtotal	224-256	36	11-12
<u>Northern residents</u>				
Jun 1965	Namu, B.C.	2	1	0
Jul 1967	Port Hardy, B.C.	1	1	0
Feb 1968	Pender Harbour, B.C.	1	0	0
Apr 1968	Pender Harbour, B.C.	7	6	0
Jul 1968	Malcolm Island, B.C.	11 ^g	1	0
Dec 1969	Pender Harbour, B.C.	12	6	0
	Subtotal	34	15	0
<u>Transients</u>				
Mar 1976	Budd Inlet, Wash.	6	0	0
Mar 1970	Pedder Bay, B.C.	5	2 ^h	1
Aug 1975	Pedder Bay, B.C.	6	2	0
	Subtotal	17	4	1
Total		275-307	55	12-13

^a Captures are listed chronologically for Washington, followed by British Columbia.

^b The exact numbers of whales caught in Washington were often not known due to poor record keeping and the difficulty in counting the numbers of individuals present in large groups (M. A. Bigg in Hoyt 1990).

^c The exact location in Haro Strait is not known (Hoyt 1990), but is presumed here to have been in Washington.

^d An adult female was shot and killed after being captured, but an adult male was also shot once during the incident (Hoyt 1990). Olesiuk et al. (1990a) presumed that the male also died, but based on Hoyt's (1990) account, there is no conclusive evidence of this.

^e Presumed to be southern residents (Olesiuk et al. 1990a).

^f Captured after stranding (Bigg and Wolman 1975).

^g Presumed to be northern residents (Olesiuk et al. 1990a).

^h Bigg and Wolman (1975) and Asper and Cornell (1977) listed three whales as being retained from this capture, but the accounts of Hoyt (1990) and Ford and Ellis (1999) disclosed the death of an adult female from apparent malnutrition in its holding pen. Her carcass was then secretly disposed of.

animals and males produced a skewed age- and sex-composition in the population, which probably worked to slow later recovery (Olesiuk et al. 1990a).

Although live-captures of killer whales ceased in the northeastern Pacific after 1977, the demand for captive individuals by aquaria continued. From 1976-1997, 55 whales were taken from the wild in Iceland, 19 from Japan, and three from Argentina (Sigurjónsson and Leatherwood 1988, Hoyt 1990, OrcaInfo 1999). These figures exclude any animals that may have died during capture. The value of captured animals rose to \$200,000-300,000 per whale by 1980 (Hoyt 1990) and is now estimated at up to \$1 million (Whale and Dolphin Conservation Society 2003). Live-captures fell dramatically in the 1990s, and by 1999, about 40% of the 48 animals on display in the world were captive born (OrcaInfo 1999). Captures temporarily ended in 1997, but resumed in September 2003, when one young whale was caught and another accidentally killed in the Russian Far East (Whale and Dolphin Conservation Society 2003). The Russian government authorized the capture of up to 10 killer whales from this region in 2003. Currently, killer whales are reported to be the third most widely kept species of toothed whale in the world's aquaria after bottlenose dolphins (*Tursiops truncatus*) and belugas (Kastelein et al. 2003).

POPULATION STATUS

Global Status: Past and Present

Little information on the former abundance of killer whales is currently available from any portion of their range. Scammon (1874), who worked primarily in the northeastern Pacific, considered the species as "not numerous" in comparison to other delphinids, but anecdotal remarks such as this provide little basis for recognizing even gross changes in population levels during the past 200 years. Nevertheless, it is likely that many populations have declined significantly since 1800 in response to greatly

diminished stocks of fish, whales, and pinnipeds in the world's oceans (Reeves and Mitchell 1988a).

Killer whales have proven difficult to census in many areas because of their general scarcity as well as their widespread and often unpredictable movement patterns (Ford 2002). Many older characterizations of relative abundance may well reflect the amount of observation effort rather than actual differences in density among sites (Matkin and Leatherwood 1986). During the past few decades, populations have been surveyed primarily through the use of photo-identification studies or line-transect counts. Photo-identification is capable of providing precise information on population size, demographic traits, and social behavior (Hammond et al. 1990), making it the preferred method in locations where the species is regularly seen. It requires intensive effort spread over multi-year periods and, due to the species' mobility, should be conducted over large geographic areas to obtain accurate results. Photo-identification catalogs for killer whales were first established in the early 1970s for the resident communities of Washington and British Columbia (Balcomb et al. 1980, Sugarman 1984, Bigg et al. 1987, van Ginneken et al. 1998, 2000, Ford and Ellis 1999, Ford et al. 2000) and have since been initiated for most areas where population studies have been undertaken. Other published catalogs exist for Alaska (Heise et al. 1991, Dahlheim 1997, Dahlheim et al. 1997, Matkin et al. 1999a), California and parts of Mexico (Black et al. 1997), and Patagonia (Bubas 2003). All photographic surveys rely on recognition of individual animals through their distinctive dorsal fins and saddle patches, although eye-patch traits are sometimes used to supplement identification (Baird 1994, Visser and Mäkeläinen 2000). Line-transect surveys from ships or aircraft have generally been undertaken in large areas of open ocean where photo-identification is impractical. The results of line-transect surveys are almost always accompanied by large confidence limits, making it difficult to establish true population sizes and to compare trends over time. Furthermore, the technique is unsuited for gathering most demographic data.

As top-level predators, killer whales occur in low densities throughout most of their geographic range. Densities are considered greater in colder waters than in tropical regions. Reeves and Leatherwood (1994) reported the worldwide population as probably exceeding 100,000 whales, based on information presented in Klinowska (1991), but this was undoubtedly an overestimate influenced by preliminary count data from the Antarctic. A number of regional abundance estimates have been made in recent years, with emerging evidence suggesting that many populations are relatively small (Whale and Dolphin Conservation Society 2002). In the northeastern Pacific, about 1,150-1,500 resident, transient, and offshore whales are currently thought to exist from California to the eastern Aleutian Islands of Alaska (Ford et al. 2000, Barrett-Lennard and Ellis 2001). Other estimates for northern populations include about 400-650 animals in the Bering Sea (Waite et al. 2002), 1,900 animals in Japan (Miyashita cited in Dahlheim and Heyning 1999), 500-1,500 animals in Norwegian coastal waters (Christensen 1988), and about 190 whales off Iceland (Klinowska 1991). New Zealand's entire population is believed to number fewer than 200 animals (I. N. Visser, unpubl. data). A recent population estimate of about 25,000 killer whales in Antarctica (Branch and Butterworth 2001) is considered much more accurate than earlier projections (Hammond 1984; Butterworth et al. 1994; T. A. Branch, pers. comm.). Densities in this region are highest near the ice edge (Kasamatsu et al. 2000). An estimate of 8,500 killer whales for the eastern tropical Pacific, as derived from shipborne surveys (Wade and Gerrodette 1993), is probably too large, given the general opinion that densities are substantially reduced at lower latitudes. Abundance in many other areas remains poorly investigated (Whale and Dolphin Conservation Society 2002). Trend information is lacking for virtually all populations other than the resident communities of the northeastern Pacific.

Status in Washington and Southern British Columbia: Before 1974

Several lines of evidence argue that the southern resident community may have numbered more than 200 whales until perhaps the mid- to late-1800s (Krahn et al. 2002), when Euro-American settlement began to impact the region's natural resources. Recent genetic investigations using microsatellite DNA reveal that the population retains a somewhat similar amount of genetic diversity as the northern residents (Barrett-Lennard 2000, Barrett-Lennard and Ellis 2001), indicating that the two were possibly once similar in size. This scenario would be unlikely if the southern resident population had remained small for many generations, which would have caused a gradual loss of genetic diversity. The presence of relatively few acoustic clans and pods in the southern residents (1 clan, 3 pods), as compared to the northern (3 clans, 16 pods) and southern Alaska residents (2 clans, 11 pods), also infers that the southern population was once larger (Krahn et al. 2002). Finally, reductions in salmon and other prey along much of the west coast of North America during the past 150 years, especially from Washington to California (Nehlsen 1997, Kope and Wainwright 1998), have very likely lessened the region's carrying capacity for resident killer whales (Krahn et al. 2002) and caused a decline in southern resident abundance.

Efforts to determine killer whale population trends in Washington and southern British Columbia during the past century are hindered by an absence of empirical information prior to 1974. A report by Scheffer and Slipp (1948) is the only older account to mention abundance in Washington. It noted that the species was "frequently seen" in the Strait of Juan de Fuca, northern Puget Sound, and off the coast of the Olympic Peninsula, with smaller numbers occurring farther south along the outer coast. Palo (1972) put forth a tentative estimate of 225-300 whales for Puget Sound and the Georgia Basin in 1970, but was admittedly unsure of the figure's validity. Olesiuk et al. (1990a) modeled population sizes of the southern and northern resident communities for the periods between 1960 and 1973 or 1974. Both

populations were projected as increasing from 1960 to 1967 or 1968, with the southern residents expanding from about 78 to 96 whales and the northern residents growing from about 97 to 120 whales (Figure 7, Appendix A). This was probably a result of both populations recovering from the opportunistic shooting that was widespread before 1960 (see *Mortality Associated with Killer Whale Depredation*) and other human impacts, or may have been caused by some unidentified improvement in the region's capacity to support the whales (Olesiuk et al. 1990a). A second but much cruder method of estimating population size in the mid-1960s is to add the numbers of whales collected and killed during the live-capture fishery to the numbers of animals tallied in the initial censuses of the southern and northern resident communities in the mid-1970s. This would produce estimates of roughly 117 and 147 whales in the two populations, respectively.

Beginning in about 1967, removals of whales by the live-capture fishery caused immediate declines

in both populations (see *Live-Captures for Aquaria*). Southern resident numbers were most affected, falling an estimated 30% to about 67 whales by 1971, whereas the northern residents decreased by an estimated 10% to about 108 whales by 1970 (Olesiuk et al. 1990a). Removals from the southern resident community are known to have included nine animals from K pod, five from L pod, and one from J pod (Bigg 1982). Northern resident takings included six known and six suspected whales from A5 pod, one from C1 pod, and one from I11 pod (Bigg 1982).

Transient whales also suffered serious prey losses between the late 1800s and late 1960s, and very likely experienced a sizable decrease in abundance as a result (Ford and Ellis 1999, Springer et al. 2003). During this period, overhunting caused dramatic declines or extirpations in pinniped and large whale populations in British Columbia and adjacent areas. By about 1970, it is estimated that harbor seal and Steller's sea lion populations in the province had fallen to about 10% and 25-33%,

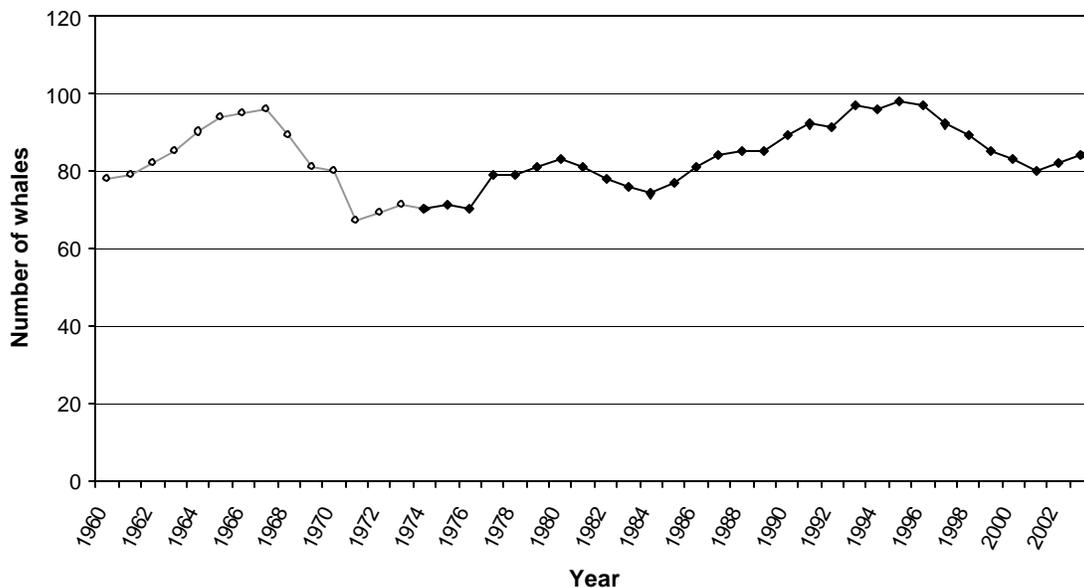


Figure 7. Population size and trend of southern resident killer whales, 1960-2003. Data from 1960-1973 (open circles, gray line) are number projections from the matrix model of Olesiuk et al. (1990a). Data from 1974-2003 (diamonds, black line) were obtained through photo-identification surveys of the three pods (J, K, and L) in this community and were provided by the Center for Whale Research (unpubl. data). Data for these years represent the number of whales present at the end of each calendar year.

respectively, of historic levels (Olesiuk et al. 1990b, Ford and Ellis 1999). Similar reductions in pinniped numbers occurred elsewhere between southeastern Alaska and California (Scheffer 1928, Bonnot 1951, Newby 1973, Jeffries et al. 2003). Whale populations crashed even more severely and have never recovered in most cases. Historical whaling data show that resident humpback and possibly fin whale populations formerly existed in the coastal waters of British Columbia and Washington, sei and blue whales once migrated past Vancouver Island, and sperm whales previously mated and calved in the region (Scheffer and Slipp 1948, Gregr et al. 2000).

Status in Washington and Southern British Columbia: 1974-2003

Southern residents. Photo-identification studies have been the foundation of all killer whale population research in Washington and British Columbia since the early 1970s. Annual censuses of the southern residents were initiated by Michael Bigg of Canada's Department of Fisheries and Oceans in 1974 (Bigg et al. 1976). The Center for Whale Research assumed responsibility for the counts in 1976 (Balcomb et al. 1980) and has directed them since then. The surveys are typically performed from May to October, when all three pods reside near the San Juan Islands, and are considered complete censuses of the entire community. It should be noted that small discrepancies in the annual count totals of the southern residents (e.g., see Ford et al. [2000], Baird [2001], Taylor and Platt [2001], Krahn et al. [2002], and Appendix A of this report) are due in part to differences in the reporting times of yearly numbers and whether or not whales that died were tallied during the year of their death. The count criteria used in this report appear in Figures 7 and 8 and Appendix A.

The population has gone through several periods of growth and decline since 1974 (Figure 7, Appendix A), when live-captures were ending and numbers were judged as beneath carrying capacity (Olesiuk et al. 1990a). Between 1974 and 1980, total whale numbers expanded 19% (mean annual growth rate of 3.1%) from 70 to 83 animals. J and

L pods grew 27% and 26%, respectively, during this period, whereas K pod decreased by 6%.

This was followed by four consecutive years of decrease from 1981-1984, when count results fell 11% (mean annual decline rate of 2.7%) to 74 whales. The decline coincided with periods of fewer births and greater mortality among adult females and juveniles (Taylor and Plater 2001). A distorted age- and sex-structure, likely caused by the selective cropping of animals during live-captures 8-17 years earlier, also appears to have been a significant factor in the decline (Olesiuk et al. 1990a). This resulted in fewer females and males maturing to reproductive age and a reduction in adult males that was possibly below the number needed for optimal reproduction. An unusually large cohort of females that stopped bearing young also played a role in the decline (Olesiuk et al. 1990a). Pod membership during this period dropped by 12% for L pod, 11% for J pod, and 7% for K pod.

In 1985, the southern residents entered an 11-year growth phase, which began with a drop-off in deaths and a pulse in births caused partly by the maturation of more juveniles (Taylor and Plater 2001). Total numbers eventually peaked at 98 animals in 1995 (Figure 7, Appendix A), representing an increase of 32% (mean annual growth rate of 2.9%) in the population. Pod growth during the period was 37% in L pod, 36% in K pod, and 29% in J pod.

The southern resident community entered yet another period of decline in 1996, with an 18% reduction (mean annual decline rate of 3.1%) in numbers occurring by 2001, when 80 whales remained (Figure 7, Appendix A). This decline appears to have resulted more from an unprecedented 9-year span of relatively poor survival in nearly all age classes and both sexes than from an extended period of poor reproduction (Krahn et al. 2002). All three pods suffered reductions in membership during this period, with L pod falling 28%, J pod 14%, and K pod 11%. The population increased slightly to 82 whales in 2002 and 84 whales in 2003. Growth in J and K pods account for this gain and both pods now

equal or exceed their largest sizes achieved in the 1990s. By comparison, L pod appears to be continuing its decline and fell to just 41 members in 2003. This pod has experienced means of 3.1 deaths and 1.4 births per year since 1994 (Center for Whale Research, unpubl. data).

At present, the southern resident population has declined to essentially the same size that was estimated during the early 1960s, when it was considered as likely depleted (Olesiuk et al. 1990a). Since censusing began in 1974, J and K pods have increased their sizes by 47% (mean of 1.6% per year) and 31% (mean of 1.1% per year), respectively. The largest pod, L pod, has grown only 5.1% (mean of 0.2% per year) during this period, but more importantly, is in a 10-year decline that threatens to reduce the pod's size below any previously recorded level. From 1974-2003, there was an average of 3.3 births and 2.7 deaths per year in the community as a whole (Center for Whale Research, unpubl. data).

Olesiuk et al. (1990a) used data from 1974-1987 to estimate an intrinsic growth rate of 2.92% per year for both resident populations combined. However, observed rates of increase differed substantially for the two communities (1.3% annually from 1974-1987 for the southern residents vs. 2.9% annually from 1979-1986 for the northern residents). Brault and Caswell (1993) also examined growth rates for both populations during the same periods, but used a stage-structured model and based their calculations on females only. Intrinsic and observed rates of growth among the southern residents were 2.5% and 0.7% per year, respectively, with the observed rate being much lower than in the northern residents. Non-significant differences in intrinsic growth rates existed among the three southern pods (J pod, 3.6% per year; K pod, 1.8% per year; and L pod, 1.5% per year). This study concluded that population growth rates in killer whales were more sensitive to changes in adult survival, as would be expected in any long-lived species, than to changes in juvenile survival and fertility.

Using data from 1974-2000, Krahn et al. (2002) recently presented a new analysis of the

population dynamics of the southern residents in an effort to identify demographic factors contributing to the population's latest decline. For their analyses, six age and sex classes were defined as follows: calves in their first summer (<1 year of age), juveniles of both sexes (1-10 years of age), females of reproductive age (11-41 years of age), post-reproductive females (42 years of age and older), young adult males (11-21 years of age), and older males (22 years of age and older). The study found sizable differences in annual survival among age and sex classes, with an overall mean of 0.969. Modeling of annual survival data determined that overall survival was relatively constant within approximately six-year periods, but differed greatly between consecutive periods. Greater than average survival rates were detected from 1974-1979 and 1985-1992, but rates were below average from 1980-1984 and 1993-2000. Changes in survival were not related to stochastic variation caused by the population's small size (e.g., random patterns in births or deaths) or to annual fluctuations in survival. Krahn et al. (2002) therefore suggested that survival patterns were more likely influenced by an external cause, such as periodic changes in prey availability or exposure to environmental contaminants. The study also discovered declining rates of survival in five of the population's six age and sex categories from 1992-2000. Survival fell most sharply in older males in contrast to reproductive females, which showed almost no decline in survival. From 1993-2001, the percentage of males 15 years of age or older in the population fell from 17% to 11%, placing it much lower than the 19% necessary for a stable age and sex distribution (Olesiuk et al. 1990a). Investigation of temporal patterns in survival rates found no differences among the three pods (Krahn et al. 2002). Each pod experienced similar reductions in survival during the declines of the early 1980s and the late 1990s.

Krahn et al. (2002) also examined fecundity levels in the southern resident population. Based on numbers of calves that survived to their first summer, average fecundity of reproductive-aged females was estimated at 12% from 1974-2000, which corresponded to a mean interval of 7.7

years between surviving calves. Modeling revealed that annual birth rates best fit a periodic function with about eight years between peaks. Low points in the numbers of recruited calves were observed in 1981, 1989, and 1997 and peaks occurred in 1977, 1985, and 1993. Krahn et al. (2002) noted considerable variability in the annual fecundity rate of the population, as expected in a small population with few reproductively active females. However, because the data fit a periodic function, reproductive output also appeared to be partially synchronized between females. Such a pattern might result from occasional poor environmental years causing high calf mortality, which might then lead to a pulse in births after conditions recovered (Krahn et al. (2002). Birthing synchrony might then be retained for a certain period of time thereafter.

Recent birthing data for the community as a whole indicate that births did not increase between 2000 and 2003, as predicted by Krahn et al.'s (2002) model. During the past decade, J and K pods appear to have slightly increased their calf productivity when compared to the previous decade (Center for Whale Research, unpubl. data). In contrast, calf productivity in L pod has dropped by half in the past 10 years, with only 13 calves born. Additionally, L pod has experienced much higher calf mortality (6 of 13 calves born during the past decade) than either J pod (0 of 10 calves) or K pod (2 of 9 calves) (Center for Whale Research, unpubl. data).

Brief histories of each of the three southern resident pods are provided below. At the end of 2003, the community as a whole was comprised of seven mature males (8.3% of the population), 21 reproductive females (25.0%), 14 post-reproductive females (16.7%), 17 juvenile males (20.2%), 12 juvenile females (14.3%), and 13 immature animals of unknown sex (15.5%) (van Ginneken et al. 2000; Center for Whale Research, unpubl. data). Older demographic information on the pods can be found elsewhere (Balcomb et al. 1980, 1982, Balcomb 1982, Bigg 1982, Balcomb and Bigg 1986, Bigg et al. 1987).

J pod. This pod's overall expansion from 15 whales in 1974 to 22 whales at the end of December 2003 has been mixed with several minor declines and increases during intervening years (Figure 8, Appendix A). The pod is currently comprised of four matriline totaling one adult male, six reproductive females, two post-reproductive females, five immature males, five immature females, and three immature animals of unknown sex (van Ginneken et al. 2000; Center for Whale Research, unpubl. data). The oldest member is J2, which is estimated to be in her eighties or early nineties (Ford et al. 2000). J1 is the only adult male and is considered to be in his early fifties.

K pod. Membership in K pod has varied from 14 to 21 whales since 1974, with 21 animals present at the end of 2003 (Figure 8, Appendix A). The pod currently holds four matriline consisting of one mature male, five reproductive females, four post-reproductive or non-reproductive females, three immature males, three immature females, and five immature whales of unknown sex (van Ginneken et al. 2000; Center for Whale Research, unpubl. data). The oldest member is K7, which is believed to be in her eighties or early nineties (Ford et al. 2000). The pod was without an adult male for several years in the late 1990s, following the death of K1 in 1997. The oldest male (K21) is now 17 years of age. This pod was cropped especially heavily during the live-capture era (Bigg 1982).

L pod. This is the largest of the three southern resident pods and grew from 39 whales in 1974 to a peak of 59 whales in 1993 (Figure 8, Appendix A). Pod membership has been in decline since then and totaled just 41 animals at the end of 2003. L pod currently contains 12 matriline comprised of five adult males, 10 reproductive females, eight post-reproductive females, 10 immature males, four immature females, and four immature animals of unknown sex (van Ginneken et al. 2000; Center for Whale Research, unpubl. data). The percentage of immatures (43.9%) is currently the lowest of any pod. Three matriline are represented by single whales, either males or post-reproductive females, and are destined to

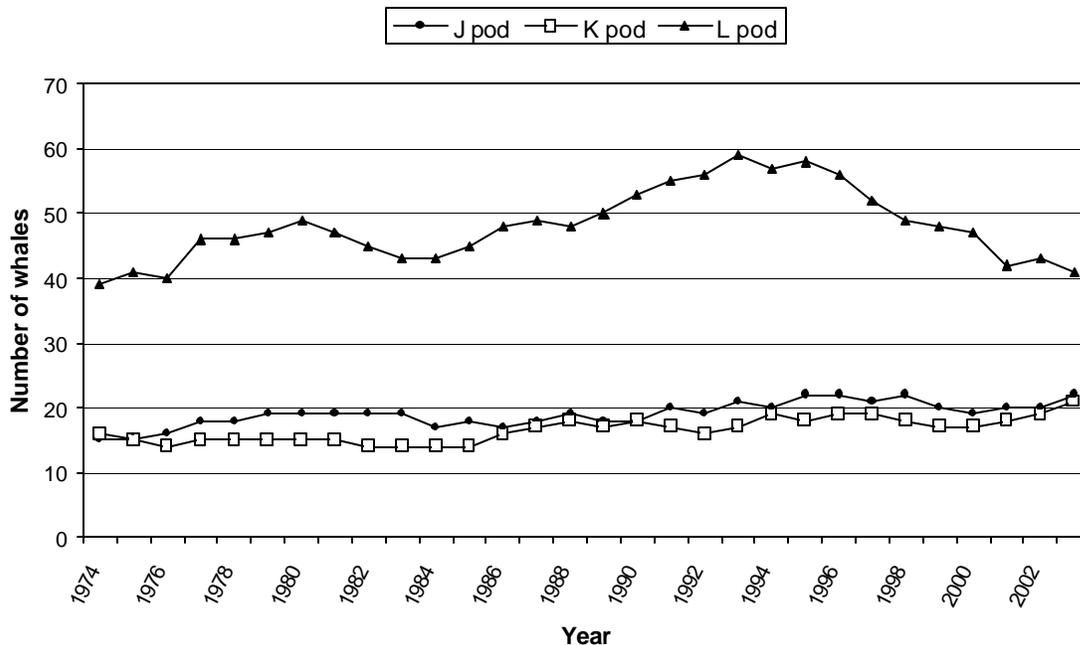


Figure 8. Population sizes and trends of the three southern resident killer whale pods (J, K, and L) from 1974-2003. Data were obtained through photo-identification surveys and were provided by the Center for Whale Research (unpubl. data). Data represent the number of whales present in each pod at the end of a calendar year (K. C. Balcomb, pers. comm.).

eventually die out. The oldest females are L25 and L12, which are estimated to be 75 and 70 years old, respectively (Ford et al. 2000). L41 and L57 are the oldest males and were both born in 1977. An additional member of L pod, a four-year-old male (L98), has lived solitarily in Nootka Sound on the west side of Vancouver Island since July 2001 after becoming separated from the pod. Canadian officials are currently assessing different methods to reunite the whale with the pod. L98 is excluded from annual census results because it is not considered a contributing member of the population. During the 1980s, Hoelzel (1993) believed that L pod had separated into three smaller pods, which were identified as L8, L10, and L 35 pods.

Northern residents. Canadian researchers have conducted annual censuses of the northern resident community since 1975 (Bigg et al. 1990, Ford et al. 2000). The population contains 16 pods and grew fairly steadily at a rate of 3.0% per year from 1975-1997, when numbers expanded from 132 to

220 whales (Figure 9, Appendix A) (Ford et al. 2000; J. K. B. Ford, unpubl. data). This rate of growth was similar to the predicted intrinsic rate of the population and was substantially higher than the observed rate of the southern residents during the same time (Olesiuk et al. 1990a, Brault and Caswell 1993). Several factors were presented as possible reasons for the relatively stable growth of the northern residents through 1997, including 1) the population's larger size in comparison to the southern residents, which made it less sensitive to stochastic events in births and deaths, 2) the smaller amount of cropping that occurred during the live-capture fishery (Olesiuk et al. 1990a), and 3) possibly fewer environmental changes in the community's geographic range in recent decades. The population experienced an 8.6% decline in numbers from 1997-2001, falling to 201 whales. Possible explanations for this decrease are similar to those put forth for the southern residents (J. K. B. Ford, pers. comm.). Abundance has increased slightly since then, with 204 whales counted in 2003. Individuals from A1, A4, C, D, G1, G12, H,

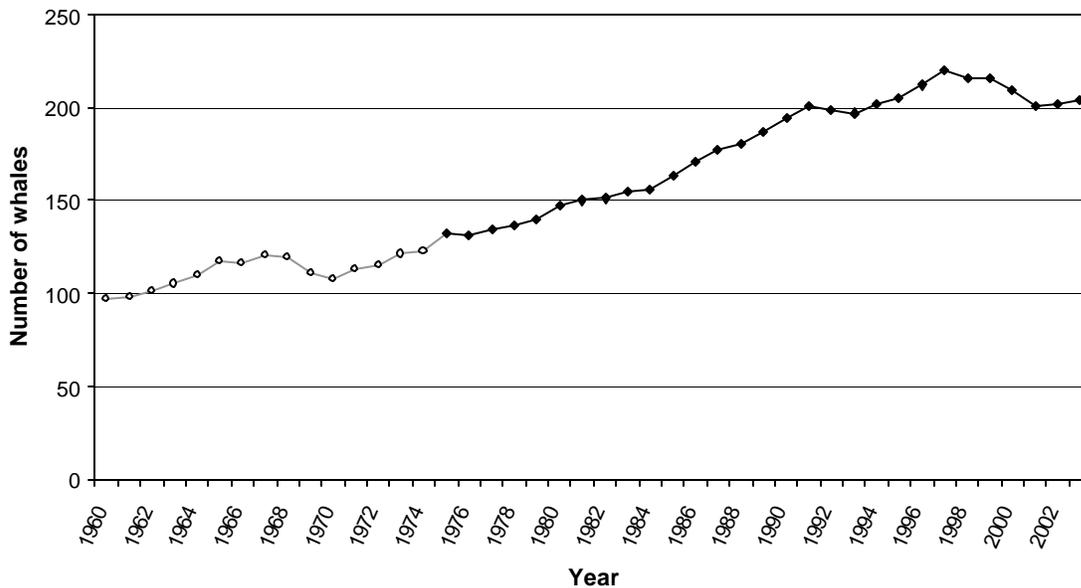


Figure 9. Population size and trend of northern resident killer whales, 1975-2003. Data from 1960-1974 (open circles, gray line) are number projections from the matrix model of Olesiuk et al. (1990a). Data from 1975-2003 (diamonds, black line) were obtained through photo-identification surveys of the 16 pods in this community and were provided by J. K. B. Ford (unpubl. data). Data for these years represent whale numbers for entire calendar years; animals are counted through their last year seen.

I1, I2, I11, and I18 pods have been identified in or near Washington's waters (D. K. Ellifrit, unpubl. data; J. Calambokidis, unpubl. data).

Transients. Cumulative numbers of photographically identified killer whales in the west coast transient community expanded throughout the 1980s and 1990s as efforts to document the population continued (Bigg et al. 1987, Black et al. 1997, Ford and Ellis 1999). To date, about 320 individuals have been identified in the population, which includes about 225 transients in Washington, British Columbia, and southeastern Alaska (Ford and Ellis 1999; J. K. B. Ford, unpubl. data) and 105 animals off California (Black et al. 1997). At least 10 whales have been seen in both regions. Efforts to determine population size are complicated by two problems (Ford and Ellis 1999, Baird 2001, Carretta et al. 2001). Small numbers of new transients continue to be documented each year, indicating that a complete registry of individuals has not yet been achieved. Secondly, some identified whales have

undoubtedly died over time, but their numbers have been difficult to establish because of the long intervals between sightings for some individuals. Given the current level of knowledge, the population probably totals about 300-400 whales. Trend information is lacking for the population because accurate assessments of abundance have not been made. The number of transient whales in Washington's waters at any one time is speculative, but is probably fewer than 20 individuals (K. C. Balcomb, pers. comm.; D. K. Ellifrit, pers. comm.). Roughly one-third to half of the entire population has been detected in the state (K. C. Balcomb, unpubl. data; D. K. Ellifrit, unpubl. data).

Offshores. No firm estimates of total population size or changes in numbers have been established for the offshore community. About 235 offshore killer whales were catalogued for the northeastern Pacific through about 2002 (J. K. B. Ford, unpubl. data). As with transients, this is considered an underestimate of total numbers because of the

continued detection of new individuals over time and the difficulty in substantiating mortalities. Carretta et al. (2002) calculated a minimum estimate of 285 offshore whales along the coasts of Washington, Oregon, and California, based on shipboard line-transect surveys conducted in the 1990s and the percentage of offshore animals among all killer whales photographed off California (Black et al. 1997). This is believed to be an underestimate of true numbers because of biases in sampling. Based on the documented movements of some photographed individuals, it is likely that much of this community occurs in Washington's waters on a regular or irregular basis. Because offshores often occur in large groups and travel widely, their abundance in the state probably varies from a few to perhaps as many as 75-100 animals at any one time (D. K. Ellifrit, pers. comm.).

Status along Washington's coast. Abundance patterns of killer whales are not well known for Washington's outer coast. Several studies have reported relatively low encounter rates during shipborne and aerial surveys, with most sightings made along the continental shelf within about 50 km of land (Green et al. 1992, 1993, Sheldon et al. 2000). Very few observations during these studies were identifiable to community type. However, killer whales were encountered somewhat more often during another study by J. Calambokidis and others (unpubl. data), who conducted summer ship surveys off the Olympic Peninsula from 1995-2002. These researchers detected transient whales most frequently, but members of both resident communities and the offshore population were also observed. Sightings were made predominantly at mid-shelf depths averaging 100-200 m and at distances of 40-80 km from land. An additional source of information is the Platforms of Opportunity Program database maintained by the National Marine Mammal Laboratory. It contains 76 killer whale records from the outer coast between 1958 and 1997. These sightings, which were obtained in a non-systematic manner, indicate that killer whales can be found along the entire coast during all seasons and at distances of up to at least 200 km from land (Platforms of

Opportunity Program Database, National Marine Mammal Laboratory, unpubl. data).

Shore sightings of killer whales are relatively rare along the outer coast. There is at least one record from the mouth of Grays Harbor and several others from just outside the bay's entrance during the past decade (Cascadia Research, unpubl. data). Few if any records are known from Willapa Bay during the past several decades (K. C. Balcomb, pers. comm.). Any sightings from either embayment would most likely involve transients.

Status in Washington and Southern British Columbia: Future Predictions

Southern residents. Two recent studies have used a technique known as population viability analysis (PVA) to assess the future risk of extinction of the southern resident population. PVAs rely on known life history parameters to reach their conclusions and usually assume that conditions observed in the past will continue in the future. Limitations in models can produce unreliable results for a variety of reasons, such as the use of inaccurate demographic data and failure to correctly consider environmental variables and parameter uncertainty (Beissinger and Westphal 1998, Reed et al. 1998). Thus, PVA forecasts should often be viewed with some caution.

Taylor and Plater (2001) made two series of simulations for the southern residents using a VORTEX software program. The first employed mortality and fecundity rates from 1974-2000 and assumed that these were representative of the rates expected in the future. The second scenario used survival rates only from the most recent decline (1996-2000) and assumed that these would continue in the future. Using a number of parameter hypotheses, the initial set of models predicted median times to extinction to all exceed 265 years and determined that the population had a 36-64% chance of extinction within 300 years. The second group of analyses utilized a wider range of assumptions and risk levels, resulting in greatly increased risk estimates that ranged from a 1.5-28.5% chance of extinction in the next 100 years. Regardless of the assumptions used, this

scenario predicted extinction to occur at a median time ranging from 113-213 years. Taylor and Platt (2001) considered the second set of analyses to be more plausible than the first because it better reflected an expected continuation of habitat degradation in the future.

Krahn et al. (2002) measured extinction risk in the southern residents with a more complex, customized PVA model that they considered more reflective of the true biology of the southern residents. Their simulations incorporated data for the periods of 1974-2000 and 1992-2000 and considered eight values of carrying capacity for the population set between 100 and 400 whales. Analyses were performed at two population levels, with one characterizing the southern residents as a single unit and the second combining them with the northern and western Alaska residents into a larger northeastern Pacific resident population. The results of this model were more optimistic than those of Taylor and Platt (2001). Nevertheless, they indicated that the southern residents still have extinction risks of 12-30% in the next 100 years and greater than 85% over 300 years under the scenario that the population's survival rates from 1992-2000 continue into the future. However, if future survival rates match those from 1974-2000, then the probability of extinction fell to 1-4% in 100 years and 5-50% in 300 years, with the higher values associated with increased rates and magnitudes of catastrophes, such as oil spills and disease outbreaks. The model determined the risk of extinction for the larger northeastern Pacific resident population as negligible over 100 years and less than 5% over 300 years.

Other communities. PVAs have not been conducted for other killer whale communities occurring in Washington. However, the transient population may be just as threatened as the southern residents because of its elevated levels of toxic contaminants (see *Environmental Contaminants*).

LEGAL STATUS

Federal laws. Killer whales and most other marine mammal populations in the United States are protected under the Marine Mammal Protection Act of 1972 (MMPA), which placed a moratorium on the taking (defined as harassing, hunting, capturing, killing, or attempting to harass, hunt, capture, or kill) and importation of these animals and products derived from them. The MMPA exempts some native harvest for subsistence purposes and for creating and selling native handicrafts and clothing, but no tribe currently has a harvest permit approved for killer whales. Some incidental take associated with commercial fisheries is also allowed. The MMPA allows permits to be issued for research, public display, and commercial educational photography. In late 2003, the Department of Defense was granted an exemption from the take and harassment provisions of the MMPA during times of national emergency. In May 2003, the southern resident community was declared a depleted stock under the MMPA by the National Marine Fisheries Service. This status will allow the agency to develop conservation measures aimed at improving the population's habitat and elevating public awareness. In response to a petition filed by a number of environmental organizations in 2001 (Center for Biological Diversity 2001), the Service determined that it was unwarranted to list the southern residents as threatened or endangered under the U.S. Endangered Species Act because the population did not meet the criteria of being a distinct population segment (Krahn et al. 2002, National Marine Fisheries Service 2002). However, this decision was rejected in federal court in December 2003, meaning that the agency must re-evaluate its determination and issue a new finding within one year. Cetaceans also receive protection through the Packwood-Magnuson Amendment of the Fisheries and Conservation Act. This law allows observers to be placed on fishing vessels that have a high probability of killing marine mammals and provides for limited monitoring and enforcement activities regarding marine mammal and vessel interactions. The Pelly Amendment of the Fisherman's Protective Act allows trade sanctions to be imposed on countries

that violate international laws protecting marine mammals. The importation of wildlife and associated products taken illegally in foreign countries is prohibited under the Lacey Act.

State laws. Killer whales are covered under several Washington laws and regulations. Killer whales are listed as protected under the category of “other protected wildlife” in the Washington Administrative Code (WAC 232-12-011). This prohibits the hunting, malicious killing, and possession of killer whales, but does not protect the species from harassment. Violations of this law are a misdemeanor offense (RCW 77.15.130), with penalties ranging up to 90 days imprisonment and a \$1,000 fine. The species also receives protection under WAC 232-12-064, which prohibits the capture, importation, possession, transfer, and holding in captivity of most wildlife in state. In June 2000, killer whales were named a “state candidate species” by the Washington Department of Fish and Wildlife, meaning that they will receive future consideration for state listing as endangered, threatened, or sensitive. Species of candidate status receive no direct protection. Killer whales are also listed as a “Criterion Two” priority species on the Department’s Priority Habitat and Species List, which catalogs animals and plants that are priorities for conservation and management, especially at the county level. Criterion Two species include those species or groups of animals susceptible to significant population declines within a specific area or statewide by virtue of their inclination to aggregate. This status also provides no mandatory protection for killer whales. In some situations, federal laws may preempt the regulatory protections provided by Washington State.

Canadian laws. Killer whales received federal protection from disturbance under Canada’s Marine Mammal Regulations of the Fisheries Act in 1994, when a change in definitions extended coverage to all cetaceans and pinnipeds (Baird 2001). Although these regulations allow killer whales to be hunted with the purchase of a fishing license at a nominal fee, the license is granted at the discretion of the Minister of Fisheries and

Oceans and no such licenses have ever been approved. The regulations broadly prohibit the disturbance of killer whales (except when being hunted), but give no definition of “disturbance.” Penalties include fines and imprisonment. The Department of Fisheries and Oceans is currently amending the regulations to make them more stringent and relevant to conservation needs (Fisheries and Oceans Canada 2002). The department has also developed a set of voluntary guidelines to limit interactions between whale-watching vessels and northern resident killer whales. Until recently, there has been little enforcement of the Marine Mammal Regulations or monitoring of the viewing guidelines by authorities (Baird 2001, Lien 2001). However, in 2004, an American whale-watching operator was prosecuted under the Marine Mammal Regulations and fined CA\$6,500 (US\$4,875) for approaching two groups of southern resident whales in the Gulf Islands too closely. In 2001, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) categorized the four populations of killer whales in the country’s Pacific waters, as follows: southern residents, endangered; northern residents, threatened; transients, threatened; and offshores, special concern. COSEWIC had no legal mandate and served only in an advisory role. The Species at Risk Act (SARA) became federal law in June 2003, with killer whale populations maintaining their same status as under COSEWIC. Under this regulation, the killing, harassment, and possession of killer whales will become prohibited in June 2004. Important habitats of listed species will also eventually receive protection. Lastly, SARA requires the preparation of recovery plans for all listed species. Such plans are now being drafted for southern and northern resident killer whales. The province of British Columbia does not have any laws currently protecting killer whales (Baird 2001).

International laws. International trade in killer whales and their body parts is regulated and monitored by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Killer whales were placed on Appendix II in 1979, which requires all international shipments of the species to be

accompanied by an export permit issued by the proper management authority of the country of origin. The International Whaling Commission categorizes killer whales and most other odontocetes as “small cetaceans,” but there is disagreement among member countries as to whether the Convention applies to this group of species. The Commission officially included killer whales in their moratorium on factory ship whaling (Anonymous 1981), but other management measures (e.g., the Southern Ocean Sanctuary and the moratorium on commercial whaling) do not apply to killer whales (Baird 2001). In 2002, killer whales were added to Appendix II of the U.N. Convention on the Conservation of Migratory Species of Wild Animals. This designation is given to migratory species that “have an unfavorable conservation status and require international agreements for their conservation and management, as well as those which have a conservation status which would significantly benefit from the international cooperation that could be achieved by an international agreement.” The World Conservation Union (IUCN) lists killer whales as a species of “Lower Risk/Conservation Dependent” on its Red List.

POTENTIAL THREATS TO POPULATIONS IN WASHINGTON AND SOUTHERN BRITISH COLUMBIA

Marine mammal populations are often exposed to many forms of environmental degradation, including habitat deterioration, changes in food availability, increased exposure to pollutants, and human disturbance. All of these factors have been identified as potential threats to killer whales in Washington and British Columbia (Ford and Ellis 1999, Ford et al. 2000, Baird 2001, Krahn et al. 2002). Unfortunately, despite much study since the early 1970s and great advances in knowledge of the species, researchers remain unsure which threats are most significant to the region’s whales. Three primary factors are discussed in this section: reductions in prey availability, disturbance by

underwater noise and whale-watching vessels, and exposure to environmental contaminants. None have yet been directly tied to the recent decline of the southern resident population (Krahn et al. 2002), but continued research should provide further insight into relationships. Perhaps most likely, two or more of these factors may be acting together to harm the whales. For example, disturbance from whale-watching craft may be most problematic when combined with the stresses of reduced prey availability or increased contaminant loads (Williams et al. 2002a). Under such a scenario, reduced foraging success resulting from interference from whale-watching boats and declining salmon abundance may lead to chronic energy imbalances and poorer reproductive success, or all three factors may work to lower an animal’s ability to suppress disease.

Reduction of Prey Populations

Healthy killer whale populations are dependent on adequate prey levels. Reductions in prey availability may force whales to spend more time foraging and might lead to reduced reproductive rates and higher mortality rates. Human influences have had profound impacts on the abundance of many prey species in the northeastern Pacific during the past 150 years. Foremost among these, many stocks of salmon have declined significantly due to overfishing and degradation of freshwater and estuarine habitats through urbanization, dam building, and forestry, agricultural, and mining practices (National Research Council 1996, Gregory and Bisson 1997, Lichatowich 1999, Pess et al. 2003). Populations of some other known or potential prey species, such as marine mammals and various fish, have similarly declined or fluctuated greatly through time. Status assessments of the food resources available to killer whales in the region are complicated by numerous considerations, including a lack of detailed knowledge on the food habits and seasonal ranges of the whales, uncertainties in the historical and current abundance levels of many localized populations of prey, and the cyclic nature of large-scale changes in ocean conditions.

Reduction of Prey Populations: Residents

Information on the diets of resident killer whales in Washington and British Columbia is very limited, but it is generally agreed that salmon are the principal prey in spring, summer, and fall (Heimlich-Boran 1986, Felleman et al. 1991, Ford et al. 1998). Current data suggest that chinook salmon, the region's largest salmonid, are the most commonly targeted prey species (Ford et al. 1998). Other salmonids appear to be eaten less frequently, as are some non-salmonids such as rockfish, halibut, lingcod, and herring. Unfortunately, conclusions about resident diets are limited by a number of observational biases (Ford et al. 1998, Baird 2000). Most information originates from a single published study (Ford et al. 1998) that focused on the northern residents from late spring to early fall. Few feeding data exist for the winter months for either resident population or for whales found away from inland waters. There has also been a reliance on surface feeding observations, which may underrepresent predation on bottom fish or other species. Further complicating an adequate understanding of whale-prey relationships is the possibility of dietary differences among pods and between sexes (Nichol and Shackleton 1996, Ford et al. 1998, Baird 2000).

Another poorly understood facet of diet is the extent to which resident killer whales have depended on specific salmon runs, both in the past and currently (Krahn et al. 2002). Several researchers have compared southern resident distribution with salmon sport catch records, but none have attempted to identify targeted runs. The population's annual presence in the vicinity of the San Juan Islands and Fraser River mouth from late spring to early fall suggests a dependence on salmon returning to this river system (Osborne 1999). This hypothesis is reasonable given the river's immense production of salmon (Northcote and Atagi 1997) and that its sockeye and pink runs pass through Haro Strait and surrounding waters. Heimlich-Boran (1986) correlated killer whale occurrence with salmon sport catch in the San Juan Islands and portions of Puget Sound, but did

not describe the species or runs selected. Felleman et al. (1991) added that some small-scale winter occurrences of the whales were related to the presence of juvenile chinook, adult steelhead, and adult cutthroat trout (*Salmo clarkii*). Autumn movements of southern resident pods into Puget Sound roughly correspond with chum and chinook salmon runs (Osborne 1999), as illustrated by the presence of whales in Dyes Inlet during a strong run of chum in 1997. Both California sightings coincided with large runs of chinook salmon (K. C. Balcomb, unpubl. data). Northern resident occurrence in Johnstone Strait has been tied more strongly to the large seasonal runs of sockeye and pink salmon, as well as chum salmon to a lesser extent (Nichol and Shackleton 1996).

Without better knowledge of selected salmon runs, the effects on resident killer whales of changing salmon abundance in key runs cannot be judged. In former times, the whales may have simply moved to other areas with adequate food or shifted their diets to alternate fish stocks in response to the reduction of a heavily used run (Ford et al. 2000). These options may be less viable now due to broader declines of various fish populations in the region.

As already noted, there is an absence of comprehensive and accurate estimates of salmon abundance for significant portions of the ranges of southern and northern residents. In many cases, salmon population estimates from the 1800s to mid-1900s are crude or non-existent. Furthermore, estimates originate from a variety of sources and methods (i.e., catch data, escapement, or both) and therefore may not be comparable among or within locations (Bisson et al. 1992). Some include both wild and hatchery fish, whereas others tallied only one of these groups. Substantial interannual variability is also inherent in many stocks. Finally, concise summaries of specific run size information can be dauntingly difficult to locate within fisheries agency records. Despite these limitations, some general trends are apparent. Of greatest significance are the overall major reductions in the natural breeding populations of most species between the 1800s to mid-1900s (Table 3). Many runs have continued

to decrease since then, but others have partially recovered. Declines are particularly prevalent in Washington, Oregon, Idaho, and California due to greater human impacts on freshwater habitats as well as ocean productivity cycles, whereas populations in Alaska have been little affected (Nehlsen 1997, Wertheimer 1997, Kope and Wainwright 1998). Among naturally spawning salmon, 30 of the 49 evolutionarily significant population units (ESUs) in the western contiguous U.S. are currently listed as threatened (22 ESUs), endangered (4), or candidates for listing (4) under the federal Endangered Species Act. Half or more of all chinook, steelhead, and chum ESUs are listed. Some of the remaining 19 ESUs are predicted to become endangered unless specific recovery actions can be accomplished. Despite this overall pattern, an assessment of natural salmon stocks in Washington during the late 1980s and early 1990s found that of 309 stocks with sufficient data to assess current status, 60.5% were in fact healthy and 39.5% were depressed or of critical status (WDF et al. 1993). A disproportionately greater number of healthy stocks were located in Puget Sound, whereas more depressed and critical stocks occurred in the Columbia River basin.

Many wild salmon runs have been supplemented by significant numbers of hatchery-reared salmon since the 1950s and 1960s, when modern hatchery programs began being widely implemented (Mahnken et al. 1998). In Washington, hatchery fish now account for about 75% of all chinook and coho salmon and nearly 90% of all steelhead harvested. In Puget Sound, the amounts of artificially reared salmon are variable with species, but significant numbers of hatchery chinook and coho are present in many runs. The extent that resident whales consume hatchery salmon is unknown, but hatchery fish may represent an important part of the diet for southern residents.

For southern resident killer whales, salmon population levels are particularly crucial in and around the Georgia Basin and Puget Sound, which are the core area for these whales during much of the year. Overall salmon abundance in Puget Sound has been roughly stable or increasing for

the past several decades, due largely to the strong performance of pink and chum salmon. Both species have been at or near historic levels of abundance for the past 20-25 years (Hard et al. 1996; Johnson et al. 1997; WDFW 2004; J. Ames, unpubl. data). No recent changes in salmon populations are obviously apparent that may be responsible for the decline of L pod.

Population trends of salmon stocks in the ranges of southern and northern resident killer whales are summarized below, along with those of several other known prey species. Brief discussions of additional factors affecting salmon abundance and productivity are also presented. Detailed accounts of the life history of Pacific salmon can be found in Groot and Margolis (1991), with summaries of occurrence in Washington presented in Wydoski and Whitney (2003).

Chinook salmon. Chinook are the least common species of salmon in the northeastern Pacific (Wydoski and Whitney 2003). Long- and short-term trends in the abundance of wild stocks are predominantly downward, with some populations exhibiting severe recent declines (Table 3). However, total abundance in Puget Sound, the eastern Strait of Juan de Fuca, and the lower Columbia River basin has been relatively high in recent decades due to production from hatcheries (Myers et al. 1998; B. Sanford, pers. comm.). All spring-run populations in these areas are depressed and most are likely to become endangered in the foreseeable future. Many of the formerly vast populations in the mid- to upper Columbia and Snake River basins have declined considerably or virtually disappeared, although some (e.g., fall runs in the upper Columbia) remain moderately large (WDF et al. 1993, Myers et al. 1998, WDFW and ODFW 2002). Total abundance along the Washington and Oregon coasts is relatively high and long-term population trends are generally upward, but a number of runs are experiencing severe recent declines. In British Columbia, chinook escapements were higher in the early 1990s than at any other time dating back to the 1950s, but concern remains over the depressed status of stocks in southern British Columbia

(Northcote and Atagi 1997, Henderson and Graham 1998). The status of stocks from southern

Table 3. Summary of historical and recent estimates of salmon numbers (in thousands) produced by western North American river systems between the Strait of Georgia and central California (adapted and updated from Krahn et al. 2002)^a.

Region	Period of time	Species					
		Chinook	Pink	Coho	Chum	Sockeye	Steelhead
Fraser River	Late 1800s to mid-1900s	750 ^b	23,850 ^b	1,230 ^b	800 ^b	925-40,200 ^c	-
	Mid-1900s to early 1980s	150 ^b	1,900-18,700 ^d	160 ^b	390 ^b	967-18,800 ^c	-
	Mid-1980s to early 1990s	140-280 ^e	7,200-22,180 ^d	40-100 ^b	about 1,300 ^f	3,770-22,000 ^c	-
	Early 1990s to current	140-350 ^e	3,600-21,200 ^d	increasing ^f	13x greater since 1997 ^f	3,640-23,600 ^c	-
Puget Sound	Late 1800s to early 1900s	250-700 ^g	1,000-16,000 ^g	700-2,200 ^g	500-1,700 ^g	1,000-22,000 ^g	-
	Mid-1900s	40-100 ^g	350-1,000 ^h	200-600 ^g	300-600 ^h	150-400 ^h	-
	Mid-1980s to early 1990s	80-140 ^h	1,000-1,930 ⁱ	300-800 ^h	1,040-2,030 ^j	92-622 ⁱ	-
	Early 1990s to current	40-170 ^{h, k}	440-3,550 ⁱ	200-500 ^h	570-3,390 ^j	37-555 ⁱ	-
Coastal Washington	Mid- to late 1800s	190 ^l	-	-	-	-	-
	Mid-1900s	-	-	-	80-100 ^h	20-130 ^h	-
	Mid-1980s to early 1990s	30-115 ^h	-	40-130 ^h	10-325 ^h	15-80 ^h	25-50 ^h
	Early 1990s to current	50-65 ^h	-	30-70 ^h	60-175 ^h	20-80 ^h	30-40 ^h
Columbia River	Mid- to late 1800s	5,000-9,000 ^m	-	2,600-2,800 ^m	500-1,400 ^m	900-1,700 ^m	570-1,350 ^m
	Mid-1900s	565-1,410 ⁿ	-	21-272 ⁿ	2-59 ⁿ	43-335 ⁿ	250-440 ⁿ
	Mid-1980s to early 1990s	410-1,140 ⁿ	-	100-1,530 ⁿ	1-5 ⁿ	47-200 ⁿ	254-560 ⁿ
	Early 1990s to current	311-515 ⁿ	-	74-550 ⁿ	1-3 ⁿ	9-94 ⁿ	240-335 ⁿ
Mid- to northern coastal Oregon	Mid- to late 1800s	300-600 ^o	-	1,700 ^p	-	-	-
	Mid-1900s	-	-	-	-	-	-
	Mid-1980s to early 1990s	30-50% decline ^o	-	100 ^p	-	-	-
	Early 1990s to current	-	-	-	-	-	-
Northern coastal California	Mid- to late 1800s	300 ^l	-	1,200 ^q	-	-	-
	Mid-1900s	250 ^q	-	200-500 ^r	-	-	-
	Mid-1980s to early 1990s	-	-	13 ^r	-	-	-
	Early 1990s to current	about 10-50 ^s	-	-	-	-	-
Central Valley, California	Mid- to late 1800s	1,000-2,000 ^t	-	-	-	-	-
	Mid-1900s	400-500 ^t	-	-	-	-	-
	Mid-1980s to early 1990s	200-1,300 ^t	-	-	-	-	-
	Early 1990s to current	300-600 ^t	-	-	-	-	-

^a Estimates may represent catch data, escapement, or estimated run size, and therefore may not be comparable between or within sites. Some estimates include hatchery fish. Early catch records for sockeye and pink salmon in Puget Sound are especially problematic because they include Fraser River salmon caught by American fishermen and landed in Puget Sound ports (J. Ames, pers. comm.).

^b Northcote and Atagi (1997), catch and escapement; ^c I. Guthrie (unpubl. data); ^d B. White (unpubl. data); ^e DFO (1999), catch and escapement; ^f DFO (2001); ^g Bledsoe et al. (1989), catch only; ^h Johnson et al. (1997b), wild run sizes only; ⁱ J. Ames, unpubl. data; ^j WDFW (2004); ^k B. Sanford (unpubl. data) in Krahn et al. (2002); ^l Myers et al. (1998); ^m Northwest Power Planning Council (1986); ⁿ WDFW and ODFW (2002); ^o Nicholas and Hankin (1989); ^p Nickelson et al. (1992); ^q California Department of Fish and Game (1965); ^r Brown et al. (1994); ^s Mills et al. (1997); ^t Yoshiyama et al. (1998).

Oregon to California's Central Valley is variable, with a number of runs in poor condition or extirpated (Yoshiyama et al. 2000). Others (e.g., Rogue River, fall runs in the upper Klamath and Trinity Rivers and the Central Valley) remain fairly abundant, although hatchery fish tend to be a large component of escapements (Myers et al. 1998, Yoshiyama et al. 2000).

Pink salmon. Pink salmon are the most abundant species of Pacific salmon (Wydoski and Whitney (2003) and reach the southern limit of their primary spawning range in Puget Sound. Most odd-year populations in the sound and southern British Columbia appear healthy and current overall abundance is close to historical levels or increasing (Hard et al. 1996; Northcote and Atagi 1997; J. Ames, pers. comm.), whereas even-year runs are naturally small. Numbers in Puget Sound have been high (mean odd year run size = 1.47 million fish, range = 440,000-7.4 million) in most years since at least 1959 (J. Ames, unpubl. data). However, several populations along the Strait of Juan de Fuca and in Hood Canal are declining or possibly extinct. Considerable variation in run size can occur, as seen in the Fraser River, where odd-year runs varied from about 3.6 to 22.2 million between 1991 and 2001 (B. White, unpubl. data). Stocks in Puget Sound and British Columbia are comprised almost entirely of naturally spawning fish.

Coho salmon. Abundance south of Alaska has declined despite the establishment of large hatchery programs (Kope and Wainwright 1998). A number of risk factors, including widespread artificial propagation, high harvest rates, extensive habitat degradation, a recent dramatic decline in adult size, and unfavorable ocean conditions, suggest that many wild stocks may encounter future problems (Weitkamp et al. 1995). Populations supplemented with large numbers of hatchery fish are considered near historical levels in Puget Sound and the Strait of Georgia, with overall trends considered stable (Weitkamp et al. 1995). Natural coho populations in British Columbia have been in decline since the 1960s (Northcote and Atagi 1997, Henderson and Graham 1998), while those in the lower Columbia

River basin and along the coasts of Oregon and northern California are in poor condition (Weitkamp et al. 1995). Most coho in the Columbia basin originate from hatcheries.

Chum salmon. Chum salmon are abundant and widely distributed in Puget Sound and the Strait of Georgia, and currently comprise the majority of wild salmon in many river systems. Autumn runs are prevalent in both areas. Recent numbers in Puget Sound are at or near historic levels (Table 3), fluctuating between about 0.6 and 2.6 million fish (including hatchery fish) from the early 1980s to 1998 (WDFW 2004). Numbers dropped to fewer than 700,000 fish in 1999 and 2000 due to unfavorable ocean conditions, but rebounded strongly in 2001 and 2002, with run size estimated at nearly 3.4 million fish in 2002 (WDFW 2002, 2004). Hatchery fish comprise 19-47% of the total population in any given year. Although chum abundance in British Columbia is characterized by large annual fluctuations, overall escapements have been slowly increasing since the 1950s (Henderson and Graham 1998). However, numbers remain lower than those observed in the early 1900s (Henderson and Graham 1998). The Columbia River once supported commercial landings of hundreds of thousands of chum salmon, but returning numbers fell drastically in the mid-1950s and never exceeded 5,000 fish per year in the 1990s (WDFW and ODFW 2002). Stock sizes are variable along the Washington coast, but are low relative to historic levels on the Oregon coast.

Sockeye salmon. Sockeye are the second most common species of salmon in the northeastern Pacific (Wydoski and Whitney 2003). Only three of Washington's nine sockeye salmon populations are considered healthy (WDF et al. 1993) and many are naturally small (Gustafson et al. 1997). Declines are especially noticeable in the Columbia basin (Table 3; WDFW and ODFW 2002). From 1993-2002, run size of the introduced stock in the Lake Washington system averaged 230,000 fish (range = 35,000-548,000) (J. Ames, unpubl. data). Sockeye numbers have been recovering in British Columbia since the 1920s (Northcote and Atagi 1997, Henderson and Graham 1998). The Fraser

River holds the largest run, usually accounting for more than half of all sockeye production in the province. Huge runs occur cyclically every four years in the river and elsewhere in southern British Columbia, which may have a substantial effect on annual food availability for southern resident killer whales. Between 1990 and 2002, run sizes varied from about 3.6 to 23.6 million fish (I. Guthrie, unpubl. data).

Steelhead. More than half of the assessed wild populations in Washington are considered depressed (WDF et al. 1993) and many are declining (Busby et al. 1996). However, stocks throughout the state are heavily supplemented with hatchery fish. Populations are largest in the Columbia River basin (Table 3), where summer runs have generally increased since the 1970s and winter runs have declined (WDFW and ODFW 2002). Wild coastal steelhead populations are considered healthy in Washington (WDFW 2002), but are largely in decline in Oregon and northern California (Busby et al. 1996).

Hatchery production. Hatchery production has partially compensated for declines in many wild salmon populations and therefore has likely benefited resident killer whales to some undetermined extent. However, hatcheries are also commonly identified as one of the factors responsible for the depletion of wild salmon stocks. Competition for food and other resources between hatchery and wild fish may reduce the number of wild fish that can be sustained by the habitat (Flagg et al. 1995, Levin et al. 2001). Physical and genetic interactions between wild and hatchery fish can weaken wild stocks by increasing the presence of deleterious genes (Reisenbichler 1997, Reisenbichler and Rubin 1999). Predation by hatchery fish may also harm wild populations.

Salmon size. Many North Pacific populations of five salmon species have declined in physical size during the past few decades (Bigler et al. 1996). For example, mean weights of adult chinook and coho salmon from Puget Sound have fallen by about 30% and 50%, respectively (Weitkamp et al. 1995; Quinn et al. 2001; B. Sanford, pers. comm.).

In the Columbia River, chinook weighing 50-60 lb were once a small but regular component of runs, but are now a rarity. Size reductions have been linked to abundance levels and ocean condition (Bigler et al. 1996, Pyper and Peterman 1999), but other factors such as harvest practices, genetic changes, effects of fish culture, and density-dependent effects in freshwater environments attributable to large numbers of hatchery releases may also play a role (Weitkamp et al. 1995). Heavy fishing pressure often produces younger age distributions in populations, resulting in fewer salmon maturing in older age classes and a smaller overall average adult size (Pess et al. 2003; J. Ames, pers. comm.). Hatcheries also have a tendency to produce returning adults that are younger and smaller (B. Sanford, pers. comm.). Reduced body size not only poses a number of risks to natural salmon populations, but may also impact killer whales and other predators. Smaller fish may influence the foraging effectiveness of killer whales by reducing their caloric intake per unit of foraging effort, thus making foraging more costly. A combination of smaller body sizes and declines in many stocks means an even greater reduction in the biomass of salmon resources available to killer whales.

Salmon body composition. In at least a few populations, hatchery salmon differ from wild salmon in their energy value for killer whales by lacking the heavier fat deposits of the wild fish. This is seen in Puget Sound, where wild spring run chinook salmon possess higher fat levels than their hatchery counterparts (B. Sanford, pers. comm.). Larger amounts of fat are required by wild fish for swimming to spawning sites located farther upstream and to survive their naturally long residency period in rivers prior to spawning. Energy value and possibly nutritional quality differ among salmon species. Osborne (1999) reported the caloric content of five Pacific salmon species as follows: chinook, 2,220 kcal/kg; sockeye, 1,710 kcal/kg; coho, 1,530 kcal/kg; chum, 1,390 kcal/kg; and pink, 1,190 kcal/kg. Thus, prey switching from a preferred but declining salmon species to a more abundant alternate species may result in lowered energy intake for resident killer whales.

Salmon distribution. Habitat alteration, hatchery and harvest practices, and natural events have combined to change regional and local patterns of salmon distributions during the past 150 years, but especially since about 1950 (Bledsoe et al. 1989, Nehlsen 1997). Some historically productive populations are no longer large, whereas other runs may have increased in abundance through hatchery production. Limited evidence indicates that hatcheries do not greatly change the pelagic distribution of coho salmon (Weitkamp et al. 1995), but they can strongly influence the nearshore presence of salmon and thus the availability of salmon for predators (Krahn et al. 2002). Within Puget Sound and the Strait of Georgia, it is unknown whether changes in salmon distribution have accompanied long-term changes in abundance. However, salmon distribution is believed to have remained consistent in this region since at least the 1960s. In particular, pink and chum salmon currently occupy nearly all of the habitat that would have been available historically (J. Ames, pers. comm.).

Perhaps the single greatest change in food availability for resident killer whales since the late 1800s has been the decline of salmon in the Columbia River basin. Estimates of predevelopment run size vary from 10-16 million fish (Table 3; Northwest Power Planning Council 1986) and 7-30 million fish (Williams et al. 1999), with chinook salmon being the predominant species present. Since 1938, annual runs have totaled just 750,000 to 3.2 million salmon (WDFW and ODFW 2002). Returns during the 1990s averaged only 1.1 million fish, representing a decline of 90% or more from historical levels. With so many salmon once present, the Columbia River mouth may well have been a highly attractive feeding site for southern resident whales. Furthermore, with several recent suspected records of northern residents traveling as far south as Grays Harbor, it is conceivable that this community visited the river mouth as well.

Seasonal availability. Even though salmon are currently considered relatively numerous in a number of areas (when hatchery fish are included), patterns of seasonal availability differs from

historical patterns in some instances. Thus, resident killer whales may have lost some seasonally important sources of prey, while perhaps gaining others, as seen in the examples that follow. Natural salmon runs throughout the region have always been greatest from August to December, but there may have been more spring and summer runs in the past (J. Ames, pers. comm.). In particular, spring and summer chinook salmon were abundant in the Columbia River until about the late 1800s (Lichatowich 1999). Populations of spring chinook have also declined severely in Puget Sound so that most runs now occur in the late summer and fall (B. Sanford, pers. comm.). This problem may be partially offset by the relatively recent presence of "blackmouth" salmon, which are a hatchery-derived form of chinook that reside year-round in Puget Sound. Through deliberate management programs, these fish have been present in large enough numbers to support a recreational fishing season since the 1970s. Contractions in run timing can also affect food availability for killer whales, as seen in several Washington populations of hatchery coho salmon, where return timing was condensed from about 14 weeks to 8 weeks during a 14-year period even though total fish numbers remained about the same (Flagg et al. 1995).

Climatic variability. A naturally occurring climatic pattern known as the Pacific Decadal Oscillation has recently been identified as a major cause of changing marine productivity and salmon abundance in the North Pacific (Mantua et al. 1997, Beamish et al. 1999, Hare et al. 1999, Benson and Trites 2002). The system is characterized by alternating 20-30-year shifts in ocean temperatures across the region, which produced cooler water temperatures from 1890-1924 and 1947-1976 and warmer water temperatures from 1925-1946 and 1977 to at least 2001. Cooler periods promote coastal biological productivity off the western contiguous U.S. and British Columbia, but inhibit productivity in Alaska, whereas warmer phases have the opposite effect (Hare et al. 1999). Salmon are probably most affected through changes in food availability and survival at sea (Benson and Trites 2002), but associated terrestrial weather patterns may also be

a factor. Higher rainfall at certain times of the year during warm regimes can cause greater stream flow and flooding in western Washington, thereby reducing salmon egg survival (J. Ames, pers. comm.). The most recent warm period has been strongly tied to lower salmon production south of Alaska (Hare et al. 1999). Greater salmon numbers in Washington during the past several years indicate that the latest warm phase has concluded. Evidence suggests that the Pacific Decadal Oscillation has existed for centuries, which implies that sizable fluctuations in salmon abundance are a natural pattern in the North Pacific (Beamish et al. 1999, Benson and Trites 2002).

Although not necessarily related to the Pacific Decadal Oscillation, changes in ocean temperature also directly influence salmon abundance in the Strait of Juan de Fuca and the vicinity of the San Juan Islands. In years when ocean conditions are cooler than usual, the majority of sockeye salmon returning to the Fraser River do so via this route, but when warmer conditions prevail, migration is primarily through Johnstone Strait (Groot and Quinn 1987).

Other fish species. Declines in abundance have also been recorded in some of the other known prey of resident killer whales. The Pacific herring stock in the Georgia Basin and Puget Sound collapsed from overharvesting in the 1960s, but recovered to high levels by the late 1970s through better management practices (DFO 2002a). However, some subpopulations, such as those at Cherry Point and Discovery Bay in Puget Sound, have fallen so low that they may now be threatened (Stout et al. 2001). Herring abundance has also decreased off western Vancouver Island since 1989, probably because of warm ocean temperatures (DFO 2001). Heavy fishing pressure was responsible for decreases in lingcod populations throughout British Columbia during the 1970s (DFO 2002b). Numbers generally responded to improved management and rebounded during the 1980s and early 1990s, but have again declined in subsequent years. Abundance has remained low in the Strait of Georgia since the 1980s. Excessive exploitation

has also caused rockfish stocks to plummet along much of the Pacific coast in recent decades (Bloeser 1999, Love et al. 2002). Copper, brown, and quillback rockfishes are among the most affected species in Puget Sound. In contrast to the species mentioned above, catch data suggest significant growth in Pacific halibut populations in British Columbia and Washington from the mid-1970s to late 1990s (International Pacific Halibut Commission 2002).

Prey availability summary. Resident killer whales have likely been exposed to natural changes in the availability of salmon and some other prey for millennia. During the past century and a half, human harvest pressures and alterations to the environment have undoubtedly caused important changes in food availability for resident whales. Due to a lack of information on many topics, especially which species runs are important, it is unknown whether current fish stocks are a limiting factor for either population of resident whales. Favorable ocean conditions across the region in the next decade or two may temporarily alleviate possible food limitations by boosting overall salmon numbers. Nevertheless, the long-term prognosis for salmon recovery in the region is unclear. Improved management programs will undoubtedly benefit some salmon populations, but continued human population growth and urbanization will place greater pressure on freshwater and marine ecosystems and challenge the efforts of managers seeking to achieve meaningful recovery (Langer et al. 2000).

Reduction of Prey Populations: Transients

Harbor seals and other marine mammals are the preferred prey of transient killer whales (Baird and Dill 1996, Ford et al. 1998, Ford and Ellis 1999), but the extent that transients rely on specific seasonal and local sources of prey is less understood. In a few instances, some transients are known to take advantage of specific seasonal food sources, such as harbor seal pupping sites (Baird and Dill 1995). As with resident whales, transients also experienced serious historical declines in their prey base. From the late 1800s to late 1960s, overhunting caused large declines or

extirpations in seal, sea lion, and large whale populations between southeastern Alaska and California (Scheffer 1928, Bonnot 1951, Newby 1973, Ford and Ellis 1999, Gregr et al. 2000, Jeffries et al. 2003, Springer et al. 2003). Numbers of harbor seals and Steller's sea lions were reduced as much as 90% in British Columbia (Olesiuk et al. 1990b, Ford and Ellis 1999). Seal numbers in the region have grown 7 to 12-fold since about 1970 and are now close to or at carrying capacity (Olesiuk 1999, Jeffries et al. 2003). Regional whale populations crashed even more severely, but have not recovered in most cases (Gregr et al. 2000). Recovery of the gray whale population is one notable exception (National Marine Fisheries Service 1993). Partial recovery of regional humpback whale populations has also occurred (Carretta et al. 2002). With the recovery of some pinniped populations, Ford et al. (2000) believed that transient whales no longer face a scarcity of prey.

The following recent population estimates have been made for marine mammals that are important prey of transient killer whales. Population sizes of harbor seals are estimated to number 24,732 (CV = 0.12) animals along the Washington and Oregon coasts, 14,612 (CV = 0.15) animals in Washington's inland waters, 108,000 animals in British Columbia, 30,293 animals in California, and 37,450 (CV = 0.073) animals in southeastern Alaska (Olesiuk 1999, Angliss and Lodge 2002, Carretta et al. 2002). The eastern Pacific stock of Steller's sea lions contains an estimated minimum of 31,028 individuals from southeastern Alaska to California (Angliss and Lodge 2002). The estimated U.S. population of California sea lions ranges from 204,000 to 214,000 animals (Carretta et al. 2002). The estimated abundance of the Dall's porpoise stock from California to Washington is 117,545 (CV = 0.45) individuals (Carretta et al. 2002). Stocks of harbor porpoise are estimated to be 39,586 (CV = 0.38) animals for the Washington and Oregon coasts and 3,509 (CV = 0.40) animals for Washington's inland waters (Carretta et al. 2002). The estimated abundance of the eastern North Pacific stock of gray whales is 26,635 (CV = 0.10) animals (Angliss and Lodge 2002). Population estimates of humpback whale

stocks in the eastern and central North Pacific are 856 (CV = 0.12) animals and 4,005 (CV = 0.095) animals, respectively (Angliss and Lodge 2002, Carretta et al. 2002).

Disturbance by Underwater Noise and Vessel Traffic

Many marine mammal populations are experiencing ever-increasing amounts of indirect harassment through expanding contact with human-made sources of marine noise and vessel traffic. Underwater noise pollution originates from a variety of sources, including general shipping and boating traffic, industrial activities such as dredging, drilling, marine construction, and seismic testing of the sea bottom, and military and other vessel use of sonar (Richardson et al. 1995, Gordon and Moscrop 1996, National Research Council 2003). Many of these activities are prevalent in coastal areas, coinciding with the preferred habitat of most killer whale populations. Killer whales rely on their highly developed acoustic sensory system for navigating, locating prey, and communicating with other individuals. Excessive levels of human-generated noise have the potential to mask echolocation and other signals used by the species, as well as to temporarily or permanently damage hearing sensitivity. Loud sounds may therefore be detrimental to survival by impairing foraging and other behavior, resulting in a negative energy balance (Bain and Dahlheim 1994, Gordon and Moscrop 1996, Erbe 2002, Williams et al. 2002a, 2002b). Such noise may also alter the movements of prey, further affecting foraging efficiency. Furthermore, chronic stress from noise exposure, as well as repeated disturbance from vessel traffic, can induce harmful physiological conditions, such as hormonal changes, lowered immune function, and pathology of the digestive and reproductive organs (Gordon and Moscrop 1996). In extreme cases, high-intensity sounds (e.g., those from certain types of sonar) are potentially lethal by directly damaging lungs, sinuses, the gastrointestinal tract, and other body tissues, or by causing hemorrhages (Gordon and Moscrop 1996). The threshold levels at which underwater noise

becomes harmful to killer whales remain poorly understood (Krahn et al. 2002).

In addition to the problem of noise, the physical presence of vessels can disrupt killer whale movements and normal behavioral patterns, especially when encounters are frequent. Commercial shipping and recreational boating traffic has expanded in many regions in recent decades, increasing the likelihood of interactions between whales and vessels. In Washington, both types of vessel traffic have grown over time with the state's expanding economy and human population.

Whale watching, naval sonar use, and deployment of acoustical harassment devices at salmon farms have drawn the most attention in Washington and British Columbia as being activities that are potentially disruptive and harmful to killer whale populations.

Whale watching. Whale watching has become an important tourist industry in many localities around the world since the early 1980s (Hoyt 2001, 2002). In addition to boosting the economies of coastal communities and providing an economic basis for preserving whale populations, whale watching has also proven beneficial by increasing public awareness of marine mammals and the environmental issues confronting them (Barstow 1986, Tilt 1986, Duffus and Deardon 1993, Lien 2001). In Washington and British Columbia, killer whales are the main target species of the commercial whale-watching industry, easily surpassing other species such as gray whales, porpoises, and pinnipeds (Hoyt 2001). Killer whale watching in the region is centered primarily on the southern and northern residents, which can be found more reliably than transients or offshores. Viewing activity occurs predominantly in and around Haro and Johnstone Straits, which are the summer core areas of the two resident communities. However, Haro Strait supports a considerably greater industry because of its proximity to urban areas. Both commercial and private vessels engage in whale watching, as well as kayaks and small numbers of aircraft. In addition, land-based

viewing is popular at locations such as Lime Kiln State Park, San Juan County Park, and the San Juan County land bank on San Juan Island, Turn Point on Stuart Island, and East Point on Saturna Island (K. Koski, pers. comm.). Lime Kiln State Park was established in 1985 by the Washington State Parks and Recreation Commission for the purpose of watching killer whales (Ford et al. 2000) and receives about 200,000 visitors per year, most of whom hope to see whales (W. Hoppe, pers. comm.).

Commercial viewing of killer whales began in Washington and southern British Columbia in 1977 and persisted at a small scale through the early 1980s, with just a few boats operating and fewer than 1,000 passengers serviced per year (Osborne 1991, Baird 2002, Osborne et al. 2002). The first full-time commercial whale-watching vessel began frequent service in 1987 (Baird 2002). Activity expanded to about 13 active vessels (defined as making more than one trip per week) and 15,000 customers by 1988 (Osborne 1991), then jumped sharply from 1989 to 1998, when vessel numbers grew to about 80 boats and passenger loads increased to about half a million customers per year (Osborne et al. 2002). Small reductions in the numbers of companies, active boats, and passengers have occurred since then. About 37 companies with 73 boats were active in 2003; passenger levels were estimated at 450,000 people in both 2001 and 2002 (K. Koski, unpubl. data). Most companies belong to an industry organization known as the Whale Watch Operators Association Northwest, which was formed in 1994 to establish a set of whale viewing guidelines for commercial operators and to improve communication among companies (Whale Watch Operators Association Northwest 2003). The majority of commercial vessels were based in Washington during the 1980s, but this has gradually shifted so that Canadian boats comprised 65% of the industry in 2002 (Osborne et al. 2002). Most companies are based in Victoria or the San Juan Islands, but others operate from Bellingham, La Conner, Everett, Port Townsend, and Vancouver. Commercial whale-watching boats range in size and configuration from open vessels measuring under 7 m in length and capable of

holding 6-16 people to large 30-m-long passenger craft that can carry up to 280 customers. Many boats routinely make two or three trips per day to view whales. Commercial kayaking operations include about six active companies that are focused on whale watching, plus another 18 companies or so that occasionally view whales (K. Koski, pers. comm.). At least one business offers occasional airplane viewing. The San Juan Islands and adjacent waters also attract large numbers of private boaters for recreational cruising and fishing. Many of these participate in viewing whales whenever the opportunity arises. Currently, about 64% of the craft seen with whales are commercially operated, with the remainder privately owned (Marine Mammal Monitoring Project 2002, Osborne et al. 2002). Additionally, private floatplanes, helicopters, and small aircraft take regular advantage of opportunities to view whales (Marine Mammal Monitoring Project 2002).

Hoyt (2001) assessed the value of the overall whale-watching industry in Washington at US\$13.6 million (commercial boat-based viewing, \$9.6 million; land-based viewing, \$4.0 million) and in British Columbia at US\$69.1 million (commercial boat-based viewing, \$68.4 million; land-based viewing, \$0.7 million) in 1998, based on estimated customer expenditures for tours, food, travel, accommodations, and other expenses. An estimated 60-80% of this value likely originated from the viewing of killer whales in the Georgia Basin and Puget Sound (R. W. Osborne, pers. comm.). More recent estimates of the economic value of whale watching in the region are unavailable. Expenditures by the users of private whale-watching vessels are also unknown.

The growth of whale watching during the past few decades has meant that killer whales in the region are experiencing unprecedented contact with vessels. Not only do greater numbers of boats accompany the whales for longer periods of the day, but there has also been a gradual lengthening of the viewing season. Commercial viewing activity during the summer now routinely extends from 9:00 a.m. to 9:00 p.m., with the heaviest pressure between 10:00 a.m. and 5:00 p.m.

(Osborne et al. 2002; K. Koski, pers. comm.). However, some viewing may begin as early as 6:00 a.m. (Bain 2002). Thus, many resident whales are commonly accompanied by boats throughout much or all of the day. The commercial whale-watching season now usually begins in April, is heaviest during the warmer summer months, and largely winds down in October, but a small amount of traffic occurs throughout the winter and early spring whenever whales are present (K. Koski, pers. comm.). Viewing by private craft follows a similar seasonal pattern. J pod is considered the most commonly viewed pod, with L pod being the least viewed (Bain 2002; K. Koski, pers. comm.; R. W. Osborne, pers. comm.).

The mean number of vessels following groups of killer whales at any one time during the peak summer months increased from five boats in 1990 to 18-26 boats from 1996-2002 (Osborne et al. 1999, 2002, Baird 2001, Erbe 2002, Marine Mammal Monitoring Project 2002). However, the whales sometimes attract much larger numbers of vessels. Annual maximum counts of 72-120 boats were made near whales from 1998-2002 (Osborne et al. 2002). In these cases, commercial vessels totaled no more than 35 craft, thus the majority of boats present were privately owned. Baird (2002) described one instance of a small fleet of 76 boats that simultaneously viewed about 18 members of K pod as they rested along the west side of San Juan Island in 1997. The ring of boats surrounding the whales included kayaks, sailboats, and a wide assortment of different-sized powerboats measuring up to about 30 m. Unusual occurrences of whales have the potential to draw even greater numbers of vessels. The month-long presence of killer whales at Dyes Inlet in Bremerton in the autumn of 1997 attracted up to 500 private whale-watching boats on weekends.

Worries that whale watching may be disruptive to killer whales date back to the 1970s and early 1980s, when viewing by relatively small numbers of vessels became routine (Kruse 1991). The tremendous expansion of commercial and private viewing in recent years has greatly added to concerns (Osborne 1991, Duffus and Deardon

1993, Lien 2001, Erbe 2002, Williams et al. 2002a, 2002b). The southern residents in particular have been exposed to large amounts of noise generated by whale-watching vessels since the early 1990s (Bain 2002). This has caused whale-watching activity to be cited as possibly an important contributing factor in the recent decline of this population (Baird 2001, Bain 2002, Krahn et al. 2002). Whale-watching vessels can produce high levels of underwater sound in close proximity to the animals. Noise levels vary with vessel and engine type and become louder as speed increases (Bain 2002, Erbe 2002). Outboard-powered vessels operating at full speed produce estimated noise levels of about 160-175 decibels with reference to one microPascal at one meter (dB re 1 μ Pa at 1 m hereafter) (Bain 2002, Erbe 2002). Inflatables with outboard engines are slightly louder than rigid-hull powerboats with inboard or stern-drive engines (Erbe 2002). Bain (2002) reported that the shift in predominance from American to Canadian-owned commercial craft during the 1990s has likely led to greater noise exposure for the whales. Many Canadian boats are small outboard powered craft, whereas most American vessels are larger and diesel powered. By modeling vessel noise levels, Erbe (2002) predicted that the sounds of fast boats are audible to killer whales at distances of up to 16 km, mask their calls up to 14 km away, elicit behavioral responses within 200 m, and cause temporary hearing impairment after 30-50 minutes of exposure within 450 m. For boats moving at slow speeds, the estimated ranges fall to 1 km for audibility and masking, 50 m for behavioral reactions, and 20 m for temporary hearing loss. It should be noted that underwater sound propagation can vary considerably depending on water depth and bottom type, thus noise measurements may not be applicable between locations (Richardson et al. 1995).

Several studies have linked vessel noise and traffic with short-term behavioral changes in northern and southern resident killer whales (Kruse 1991; Jelinski et al. 2002; Williams et al. 2002a, 2002b; J. Smith, unpubl. data). Individuals can react in a variety of ways to the presence of whale-watching vessels. Responses include swimming faster,

adopting less predictable travel paths, making shorter or longer dives, moving into open water, and altering normal patterns of behavior at the surface (Kruse 1991; Jelinski et al. 2002; Williams et al. 2002a; J. Smith, unpubl. data), while in some cases, no disturbance seems to occur (R. Williams, unpubl. data). Avoidance tactics often vary between encounters and the sexes, with the number of vessels present and their proximity, activity, size, and loudness affecting the reaction of the whales (Williams et al. 2002a, 2002b). Avoidance patterns often become more pronounced as boats approach closer. Kruse (1991) observed that northern resident whales sometimes reacted even to the approach of a single boat to within 400 m. This study also reported a lack of habituation to boat traffic over the course of one summer. However, further research by Williams et al. (2001, 2002a, 2002b) indicated a reduction in the intensity of northern resident responses to vessels between the mid-1980s and mid-1990s, possibly because of gradual habituation, changes in the avoidance responses of the whales, or sampling differences between the two studies. Disturbance by whale-watching craft has also been noted to cause newborn calves to separate briefly from their mothers' sides, which may lead to greater energy expenditures by the calves (J. P. Schroeder, pers. comm.).

Transient killer whales also receive considerable viewing pressure when they venture into the Georgia Basin and Puget Sound (Baird 2001). No studies have focused on their behavioral responses to whale-watching vessels to determine whether they resemble those of residents. Because transients may depend heavily on passive listening for prey detection (Barrett-Lennard et al. 1996), their foraging success is more likely affected by vessel presence than with residents (Ford and Ellis 1999, Baird 2001).

Whale-watching vessels generally employ one of two methods for approaching and viewing killer whales. "Paralleling" involves a boat that slowly cruises alongside the whales, preferably at a distance of greater than 100 m, as specified under current guidelines (see below). This style usually allows the passengers to see more of the whales

and their behavior, but keeps them farther from the animals. The second technique is known as “leapfrogging” and involves a vessel that moves ahead of the whales by paralleling them for some distance at a faster speed (Williams et al. 2002b). The vessel then turns 90° to place itself directly in the whales’ anticipated path and waits for their approach while sitting in a stationary position with its engines put in idle or turned off. If the whales maintain their approximate travel course, they often swim closely past the boat or even underneath it, giving passengers a better close-up viewing opportunity. Private boaters usually engage in leapfrogging more than commercial operators (William et al. 2002b). Both styles of watching induce similar evasive responses by the whales, but leapfrogging appears to cause greater path deviation (Williams et al. 2002a, 2002b). Vessels speeding up to leapfrog also emit greater noise levels that are of higher frequency, and therefore have greater potential to mask communication in the whales than paralleling craft (Bain 2002). Furthermore, masking is more likely to occur from vessels placed in front of the whales (Bain and Dahlheim 1994, Bain 2002).

Researchers and photographers during the 1970s suspected that their own vessels affected killer whale behavior and developed an unofficial code of conduct intended to reduce the impacts of their activity on the whales (Bain 2002). These initial rules addressed the proximity between vessels and whales, vessel speeds, and the orientation of vessels relative to whales. As whale watching in Washington and southern British Columbia became increasingly popular, a set of voluntary guidelines was eventually established in the late 1980s by The Whale Museum in Friday Harbor to instruct commercial operators and recreational boaters on appropriate viewing practices. These also functioned as a proactive alternative to stricter legal enforcement of American and Canadian regulations (i.e., the Marine Mammal Protection Act and Fisheries Act, respectively), which prohibit harassment of the whales. In 1994, the newly formed Whale Watch Operators Association Northwest prepared an improved set of guidelines aimed primarily at commercial operators (Whale Watch Operators Association

Northwest 2003). Regular review and updating of the guidelines has occurred since then. The current “Be Whale Wise” guidelines (Appendix B) were issued in 2002 with input from the operator’s association, whale advocacy groups, and governmental agencies. These guidelines suggest that boaters parallel whales no closer than about 100 m, approach the animals slowly from the side rather than from the front or rear, and avoid putting their vessel within about 400 m in front of or behind the whales. Vessels are also recommended to reduce their speed to about 13 km/hr within about 400 m of the whales and to remain on the outer side of whales near shore. A variety of other recommendations are also provided. Commercial operators have also agreed not to accompany whales into two areas off San Juan Island, an action that many private boaters follow as well. The first is a ½-mile (800 m)-wide zone along a 3-km stretch of shore centered on the Lime Kiln lighthouse. The area was designated in 1996 to facilitate shore-based viewing of whales and to reduce vessel presence in an area used preferentially by the whales for feeding, traveling, and resting. The second is a ¼-mile (400 m)-wide zone along much of the west coast of San Juan Island from Eagle Point to Mitchell Point. This was established in 1999 for the purpose of giving whales uninterrupted access to inshore habitats.

Most commercial whale-watching boats generally appear to honor the guidelines, with overall adherence rates improving over time (K. Koski, pers. comm.). However, infractions persist (Table 4). A greater problem lies with recreational boaters, who are much less likely to know about the guidelines and proper viewing etiquette (Lien 2001, Erbe 2002). As a result, several programs have been established to improve the awareness and compliance of private whale watchers, but these have had a beneficial impact on commercial operators as well. They include the Soundwatch Boater Education Program, which The Whale Museum has operated since 1993 largely through private grants and donations. A Canadian counterpart program known as the Marine Mammal Monitoring Project (M3) began in 2001 through the Veins of Life Watershed Society, with principal funding from the Canadian federal

Table 4. Types and relative occurrence of infractions of voluntary whale-watching guidelines witnessed by the Soundwatch Boater Education Program in Washington and southern British Columbia, 1998-2002 (data provided by The Whale Museum's Soundwatch Boater Education Program). Infractions were committed by commercial and recreational vessels and aircraft in the act of whale watching.

Type of infraction	Percent of infractions ^a
Parked in path of whales ^b	31.6
Within the 400-m-wide San Juan Island no-boat zone	21.4
Inshore of whales	20.8
Other ^c	7.6
Aircraft within 300 m of whales	6.4
Under power within 100 m of whales	5.0
Crossing the path of whales	3.6
Chasing or pursuing whales	2.0
Within the 800-m-wide Lime Kiln no-boat zone	1.8
Total	100.2

^a Based on 2,634 infractions observed from 1998-2002.

^b Includes leapfrogging and repositioning.

^c Includes a variety of infractions, such as repeated circling by aircraft, operating a vessel at fast speeds within 400 m of whales, drifting into the path of whales, and operating a vessel within the protected zone around seabird nesting areas and marine mammals haul-out sites.

government. Both programs work cooperatively in the waters of both countries. A third program known as Straitwatch has operated in the vicinity of Johnstone Strait under the guidance of the Johnstone Strait Killer Whale Interpretive Centre Society since 2002. The programs educate the boating public through several methods, the most visible of which is the use of small patrol boats that are on the water with whale-watching vessels on a daily basis during the peak whale-watching season. Crews do not have enforcement capability, but monitor and gather data on boater activities and inform boat operators of whale-watching guidelines and infractions. Monitoring of commercial craft is also performed. Program staff also distribute informational materials and give public presentations to user groups. These programs have been very successful in improving the overall behavior of recreational and commercial whale watchers, especially when their patrol craft are operating on the scene (J. Smith, unpubl. data; K. Koski, pers. comm.).

Aircraft are not specifically mentioned in the "Be Whale Wise" guidelines. However, recommendations for aircraft are incorporated into a broader

set of regional whale-watching guidelines prepared by the National Marine Fisheries Service. These advise aircraft to maintain a minimum altitude of 300 m (1,000 ft) above all marine mammals, including killer whales, and to not circle or hover over the animals. Violations of these recommendations have dramatically risen in the past four years and now represent about 10% of all infractions observed (Marine Mammal Monitoring Project 2002; K. Koski, unpubl. data).

The potential impacts of whale watching on killer whales remain controversial and inadequately understood. Although numerous short-term behavioral responses to whale-watching vessels have been documented, no studies have yet demonstrated a long-term adverse effect from whale watching on the health of any killer whale population in the northeastern Pacific. Both resident populations have shown strong site fidelity to their traditional summer ranges despite more than 25 years of whale-watching activity. Furthermore, northern resident abundance increased throughout much of this period, suggesting that this population was not affected to any great extent until perhaps recently. The

current decline of the southern resident population does not appear to follow a simple cause-and-effect relationship with the expansion of whale watching. Indeed, the statistical analyses of Bain (2002) most strongly indicated that the whale-watching fleet's buildup tracked the decline of the population from 1991-2001. Bain (2002) therefore speculated that a complex relationship with additional variables might be at work. Further confounding the matter is the fact that the heaviest watched pod (J pod) has shown an overall increasing trend in numbers since the 1970s and is currently at its highest recorded number. In contrast, L pod is considered the least viewed pod, but is the only one to undergo a substantial and continuing decline since 1996. It is important to note that research findings on the responses of the northern residents to vessel traffic are not necessarily applicable to the southern residents, which are exposed to much heavier viewing pressure (Williams et al. 2002a). Some researchers believe that the southern residents are more habituated to vessel traffic and have perhaps adapted to some of its adverse impacts. Nevertheless, concerns remain that populations may be experiencing subtle cumulative detrimental effects resulting from frequent short-term disturbance caused by whale watching. If recent levels of whale watching are indeed problematic for the southern residents, the population has much less opportunity than the region's other killer whale communities to relocate to other productive feeding areas with less disturbance (Bain 2002).

Military sonar use and other activities. The intense sound levels generated by some military sonar, when coupled with certain types of sea bottom, may sometimes be harmful to marine mammals (Balcomb and Claridge 2001). Current sonar designs produce signals of greater than 235 dB re 1 μ Pa at 1 m and can be heard underwater for up to 30 km. The signals are loud enough to damage the hearing of marine mammals and, in severe cases, can cause hemorrhaging around the brain and ear bones, resulting in death. Injuries (e.g., severe congestion and hemorrhaging in blood vessels and some tissues) in deep-diving species are consistent with gas bubble formation

resulting from rapid decompression (Jepson et al. 2003). Strandings of cetaceans have been linked to naval sonar use at a number of locations (see summary in Balcomb and Claridge 2001). Animals appear to be especially vulnerable in confined waterways, where opportunities for escape are limited.

A clear example of the disruptive effects that military sonar use can have on killer whales and other marine mammals was seen in Haro Strait on 5 May 2003. A U.S. Navy guided-missile destroyer (*USS Shoup*) passed through the strait while operating its mid-frequency (3 kHz) AN/SQS-53C sonar during a training exercise. This type of sonar is widely used on Navy ships and has been linked to marine mammal strandings elsewhere. The test lasted about 4 hours and the sonar's pulses were loud enough to be heard above water by witnesses in the area. Twenty-two members of J pod happened to be at a preferred foraging area in the strait and performed a number of unusual behaviors in response to the sound (K. C. Balcomb, pers. comm.). Observers noted that the whales quickly stopped foraging and bunched up in a defensive manner. They then swam in close to shore at the surface, moved about in several different directions and appeared confused, and finally split apart and fled the area in opposite directions. As many as 100 Dall's porpoises were seen high-speed swimming over a long distance while rapidly departing the strait and a minke whale was observed porpoising over a distance of at least 4.5 km (K. C. Balcomb, pers. comm.). During the month after the incident, eight dead harbor porpoises and one Dall's porpoise washed ashore in the vicinity of the San Juan Islands and eastern Strait of Juan de Fuca (National Marine Fisheries Service 2004). Necropsies performed on seven of the harbor porpoises indicated that causes of death were due to blunt-force injury or illness (four animals) or could not be determined (three animals) (National Marine Fisheries Service 2004). No definite evidence of acoustic trauma was noted, but such injury could not be ruled out as a contributing factor in the deaths of any of the porpoises.

Naval exercises using mid-frequency sonar are infrequent in Washington's inland waters, but may occur with greater regularity off the outer coast. It is unknown whether such tests have previously affected killer whales or other marine mammals along the coast or elsewhere in the northeastern Pacific.

Canadian military authorities maintain a munitions testing area near Bentinck Island and Pedder Bay at the southern tip of Vancouver Island. Underwater detonations are sometimes performed at the site and occurred on one occasion when a J pod was less than 1.5 km away, which caused the whales to suddenly change their direction of travel (R. W. Baird, pers. comm.). The U.S. Navy operates at least four ordnance training locations in Puget Sound, including sites at Crescent Harbor and Holmes Harbor off eastern Whidbey Island, Port Townsend Bay off Indian Island, and Hood Canal at Subbase Bangor. Similar sites probably occur elsewhere in Washington and other U.S. waters with killer whales. Their operations likely have little impact on the species unless they take place when animals happen to be in the vicinity.

Civilian sonar use. Commercial sonar systems widely used on civilian vessels are often characterized by higher operating frequencies, lower power, narrower beam patterns, and shorter pulse lengths than military sonar (National Research Council 2003). Frequencies fall between 1 and 200 kHz or more, thus many systems function within the hearing range of marine mammals. Source levels of some units can reach 250 dB re 1 μ Pa at 1 m. Commercial depth sounders and fish detectors usually focus their sound downward and therefore may be less disruptive to killer whales than forward-looking sonars. Little information is currently available on the impacts of civilian sonar on killer whales and other marine mammals, but there is potential for conflicts under some circumstances.

Underwater acoustic harassment devices. The use of acoustic harassment devices at salmon aquaculture farms represents another source of disruptive noise for killer whales in Washington and British Columbia. The devices emit loud

signals that are intended to displace harbor seals and sea lions away from the farms, thereby deterring predation, but can cause strong avoidance responses in cetaceans as well (Olesiuk et al. 2002). Morton and Symonds (2002) described one model that broadcast a 10 kHz signal at 194 dB re 1 μ Pa at 1 m and was potentially audible in open water for up to 50 km. During the early 1990s, the devices were installed at a number of salmon farms in Washington (including Cypress Island, Port Angeles, Rich Passage off Bainbridge Island, and Squaxin Island) and British Columbia, but were phased out of operation in Washington after just a few years (B. Norberg, pers. comm.; D. Swecker, pers. comm.; J. K. B. Ford, pers. comm.). Activation of the devices at a farm near northeastern Vancouver Island corresponded with drastic declines in the use of nearby passages and inlets by both resident and transient whales (Morton and Symonds 2002). It is unknown whether the devices ever produced similar impacts on killer whales in Washington or elsewhere in British Columbia. The only device still in use in Washington operates at the Ballard locks in Seattle, where the National Marine Fisheries Service utilizes it primarily during the spring steelhead run (B. Norberg, pers. comm.).

Environmental Contaminants

Organochlorines. Another primary factor in the decline of killer whales in the northeastern Pacific may be exposure to elevated levels of toxic chemical contaminants, especially organochlorine compounds (Ross et al. 2000, Center for Biological Diversity 2001, Krahn et al. 2002). Organochlorines comprise a diverse group of chemicals manufactured for industrial and agricultural purposes, such as polychlorinated biphenyls (PCBs), DDT, as well as unintentional by-products of industrial and combustion processes, such as the dioxins (PCDDs) and furans (PCDFs). Many organochlorines are highly fat soluble (lipophilic) and have poor water solubility, which allows them to accumulate in the fatty tissues of animals, where the vast majority of storage occurs (O'Shea 1999, Reijnders and Aguilar 2002). Some are highly persistent in the environment and resistant to metabolic

degradation. Vast amounts have been produced and released into the environment since the 1920s and 1930s. The persistent qualities of organochlorines mean that many are ultimately transported to the oceans, where they enter marine food chains. Bioaccumulation through trophic transfer allows relatively high concentrations of these compounds to build up in top-level marine predators, such as marine mammals (O'Shea 1999). The toxicity of several organochlorines has led to bans or restrictions on their manufacture and use in northern industrial countries (Barrie et al. 1992). Most agriculture uses of DDT ended in the U.S. in 1972 and in Canada from 1970-1978. Production of PCBs stopped in the U.S. in 1977 and importation into Canada was prohibited in 1980. However, these compounds continue to be used widely in other parts of the world, including Asia and Latin America. Organochlorines enter the marine environment through several sources, such as atmospheric transport, ocean current transport, and terrestrial runoff (Iwata et al. 1993, Grant and Ross 2002). As a result, these compounds have become distributed throughout the world, including seemingly pristine areas of the Arctic and Antarctic (Barrie et al. 1992, Muir et al. 1992). Much of the organochlorine load in the northern Pacific Ocean originates through atmospheric transport from Asia (Barrie et al. 1992, Iwata et al. 1993, Tanabe et al. 1994).

Killer whales are candidates for accumulating high concentrations of organochlorines because of their position atop the food chain and long life expectancy (Ylitalo et al. 2001, Grant and Ross 2002). Their exposure to contaminants occurs only through diet (P. S. Ross, pers. comm.). Mammal-eating populations appear to be especially vulnerable to accumulation of contaminants because of the higher trophic level of their prey, as compared to fish-eating populations (Ross et al. 2000).

Several studies have examined contaminant levels in killer whales from the North Pacific (Table 5). It should be noted that variable sample quality, limited background information, and different analytical techniques make direct comparisons between study results difficult (Ross et al. 2000,

Ylitalo et al. 2001, Reijnders and Aguilar 2002). Organochlorine concentrations are also known to vary in relation to an animal's physiological condition (Aguilar et al. 1999). Most marine mammals lose weight during certain stages of their normal life cycles, such as breeding and migration, or from other stresses, including disease and reduced prey abundance and quality. The depletion of lipid reserves during periods of weight loss can therefore alter detected organochlorine concentrations, depending on whether a compound is redistributed to other body tissues or is retained in the blubber (O'Shea 1999). Perhaps most importantly, caution should be used when comparing contaminant levels between free-ranging presumably healthy whales and stranded individuals, which may have been in poor health before their deaths. Sick animals commonly burn off some of their blubber before stranding. Furthermore, stranded killer whales tend to be older individuals and therefore may be more contaminated (P. S. Ross, pers. comm.).

Ross et al. (2000) have recently described the contaminant loads of killer whale populations occurring in British Columbia and Washington. Male transient whales were found to contain significantly higher levels of total PCBs (SPCBs hereafter) than southern resident males, whereas females from the two communities carried similar amounts (Table 5). Both populations had much higher SPCB concentrations than northern resident whales. A similar pattern exists in Alaska, where transients from the Gulf of Alaska and AT1 communities contained SPCB levels more than 15 times higher than residents from the sympatric Prince William Sound pods of the southern Alaska community (Ylitalo et al. 2001). Profiles of specific PCB congeners were similar among the three killer whale communities from British Columbia and Washington, with congeners 153, 138, 52, 101, 118, and 180 accounting for nearly 50% of SPCB load (Ross et al. 2000).

Relatively low amounts of SPCDDs and SPCDFs were detected in these whales, possibly because these compounds are more easily metabolized or excreted than many PCB congeners (Ross et al. 2000). PCDD and PCDF levels in whales from

Table 5. SPCB, SDDT, and *p,p'*-DDE concentrations (mean \pm SE, mg/kg, wet weight or lipid weight) reported in tissue samples from killer whale populations in the North Pacific.

Reference	Popula- tion ^a	Age and sex ^b	Sample size ^c	Sample locations ^d	Sample years	SPCBs ^e	SDDTs ^e	<i>p,p'</i> -DDE ^e
<u>Studies of free-ranging animals that were biopsied or otherwise tested^f</u>								
Ross et al. (2000)	WCT	M	5	BC	1993-96	251 \pm 55 (l)	-	-
	WCT	F	5	BC	1993-96	59 \pm 21 (l)	-	-
	SR	M	4	BC	1993-96	146 \pm 33 (l)	-	-
	SR	F	2	BC	1993-96	55 \pm 19 (l)	-	-
	NR	AM	8	BC	1993-96	37 \pm 6 (l)	-	-
	NR	AF	9	BC	1993-96	9 \pm 3 (l)	-	-
Ylitalo et al. (2001)	AT	M, F	13	AK	1994-99	59 \pm 12 (w)	83 \pm 17 (w)	71 \pm 15 (w)
	AT	M, F	13	AK	1994-99	230 \pm 36 (l)	320 \pm 58 (l)	280 \pm 50 (l)
	SAR	M, F	64	AK	1994-99	3.9 \pm 0.6 (w)	3.8 \pm 0.6 (w)	3.1 \pm 0.5 (w)
	SAR	M, F	64	AK	1994-99	14 \pm 1.6 (l)	13 \pm 1.8 (l)	11 \pm 1.5 (l)
Ono et al. (1987)	U	AM	1	JA	1986	410 (w)	-	-
	U	AF	2	JA	1986	355 \pm 5 (w)	-	-
<u>Studies of stranded animals</u>								
Calambokidis et al. (1984)	WCT	AM	1	BC	1979	250 (w)	-	640 (w)
	SR	AM	1	WA	1977	38 (w)	-	59 (w)
Jarman et al. (1996)	U	JM, AM, AF	6	WA, BC	1986-89	22 (w)	32 (w)	28 (w)
Hayteas and Duffield (2000)	U	JM	3	OR	1988-97	146 \pm 135 (w)	-	174 \pm 106 (w)
	U	AF	1	OR	1996	276 (w)	-	494 (w)
	U	JF	1	OR	1995	117 (w)	-	519 (w)

^a WCT, west coast transients; SR, southern residents; NR, northern residents; AT, Gulf of Alaska and AT1 transients; SAR, southern Alaska residents; and U, not identified.

^b M, males; F, females; A, adults; and J, juveniles.

^c Number of animals sampled.

^d BC, British Columbia; AK, Alaska; JA, Japan; WA, Washington; and OR, Oregon.

^e Concentrations expressed on the basis of wet weight (w) or lipid weight (l).

^f The animals studied by Ono et al. (1987) were accidentally caught and killed by commercial fishermen.

this area also appear in Jarman et al. (1996). No detailed studies of SDDT concentrations in killer whales have been conducted to date in Washington or surrounding areas. However, preliminary evidence from stranded individuals in Oregon and Washington suggests that high levels of the metabolite *p,p'*-DDE may be present (Calambokidis et al. 1984, Hayteas and Duffield 2000). High concentrations of SDDTs, primarily *p,p'*-DDE, have also been detected in transient whales from Alaska (Ylitalo et al. 2001). Results from these studies establish the transient and southern resident populations of the northeastern Pacific as among the most chemically contaminated marine mammals in the world (Ross

et al. 2000, Ylitalo et al. 2001). This conclusion is further emphasized by the recent discovery of extremely high levels of SPCBs (about 1,000 mg/kg, wet weight) in a reproductively active adult female transient (CA189) that stranded and died on Dungeness Spit in January 2002 (G. M. Ylitalo, unpubl. data). While alive, this whale was recorded most frequently off California, thus its high contaminant load may largely reflect pollutant levels in prey from that region (M. M. Krahn, pers. comm.). It should be noted that organochlorine levels have not yet been established for the three southern resident pods. It is unknown whether L pod has higher contaminant

levels than J or K pods, thus accounting for its decline.

No direct temporal data are available to indicate whether contaminant concentrations have changed over time in the region's killer whales. Populations visiting Puget Sound have been exposed to PCBs and DDT for a number of decades. Sediment analyses indicate that large amounts of PCBs began entering marine ecosystems in the sound during the late 1930s, whereas inputs of DDT date back to the 1920s (Mearns 2001). The presence of both chemicals peaked in about 1960. Since then, environmental levels of many organochlorines (e.g., PCBs, dioxins, furans, organochlorine pesticides, and chlorophenols) have substantially declined (Gray and Tuominen 2001, Mearns 2001, Grant and Ross 2002). Mean SPCB concentrations in harbor seal pups from Puget Sound fell from more than 100 mg/kg, wet weight in 1972 to about 20 mg/kg, wet weight in 1990, but have since leveled off (Calambokidis et al. 1999). Recent modeling of PCB levels in killer whales from British Columbia and Washington suggests that concentrations have declined by about 2.5 times since 1970 (B. Hickie and P. S. Ross, unpubl. data).

Concentrations of most organochlorine residues in killer whales are strongly affected by an animal's age, sex, and reproductive status (Ross et al. 2000, Ylitalo et al. 2001). Levels in juveniles of both sexes increase continuously until sexual maturity. Males continue to accumulate organochlorines throughout the remainder of their lives, but reproductive females sharply decrease their own burden by transferring much of it to their offspring during gestation and nursing. Because organochlorines are fat-soluble, they are readily mobilized from the female's blubber to her fat-rich milk and passed directly to her young in far greater amounts during lactation than through the placenta during pregnancy (Reijnders and Aguilar 2002). As a result, mothers possess much lower levels than their weaned offspring, as well as adult males of the same age bracket (Ylitalo et al. 2001). After females become reproductively senescent at about 40 years old, their organochlorine concentrations once again begin to increase (Ross

et al. 2000). Similar patterns of accumulation have been reported in other marine mammals (Tanabe et al. 1987, 1994, Aguilar and Borrell 1988, 1994a, Borrell et al. 1995, Beckmen et al. 1999, Krahn et al. 1999, Tilbury et al. 1999).

Birth order also influences the organochlorine burdens of killer whales. First-born adult male resident whales contain significantly higher levels of SPCBs and SDDTs than non-first-born males of the same age group (Ylitalo et al. 2001, Krahn et al. 2002). This pattern presumably exists among immature females as well. In other delphinids, females pass as much as 70-100% of their organochlorine load to their offspring during lactation, with the first calf receiving by far the largest burden (Tanabe 1988, Cockcroft et al. 1989, Borrell et al. 1995). Thus, females that have gone through previous lactation cycles carry substantially lower organochlorine loads and transfer reduced amounts to subsequent young (Aguilar and Borrell 1994a, Ridgway and Reddy 1995). These observations indicate that first-born killer whales are the most likely to suffer from any organochlorine toxicity effects (Ylitalo et al. 2001).

The effects of chronic exposure to moderate to high contaminant levels have not yet been ascertained in killer whales. There is no evidence to date that high organochlorine concentrations cause direct mortality in this species or other cetaceans (O'Shea and Aguilar 2001). However, a variety of more subtle physiological responses in marine mammals has been linked to organochlorine exposure, including impaired reproduction (Béland et al. 1998), immunotoxicity (Lahvis et al. 1995, de Swart et al. 1996, Ross et al. 1995, 1996a, 1996b, Ross 2002), hormonal dysfunction (Subramanian et al. 1987), disruption of enzyme function and vitamin A physiology (Marsili et al. 1998, Simms et al. 2000), and skeletal deformities (Bergman et al. 1992). PCB-caused suppression of the immune system can increase susceptibility to infectious disease (Ross 2002, Ross et al. 1996b) and was implicated in morbillivirus outbreaks that caused massive die-offs of dolphins in the Mediterranean Sea during the early 1990s (Aguilar and Borrell 1994b) and

harbor seals and gray seals (*Halichoerus grypus*) in the North Sea in the late 1980s (de Swart et al. 1994, Ross et al. 1995, 1996a). Immune suppression may be especially likely during periods of stress and resulting weight loss, when stored organochlorines are released from the blubber and become redistributed to other tissues (Krahn et al. 2002). Several studies have attempted to establish threshold levels at which organochlorines become toxic to marine mammals. However, susceptibility to PCBs varies substantially among mammal species, even within a genus, making it difficult to generalize about sensitivity (O'Shea 1999). Nevertheless, it is likely that all males from the three tested killer whale communities in Washington and British Columbia, as well as most female transients and southern residents, exceed the toxicity levels believed to cause health problems in other marine mammals (Ross et al. 2000).

Toxic elements. The three elements usually considered of greatest concern to cetaceans are mercury, cadmium, and lead (O'Shea 1999). Mercury, cadmium, and other metals accumulate primarily in the liver and kidneys, whereas lead is deposited mostly in bones (Reijnders and Aguilar 2002). Concentrations of most metals tend to increase throughout an animal's life. Because metals are not lipophilic, females cannot significantly reduce their loads via reproductive transfer. Many marine mammal species are able to tolerate high amounts of metals or detoxify them (Reijnders and Aguilar 2002) and published accounts of metal-caused pathology are scarce (O'Shea 1999). To date, there has been little investigation of metals in killer whales in Washington and British Columbia. Small numbers of animals have been tested, with one 17-year old male resident (L14) having high liver concentrations of mercury (reported as >600 mg/kg, wet weight, of which 14% was in the toxic methylated form, J. Calambokidis, unpubl. data; also reported as 1,272 mg/kg, wet weight, Langelier et al. 1990). An adult female transient (CA189) that stranded at Dungeness Spit in January 2002 carried the following metal levels (wet weight) in its liver: mercury, 129 mg/kg; cadmium, <0.15 mg/kg; and lead, <0.15 mg/kg (G.

M. Ylitalo, unpubl. data). Stranded resident whales appear to carry higher amounts of mercury than transients (Langelier et al. 1990, cited in Baird 2001). With the exception of mercury, most metals do not bioaccumulate and are therefore unlikely to directly threaten the health of killer whales (Grant and Ross 2002). However, their greatest impact may be on prey populations and habitat quality.

Contaminant levels in prey. Relatively few studies have measured organochlorine loads in known or potential prey species of killer whales in Puget Sound and adjacent areas. Pinnipeds and porpoises carry far greater amounts of PCBs and DDTs than baleen whales and fish (Table 6) because of their higher positions in food chains (O'Shea and Aguilar 2001, Reijnders and Aguilar 2002). Among five species of fish in which muscle tissue has been sampled, chinook salmon possess the highest mean SPCB and SDDT levels and coho salmon have the lowest (Table 6). Whole-body testing of two species indicates that Pacific herring are more contaminated than coho salmon. Returning adult chinook and coho salmon carry substantially higher SPCB levels than smolts, indicating that the vast majority of these compounds are obtained during the marine phase of life in Puget Sound or the Pacific Ocean (O'Neill et al. 1998). Studies reveal that adult coho salmon returning to spawn in central and southern Puget Sound have higher SPCB concentrations than those returning to northern Puget Sound (West et al. 2001a). In English sole, rockfish, and herring, SPCB levels are influenced by the contaminant levels of local sediments. Thus, sole and rockfish living near contaminated urban areas often have higher burdens than those from non-urban sites (O'Neill et al. 1995, West et al. 2001b) and herring from central and southern Puget Sound possess greater burdens than those from northern Puget Sound and the Strait of Georgia (O'Neill and West 2001). Recent analyses of PCB levels in harbor seals indicate that seals and their prey in Puget Sound are seven times more contaminated than those in the Strait of Georgia (Cullon et al. in press). In some long-lived fish species, PCB concentrations accumulate with age so that older individuals carry

Table 6. Summary of SPCB and SDDT concentrations (mean \pm SE, mg/kg, wet weight) in tissue samples from various mammal and fish species that are known or potential prey of killer whales in Washington and neighboring areas. Results are combined for both sexes.

Species	Location	Age ^a	Tissue analyzed	Sample size	SPCBs	SDDTs	Reference
Harbor seal	s. Puget Sound, Wash.	P	blubber	7	17.1 \pm 2.1	2.2 \pm 0.3 ^b	Calambokidis et al. (1991)
Harbor seal	e. Strait of Juan de Fuca, Wash.	P	blubber	7	4.0 \pm 2.5	1.5 \pm 0.8 ^b	Calambokidis et al. (1991)
Harbor seal	s. Puget Sound, Wash.	P	blubber	4	13.1	2.9 ^b	Hong et al. (1996)
Harbor seal	e. Strait of Juan de Fuca, Wash.	P	blubber	4	1.7	0.8 ^b	Hong et al. (1996)
Harbor seal	s. Puget Sound, Wash.	P	blubber	57	13.4 \pm 1.1	2.0 \pm 0.2	Calambokidis et al. (1999)
Harbor seal	s. Puget Sound, Wash.	P	blubber	17	18.1 \pm 3.1	-	Ross et al. (2004)
Harbor seal	Georgia Strait, British Columbia	P	blubber	38	2.5 \pm 0.2	-	Ross et al. (2004)
Harbor seal	Queen Charlotte Strait, B.C.	P	blubber	5	1.1 \pm 0.3	-	Ross et al. (2004)
Sea lion sp.	outer coast, Wash.	-	blubber	1	2.6	4.8 ^b	Calambokidis et al. (1984)
Harbor porpoise	s. Puget Sound, Wash.	-	blubber	1	55.0	14.0 ^b	Calambokidis et al. (1984)
Harbor porpoise	Washington ^c	I,A	blubber	8	17.3 \pm 3.9	14.4 \pm 3.2 ^b	Calambokidis and Barlow (1991)
Harbor porpoise	British Columbia ^d	C,I,A	blubber	7	8.4 ^e	8.2 ^e	Jarman et al. (1996)
Harbor porpoise	Oregon	C,I,A	blubber	13	10.9 \pm 3.7	19.2 \pm 4.5 ^b	Calambokidis and Barlow (1991)
Harbor porpoise	central California	C,I,A	blubber	22	12.3 \pm 2.0	41.5 \pm 7.2 ^b	Calambokidis and Barlow (1991)
Harbor porpoise	Monterey Bay, California	I,A	blubber	3	10.0 ^e	15.0 ^e	Jarman et al. (1996)
Dall's porpoise	San Juan Islands, Wash.	-	blubber	1	9.0	5.0 ^b	Calambokidis et al. (1984)
Dall's porpoise	s. British Columbia ^d	I,A	blubber	3	4.5 ^e	5.5 ^e	Jarman et al. (1996)
Minke whale	s. Puget Sound, Wash.	-	blubber	1	.150	.550 ^b	Calambokidis et al. (1984)
Gray whale	Washington	-	blubber	38	.220 \pm .042	.130 \pm .026	Krahn et al. (2001)
Chinook salmon	Puget Sound, s. Georgia Str, Wash.	4	muscle	66	.050 \pm .005	.022 \pm .001	O'Neill et al. (1995)
Chinook salmon	s. and c. Puget Sound, Wash.	-	muscle	34	.074	-	O'Neill et al. (1998)
Chinook salmon	Puget Sound, Wash.	4	whole body	35	.042 \pm .003	.023 \pm .001	G. M. Ylitalo (unpubl. data, in Krahn et al. 2002)
Coho salmon	s. and c. Puget Sound, Wash.	-	muscle	32	.035	-	O'Neill et al. (1998)
Coho salmon	Puget Sound, Wash.	3	muscle	47	.019 \pm .002	.011 \pm <.001	West et al. (2001a)
Pacific herring	Puget Sound, s. Georgia Str, Wash.	3	whole body	50	.102 \pm .012	.029 \pm .004	West et al. (2001a)
English sole	c. Puget Sound, Wash. ^f	-	muscle	18	.071	-	Landolt et al. (1987)
English sole	Puget Sound, s. Georgia Str, Wash.	6	muscle	113	.022 \pm .002	.001 \pm <.001	West et al. (2001a)
Quillback rockfish	Puget Sound, San Juan Isl., Wash.	14	muscle	83	.028 \pm .003	.001 \pm <.001	West et al. (2001a)
Brown rockfish	Puget Sound, San Juan Isl., Wash.	22	muscle	35	.027 \pm .004	.002 \pm <.001	West et al. (2001a)

^a Expressed as age category (P, pups; C, calves; I, immatures; and A, adults) or years of age.

^b Only *p,p'*-DDE was measured.

^c Collected primarily from the outer coast.

^d Collected primarily from southern Vancouver Island.

^e Results expressed as a geometric mean.

^f Collected from Edmonds, Elliott Bay, Commencement Bay, and Bremerton.

significantly higher burdens than younger individuals (O'Neill et al. 1995, 1998). In rockfish, this type of accumulation occurs only in males (West et al. 2001b).

Sources of contaminants. Marine ecosystems in the northeastern Pacific receive pollutants from a variety of local, regional, and international sources (Grant and Ross 2002), but the relative contribution of these sources in the contamination of killer whales is unknown. Because resident killer whales carry increasingly higher chemical loads from Alaska to Washington (Ross et al. 2000, Ylitalo et al. 2001), pollutants originating within Puget Sound and the Georgia Basin may play a greater role in contamination than those from other sources. Ross et al. (2000) has suggested that elevated organochlorine concentrations in southern residents might result from their consumption of small amounts of highly contaminated prey near industrialized areas. However, the high PCB loads of chinook salmon, which are a major prey item of killer whales, illustrate that pelagic contaminant sources may also be involved. Chinook spend most of their life in the open Pacific Ocean and their high trophic level relative to other salmonids may result in greater accumulation of PCBs. In this case, atmospheric deposition of PCBs in the North Pacific may be an important route for food chain contamination (Ross et al. 2000). Sources of pollutants in transient whales are also difficult to decipher. Transients are highly contaminated throughout much of their distribution, but this very likely results from the higher trophic level and biomagnification abilities of their prey, as well as possibly from the widespread movements of many of these whales.

PCBs, polycyclic aromatic hydrocarbons (PAHs), and a number of other pollutants appear to occur at substantially higher levels in Puget Sound than elsewhere in Washington and southern British Columbia, including the Strait of Georgia, based on studies of contaminant loads in harbor seals, herring, and mussels (Hong et al. 1996, Mearns 2001, O'Neill and West 2001, Grant and Ross 2002, Ross et al. 2004, Cullon et al. in press). This geographic pattern undoubtedly stems from

greater contaminant inputs into Puget Sound due to human activities as well as the sound's lower rates of flushing and sedimentation (O'Neill et al. 1998, West et al. 2001a). Recent analyses indicate that 1% of the marine sediments in Puget Sound are highly degraded by chemical contamination, whereas 57% show intermediate degrees of deterioration and 42% remain relatively clean (Long et al. 2001). Hotspots for contaminated sediments are centered near major urban areas, where industrial and domestic activities are concentrated. Locations of particular concern include Bellingham Bay, Fidalgo Bay, Everett Harbor and Port Gardner, Elliott Bay, Commencement Bay, Sinclair Inlet and other sites near Bremerton, and Budd Inlet (Long et al. 2001, Grant and Ross 2002), but contamination can extend widely into even some rural bays. Analyses of contaminants in fish and mussels suggest that some pollutants are most abundant in central and southern Puget Sound (Mearns 2001, O'Neill and West 2001, West et al. 2001a). However, sediment testing indicates that the extent of contamination is broadly similar throughout the sound (Long et al. 2001).

Marine pollutants originate from a multitude of urban and non-urban activities, such as improper disposal of manufacturing by-products, processing and burning of fossil fuels, discharge of leachate from landfills and effluent from wastewater treatment plants (Appendix C), agricultural use of pesticides, and non-source terrestrial runoff. During the past few decades, regulatory actions, improved waste handling, and on-going cleanup efforts have led to marked improvements in regional water quality. Important actions taken include the cessation of PCB production and DDT use in the 1970s and the elimination of most dioxin and furan emissions from pulp and paper mills during the 1980s and early 1990s. Significant progress has also been made in the cleaning and containment of the 31 Superfund sites in the Puget Sound basin, of which at least 11 leaked contaminants into coastal waters (Appendix D). Environmental levels of many organochlorine residues (e.g., PCBs, dioxins, furans, organochlorine pesticides, and chlorophenols) have declined significantly during this period

(Gray and Tuominen 2001, Mearns 2001, Grant and Ross 2002). For example, mean SPCB concentrations in harbor seal pups from Puget Sound fell from more than 100 mg/kg, wet weight in 1972 to about 20 mg/kg, wet weight in 1990 (Calambokidis et al. 1999). Despite these improvements, the presence of some chemicals (e.g., PCBs and DDE) in coastal habitats and wildlife has stabilized since the early 1990s and is not expected to decline further for decades to come (Calambokidis et al. 1999, Grant and Ross 2002).

Atmospheric transport of pollutants is another important contaminant source for marine ecosystems. Due to the prevailing wind patterns of the Northern Hemisphere, a number of substances (e.g., PCBs, DDT, other pesticides, dioxins, furans, and metals) are carried in this manner from Asia to the northeastern Pacific (Iwata et al. 1993, Tanabe et al. 1994, Blais et al. 1998, Ewald et al. 1998, Jaffe et al. 1999, Ross et al. 2000, Grant and Ross 2002, Lichota et al. 2004). Such contamination particularly affects the open North Pacific Ocean, where migratory salmon populations spend much of their lives maturing, but also impacts the coastal waters and land areas of Washington and British Columbia. Locally produced airborne pollutants (e.g., certain PCBs, dioxins, and furans) also enter coastal marine waters (Lichota et al. 2004).

Increased human population growth, urbanization, and intensified land use are projected for western Washington and southern British Columbia during the coming decades (Transboundary Georgia Basin-Puget Sound Environmental Indicators Working Group 2002) and will undoubtedly subject coastal ecosystems to greater contaminant input (Gray and Tuominen 2001, Grant and Ross 2002). Emissions from Asian sources are also expected to gradually expand and continue to reach the open North Pacific and mainland of northwestern North America. In particular, PCBs will likely remain a health risk for at least several more decades due to their persistence, their continued cycling in the environment through atmospheric processes, and the relative inability of marine mammals to metabolize them (Ross et al.

2000, Calambokidis et al. 2001). Thus, exposure of the region's killer whales to contaminants is not expected to change appreciably in the foreseeable future (Grant and Ross 2002, Krahn et al. 2002).

Oil spills

Exposure to petroleum hydrocarbons released into the marine environment via oil spills and other discharge sources represents another potentially serious health threat for killer whales in the northeastern Pacific. Marine mammals are generally able to metabolize and excrete limited amounts of hydrocarbons, but acute or chronic exposure poses greater toxicological risks (Grant and Ross 2002). Unlike humans, cetaceans have a thickened epidermis that greatly reduces the likelihood of petroleum toxicity from skin contact with oiled waters (O'Shea and Aguilar 2001). Inhalation of vapors at the water's surface and ingestion of hydrocarbons during feeding are more likely pathways of exposure. Transient killer whales may be especially vulnerable after consuming prey debilitated by oil (Matkin and Saulitis 1997). In marine mammals, acute exposure to petroleum products can cause changes in behavior and reduced activity, inflammation of the mucous membranes, lung congestion, pneumonia, liver disorders, and neurological damage (Geraci and St. Aubin 1982). Evidence of direct mortality in killer whales from spills is described elsewhere in this report (see *Incidental Human-Related Mortality*). Oil spills are also potentially destructive to prey populations and therefore may adversely affect killer whales by reducing food availability.

The Georgia Basin and Puget Sound are among the busiest waterways in the world, with a mean of about 39 large cargo ships, tankers, and oil barges passing daily through Puget Sound alone in 2000 (Puget Sound Action Team 2002). Due to its proximity to Alaska's crude oil supply, the sound is also one of the leading petroleum refining centers in the U.S., with about 15 billion gallons of crude oil and refined petroleum products transported through it annually (Puget Sound Action Team 2002). Inbound oil tankers carry crude oil to four major refineries in Puget Sound,

Table 7. Oil spills of 100,000 gallons or more from vessels, production facilities, and pipelines in Washington from the 1960s to 2003 (from Neel et al. 1997, Puget Sound Action Team 2002).

Year	Incident name	Location	Amount spilled (gallons)	Type of product
<u>Vessels</u>				
1972	<i>General M. C. Meiggs</i>	Cape Flattery	2,300,000	Heavy fuel oil
1964	United Transportation barge	n. Grays Harbor Co.	1,200,000	Diesel fuel
1985	<i>ARCO Anchorage</i>	Port Angeles	239,000	Crude oil
1988	<i>Nestucca</i> barge	Ocean Shores	231,000	Heavy fuel oil
1971	United Transportation barge	Skagit County	230,000	Diesel fuel
1984	<i>SS Mobil Oil</i> tanker	Columbia R., Clark Co.	200,000	Heavy fuel oil
1978	Columbia River barge	Klickitat County	100,000	Diesel fuel
1991	<i>Tenyo Maru</i>	Strait of Juan de Fuca ^a	100,000	Heavy fuel oil, diesel
<u>Refineries</u>				
1991	US Oil	Tacoma	600,000	Crude oil
1993	US Oil	Tacoma	264,000	Crude oil
1991	Texaco	Anacortes	210,000	Crude oil
1990	Texaco	Anacortes	130,000	Crude oil
<u>Pipelines</u>				
1973	Trans-Mountain	Whatcom County	460,000	Crude oil
1999	Olympic	Bellingham	277,000	Gasoline
1983	Olympic	Skagit County	168,000	Diesel fuel

^a Spill occurred in Canadian waters at the mouth of the Strait of Juan de Fuca and flowed into Washington.

while outbound tankers move refined oil products to destinations along the U.S. west coast (Neel et al. 1997). In 2002, a total of 759 oil tankers passed through Washington's waters bound for ports in Puget Sound, Canada, and along the Columbia River (Washington Department of Ecology 2003). This volume of shipping traffic puts the region at risk of having a catastrophic oil spill. The possibility of such a spill is considered one of the most important short-term threats to killer whales and other coastal organisms in the region (Krahn et al. 2002).

Neel et al. (1997) reported that shipping accidents were responsible for the largest volume (59%; 3.4 million gallons [12.9 million liters]) of oil discharged during major spills in Washington from 1970-1996. Other sources were refineries and associated production facilities (27%; 1.5 million gallons [5.7 million liters]) and pipelines (14%; 800,000 gallons [3.0 million liters]). There have been eight major oil tanker spills exceeding

100,000 gallons (378,500 liters) in the state's coastal waters and on the Columbia River since the 1960s, with the largest estimated at 2.3 million gallons (8.7 million liters) (Table 7). Grant and Ross (2002) did not report any major vessel spills from British Columbia during this same period, but at least one of 100,000 gallons (379,000 liters) is known to have occurred in Canadian waters at the mouth of the Strait of Juan de Fuca in 1991 (Neel et al. 1997). In addition to these incidents, there have been a number of near accidents resulting from vessel groundings, collisions, power loss, or poor vessel condition (Neel et al. 1997).

Puget Sound's four oil refineries are coastally located at Anacortes (Shell Oil and Texaco), Ferndale (Mobil Oil), and Tacoma (US Oil). Four major spills have occurred at two of these facilities (Table 7), with each causing some discharge of petroleum into marine waters (D. Doty, pers. comm.). Pipelines connecting to refineries and oil

terminals at ports represent another potential source of coastal spills. Pipeline leaks have caused several major spills in western Washington, but only the 1999 Olympic spill resulted in any discharge to marine waters (Neel et al. 1997; G. Lee, pers. comm.).

During the late 1980s and early 1990s, Washington significantly upgraded its efforts to prevent oil spills in response to increased numbers of spills in the state and the *Exxon Valdez* accident in Alaska. A number of state, provincial, and federal agencies now work to reduce the likelihood of spills, as does the regional Oil Spill Task Force, which was formed in 1989. National statutes enacted in the early 1990s, including the U.S.'s Oil Pollution Act in 1990 and the Canada Shipping Act in 1993, have also been beneficial in creating spill prevention and response standards. Since 1999, Washington State has maintained a rescue tugboat at Neah Bay for about 225 days per year during the winter months to aid disabled vessels and thereby prevent oil spills. These measures appear to have been helpful in reducing the number and size of spills since 1991, but continued vigilance is needed (Neel et al. 1997). In general, Washington's outer coast, the Strait of Juan de Fuca, and areas near the state's major refineries are considered the locations most at risk of major spills (Neel et al. 1997).

Disease

Infectious diseases are not known to limit any killer whale population, nor have epidemics been recorded in the species. Nevertheless, a variety of pathogens have been identified in killer whales, while others occur in sympatric marine mammal species and may therefore be transmittable to killer whales (Gaydos et al., in press). Several highly virulent diseases have emerged in recent years as threats to marine mammal populations. Of particular concern are several types of virus of the genus *Morbillivirus*. These include 1) dolphin morbillivirus, which killed several thousand striped dolphins (*Stenella coeruleoalba*) in the Mediterranean Sea during the early 1990s (Aguilar and Borrell 1994b) and unknown numbers of bottlenose dolphins in the western Atlantic during

the late 1980s and Gulf of Mexico in the mid-1990s (Kennedy 1999, 2001), 2) phocine distemper virus, which produced large die-offs of harbor seals and gray seals in Europe in the late 1980s and 2002 (Hall et al. 1992, Jensen et al. 2002), and 3) canine distemper virus, which caused mass mortalities among Baikal seals (*Phoca sibirica*) in the late 1980s and Caspian seals (*P. caspica*) in 2000 (Kennedy et al. 2000, Kennedy 2001). PCB-caused suppression of the immune system is thought to have increased susceptibility to the virus in many of these cases (de Swart et al. 1996, Ross et al. 1996b, Ross 2002), although this conclusion is the subject of debate (O'Shea 2000a, 2000b, Ross 2000). Morbillivirus infections have been diagnosed in a variety of other marine mammals from the Atlantic, but caused little mortality in most instances (Kennedy 2001). Antibodies to dolphin morbillivirus have also been detected in common dolphins (*Delphinus delphis*) from southern California (Reidarson et al. 1998), placing the virus inside the ranges of transient and offshore killer whales and near the known southern limit of the southern resident community (Gaydos et al., in press). Additionally, there have been recent detections of canine distemper virus in river otters in British Columbia (Mos et al. 2003) and evidence of exposure to a canine- or phocine-like morbillivirus in sea otters from the Olympic Peninsula (J. Davis, unpubl. data). Because of the mutation capabilities and species-jumping history of morbilliviruses, there is a possibility that these forms could infect killer whales even if they are not the dolphin type (J. Gaydos, pers. comm.). Limited testing evidence suggests that killer whales have not yet been affected by morbilliviruses in Washington, British Columbia, or elsewhere in the world (Van Bressemer et al. 2001), although small sample sizes precludes a thorough assessment of this issue. The fact that southern resident killer whales are likely seronegative suggests that they may be vulnerable if exposed to such a virus (P. S. Ross, pers. comm.). Other diseases such as *Brucella* spp. and cetacean poxvirus may impact killer whale populations by lowering reproductive success or causing greater mortality among calves (Gaydos et al., in press). The southern resident community is

perhaps the most vulnerable of the four populations in Washington and British Columbia to a serious disease outbreak due to its gregarious social nature, smaller population, seasonal concentration near the San Juan Islands, and high levels of PCB contamination (Gaydos et al., in press).

Inbreeding

Small population sizes often increase the likelihood of inbreeding, which can lead to the accumulation of deleterious alleles and thereby heighten the risk of a population's extinction. Inbreeding depression can cause decreased reproductive rates, reduced adaptability to environmental hazards such as disease and pollution, and other problems (Barrett-Lennard and Ellis 2001). Such effects are highly variable among species, with some strongly impacted and others much less so. Killer whale communities in the northeastern Pacific each contain fewer than 400 individuals, which is usually considered very small for discrete populations of most species (Barrett-Lennard and Ellis 2001, Frankham et al. 2002). Nevertheless, these communities appear adept at avoiding matings between members of the same pod. This may be an adaptation to small group size and suggests that the populations are genetically more viable when small than those of most species (Barrett-Lennard and Ellis 2001). If inbreeding depression is indeed a threat, the southern resident community is probably the most vulnerable due to its small size and lower gene diversity than other populations (Barrett-Lennard and Ellis 2001). Because of its recent decline, this community now contains just 28 reproductively active individuals. The deaths of several adult males in J and K pods between 1995 and 1998 have left the females of L pod with only one fully adult male (J1) to mate with during the past five years. This situation could lead to further loss of genetic variability in the population (Center for Biological Diversity 2001). Thus, inbreeding depression should not be ruled out as a future possibility in the southern residents.

CONCLUSION AND RECOMMENDATIONS

Four populations of killer whales occur in Washington: southern residents, northern residents, transients, and offshores. Only two of these communities, southern residents and transients, are regularly present in the state's coastal waters, while offshore whales are mainly inhabitants of the open ocean. These populations maintain large geographic ranges and none live exclusively in the state. Northern resident killer whales occur primarily in British Columbia and have been recorded in Washington on only a few occasions.

The southern resident population, which is composed of J, K, and L pods, is most familiar to the general public and is usually encountered in and around the San Juan Islands. This population comprises the majority of killer whales found in Washington at any one time during the spring, summer, and fall. The historical size of the southern resident population is unknown, but the best available scientific information suggests that it totaled about 200 whales. By 1960, the population was estimated to have declined to roughly 80 whales, due probably to indiscriminate shooting by fishermen and possibly decreasing salmon abundance. Numbers are believed to have increased somewhat during the early and mid-1960s, but live-captures for aquaria removed or killed at least 47 of the whales during the 1960s and 1970s. The population increased from 70 to 98 whales between 1974 and 1995, but this was followed by a rapid net loss of 18 animals, or 18% of the population, from 1996 to 2001. J and K pods have generally maintained their numbers since 1996, ranging between 19 and 22 animals and 17 and 21 animals, respectively. However, L pod, which comprises about half of the southern resident population, has experienced a 31% loss since 1994. This rate of decline is unprecedented since annual censuses began in 1974 and is especially worrisome because it involves both increased mortality among most sex and age classes and a substantial reduction in birth rates. At present, the southern resident population has declined to essentially the same size that was

estimated during the early 1960s, when it was considered as likely depleted. In contrast, northern resident killer whales have more than doubled their population between 1960 and 2003, increasing from an estimated 97 to 204 whales. Population trends for transient and offshore killer whales are not known because of the greater mobility and more sporadic occurrence of these whales, making it difficult for researchers to maintain detailed records of both populations.

Killer whales in Washington face three main potential threats, plus other risk factors, that are unlikely to diminish in the future. These are particularly applicable to the southern residents, which are considered the most urbanized population of killer whale in the world. The southern residents have experienced large historic declines in their main prey, salmon. Although overall salmon abundance has remained relatively stable or been increasing in Puget Sound and the Georgia Basin during the past few decades, there is a lack of comprehensive information on the status of all salmon runs in the population's range, which is currently known to extend from central California to northern British Columbia. Furthermore, a number of issues associated with human harvest practices, hatchery production, and stream habitat alteration may have reduced salmon quality (i.e., size and fat content) and changed localized patterns of salmon occurrence for whales. Organochlorine pollutants, primarily PCBs and DDT residues, are a second threat. Both southern resident and transient populations are now considered among the most highly contaminated marine mammals in the world and exceed the chemical toxicity concentrations believed to cause health problems in other marine mammals. Although environmental levels of some contaminants have declined in the region during the past few decades, many pollutants are still widely present and are foreseen to remain a health risk well into the future. A third potential factor, whale watching, has grown tremendously in and around the San Juan Islands during the past two decades. As a result, southern resident whales residing in this portion of their range are now followed during much or all of the day by significant numbers of commercial and private

vessels. Whale watching vessels are known to cause a variety of short-term behavioral changes in killer whales. These, and possible interference with foraging, may have a cumulative negative effect on the whales. An important short-term risk to killer whales and their prey in the Georgia Basin and Puget Sound is the threat of sizable oil spills. These factors, singly, or in combination, pose a risk for southern residents and the other populations. The factors responsible for the recent, rapid decline in the L pod are unknown.

As a top-level predator, killer whales occur at naturally low densities, are long-lived, have low reproductive rates and long generation times, and invest large amounts of parental effort in each offspring. These characteristics mean that the loss of relatively few individuals can have serious consequences for their populations, as well as hinder recovery rates. Several population viability models using different assumptions and data sets have been recently used to estimate extinction risks for the southern resident population. Models considered most plausible by Taylor and Plater (2001) estimated there was a 1.5-28.5% chance of extinction in the next 100 years and predicted median extinction times to range from 113-213 years. The most conservative PVA models used by Krahn et al. (2002) predicted 1-4% probabilities of extinction in 100 years and 5-50% in 300 years. During recent discussions convened by the National Marine Fisheries Service, marine mammals scientists reviewed the subject of thresholds of extinction risk in whales and recommended that endangered status was appropriate for species with probabilities of extinction exceeding 1% in 100 years (Angliss et al. 2002).

Because of the combination of low population numbers, the recent steep decline in L pod, and continued threats to the population, the Department believes that killer whales in Washington, predominantly the southern residents, are at risk of extinction from all or a significant portion of their range in Washington and recommends that the species be listed as endangered in the state.

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Appendix A. Population and pod sizes of southern and northern resident killer whales in Washington and British Columbia, 1960-2003.

Year	Southern residents ^a			Total	Northern residents ^b
	J pod	K pod	L pod		Total
1960	-	-	-	78	97
1961	-	-	-	79	98
1962	-	-	-	82	101
1963	-	-	-	85	105
1964	-	-	-	90	110
1965	-	-	-	94	117
1966	-	-	-	95	115
1967	-	-	-	96	119
1968	-	-	-	89	120
1969	-	-	-	81	111
1970	-	-	-	80	108
1971	-	-	-	67	113
1972	-	-	-	69	115
1973	-	-	-	71	121
1974	15	16	39	70	123
1975	15	15	41	71	132
1976	16	14	40	70	131
1977	18	15	46	79	134
1978	18	15	46	79	137
1979	19	15	47	81	140
1980	19	15	49	83	147
1981	19	15	47	81	150
1982	19	14	45	78	151
1983	19	14	43	76	155
1984	17	14	43	74	156
1985	18	14	45	77	163
1986	17	16	48	81	171
1987	18	17	49	84	177
1988	19	18	48	85	180
1989	18	17	50	85	187
1990	18	18	53	89	194
1991	20	17	55	92	201
1992	19	16	56	91	199
1993	21	17	59	97	197
1994	20	19	57	96	202
1995	22	18	58	98	205
1996	22	19	56	97	212
1997	21	19	52	92	220
1998	22	18	49	89	216
1999	20	17	48	85	216
2000	19	17	47	83	209
2001	20	18	42	80	201
2002	20	19	43	82	202
2003	22	21	41	84	204

^a Southern resident data from 1960-1973 are estimates based on projections from the matrix model of Olesiuk et al. (1990a). Data from 1974-2003 were determined through photo-identification surveys and were provided by the Center for Whale Research (unpubl. data). Data for these years represent the number of whales present at the end of each calendar year. Whales verified as missing are assumed to have died and may be removed from count totals within a calendar year, depending on date of disappearance (K. C. Balcomb, pers. comm.).

^b Northern resident data from 1960-1974 are estimates based on projections from the matrix model of Olesiuk et al. (1990a). Data from 1975-2003 were determined through photo-identification surveys and were provided by J. K. B. Ford (unpubl. data). Count data represent the number of whales believed to be alive during a calendar year. Whales are counted through their last year of being seen (J. K. B. Ford, pers. comm.).

Appendix B. The current “Be Whale Wise” guidelines recommended for vessels, kayaks, and other craft watching killer whales in Washington and British Columbia by the Soundwatch Boater Education Program and Marine Mammal Monitoring Project (M3).

Whale Watching

1. Be cautious and courteous: approach areas of known or suspected marine mammal activity with extreme caution. Look in all directions before planning your approach or departure.
2. Slow down: reduce speed to less than 7 knots when within 400 meters/yards of the nearest whale. Avoid abrupt course changes.
3. Avoid approaching closer than 100 meters/yards from any whale.
4. If your vessel is unexpectedly within 100 meters/yards, stop immediately and allow the whales to pass.
5. Avoid approaching whales from the front or from behind. Always approach and depart whales from the side, moving in a direction parallel to the direction of the whales.
6. Keep clear of the whales’ path. Avoid positioning your vessel within the 400 meter/yard area in the path of the whales.
7. Stay on the offshore side of the whales when they are traveling close to shore. Remain at least 200 meters/yards offshore at all times.
8. Limit your viewing time to a recommended maximum of 30 minutes. This will minimize the cumulative impact of many vessels and give consideration to other viewers.
9. Do not swim with or feed whales.

Porpoises and Dolphins

1. Observe all guidelines for watching whales.
2. Do not drive through groups of for the purpose of bow-riding.
3. Should dolphins or porpoises choose to ride the bow wave of your vessel, reduce speed gradually and avoid sudden course changes.

Seals, Sea Lions and Birds on Land

1. Avoid approaching closer than 100 meters/yards to any marine mammals or birds.
2. Slow down and reduce your wake/wash and noise levels.
3. Pay attention and back away at the first sign of disturbance or agitation.
4. Be cautious and quiet when around haul-outs and bird colonies, especially during breeding, nesting and pupping seasons (generally May to September).
5. Do not swim with or feed any marine mammals or birds.

Viewing Wildlife within Marine Protected Areas, Wildlife Refuges, Ecological Reserves and Parks

1. Check your nautical charts for the location of various protected areas.
2. Abide by posted restrictions or contact a local authority for further information.

To Report a Marine Mammal Disturbance or Harassment:

Canada: Fisheries and Oceans Canada: 1-800-465-4336

U.S.: National Marine Fisheries Service, Office for Law Enforcement: 1-800-853-1964

To Report Marine Mammal Sightings:

BC Cetacean Sightings Network: www.wildwhales.org or 1-604-659-3429

The Whale Museum Hotline (WA state): 1-800-562-8832 or hotline@whalemuseum.org

Orca Network: info@orcانetwork.org

Appendix C. List of major sewage treatment plants and pulp and paper mills in the Puget Sound and Georgia Basin region^A

Sewage treatment plants

Washington

Bellingham STP	Lakota STP, Federal Way
Anacortes WWTP	Tacoma Central No. 1
Mt. Vernon STP	Tacoma North No. 3
Everett STP	Chambers Creek, University Place
Lynnwood STP	Puyallup STP
Edmonds STP	Sumner STP
Metro Alki Point, Seattle	Enumclaw STP
Metro West Point, Seattle	LOTT, Olympia area
Salmon Creek WWTP, Burien	Port Angeles STP
Metro Renton, Renton	Kitsap County Central Kitsap, Poulsbo
Miller Creek WWTP, Normandy Park	Bremerton STP
Midway Sewer District, Des Moines	Shelton STP
Redondo STP, Des Moines	

British Columbia

Campbell River	Chilliwick
Comox Valley Regional	Northwest Langley
Powell River	Nanaimo
Westview	French Creek, Nanaimo
Squamish	Ladysmith
Lion's Gate, Vancouver	Salt Spring Island
Iona Island, Vancouver	Sydney
Lulu Island, Vancouver	Clover Point, Victoria
Annacis Island, Vancouver	Macaulay Point, Victoria

Pulp and paper mills

Washington

Georgia Pacific, Bellingham	Kimberley-Clark, Everett
Daishowa America, Port Angeles	Simpson Tacoma Kraft, Tacoma
Rayonier ^b , Port Angeles	Sonoco, Sumner
Port Townsend Paper, Port Townsend	Stone Consolidated (Abitibi) ^a , Steilacoom

British Columbia

Norske Skog Canada, Elk Falls	Western Pulp Limited Partnership, Squamish
Pacifica Papers, Port Alberni	Howe Sound Pulp & Paper, Port Mellon
Pope & Talbot, Harmac	Norampac Paper, New Westminster
Norske Skog Canada, Crofton	Scott Paper, New Westminster
Pacifica Papers, Powell River	

^a Adapted from Grant and Ross (2002), with additional information from the Washington Department of Ecology. Many of these sites discharge their effluent directly into marine waters and may have once been significant polluters.

^b Now closed.

Appendix D. Superfund sites located in the Puget Sound region, with a listing of primary contaminants (U.S. Environmental Protection Agency 2003).

Site name	Location	Contaminated media	Major contaminants
Northwest Transformer, Mission Pole ^a	Everson, Whatcom Co.	Soils, sludges	PCBs, others
Northwest Transformer, S. Harkness St. ^a	Everson, Whatcom Co.	Soils, sludges	PCBs, heavy metals
Oeser Company	Bellingham, Whatcom Co.	Soils, sludges	Others
Whidbey Island Naval Air Station, Ault Field	Whidbey Island, Island Co.	Soils, marine and freshwater sediments, groundwater	PCBs, pesticides, dioxins, heavy metals, others
Whidbey Island Naval Air Station, Seaplane Base ^a	Whidbey Island, Island Co.	Soils, sludges, groundwater, surface water	Pesticides, heavy metals, others
Tulalip Landfill	Marysville, Snohomish Co.	Surface water, soils, marine and freshwater sediments, groundwater	PCBs, DDT, heavy metals, others
Harbor Island	Seattle, King Co.	Soils, marine and freshwater sediments, sludges, groundwater	PCBs, heavy metals, petroleum products, others
Lower Duwamish Waterway	Seattle, King Co.	Freshwater sediments, surface water	PCBs, others
Pacific Sound Resources	Seattle, King Co.	Marine and freshwater sediments, groundwater	PCBs, heavy metals, others
Pacific Car and Foundry (PACCAR)	Renton, King Co.	Soils	PCBs, heavy metals, petroleum products, others
Midway Landfill	Kent, King Co.	Groundwater	Heavy metals, others
Seattle Municipal Landfill	Kent, King Co.	Groundwater	Heavy metals, others
Western Processing Company	Kent, King Co.	Soils, freshwater sediments, groundwater	PCBs, dioxins, heavy metals, others
Queen City Farms	Maple Valley, King Co.	Soils, sludges, groundwater, surface water	PCBs, heavy metals, others
Port Hadlock Detachment, U.S. Navy	Indian Island, Jefferson Co.	Marine sediment, shellfish, soils, groundwater	PCBs, pesticides, heavy metals, others
Naval Undersea Warfare Center	Keyport, Kitsap Co.	Soils, marine sediments, shellfish, groundwater	PCBs, heavy metals, petroleum products, others
Bangor Naval Submarine Base	Silverdale, Kitsap Co.	Soils, sludges, surface water, groundwater	Others
Bangor Ordnance Disposal, U.S. Navy	Silverdale, Kitsap Co.	Soils, sludges, surface water, groundwater	Others

Appendix D. Superfund sites in the Puget Sound region (cont'd).

Site name	Location	Contaminated media	Major contaminants
Wyckoff Company/Eagle Harbor	Bainbridge Island, Kitsap Co.	Soils, marine sediments, groundwater	Dioxins, furans, heavy metals, others
Jackson Park Housing Complex, U.S. Navy	Bremerton, Kitsap Co.	Soils, sludges, surface water	Heavy metals, others
Puget Sound Naval Shipyard Complex	Bremerton, Kitsap Co.	Soils, sludges, marine sediments, groundwater	PCBs, heavy metals, petroleum products, others
Old Navy Dump/Manchester Lab	Manchester, Kitsap Co.	Soils, sludges, marine sediments, surface water, shellfish	PCBs, heavy metals, petroleum products, others
Commencement Bay Nearshore/ Tideflats	Tacoma, Pierce Co.	Surface water, soils, marine sediments, groundwater	PCBs, heavy metals, others
Commencement Bay South Tacoma Channel	Tacoma, Pierce Co.	Surface water, soils, marine sediments, groundwater	PCBs, heavy metals, petroleum products, others
American Lake Gardens, McChord AFB	Tacoma, Pierce Co.	Groundwater	Others
McChord AFB (Wash Rack/Treat) ^a	Tacoma, Pierce Co.	Groundwater	Petroleum products, others
Lakewood Site	Lakewood, Pierce Co.	Soils, sludges, groundwater	Others
Hidden Valley Landfill (Thun Field)	Puyallup, Pierce Co.	Groundwater	Heavy metals, others
Fort Lewis (Landfill No. 5) ^a	Fort Lewis, Pierce Co.	Groundwater	Heavy metals, others
Fort Lewis Logistics Center	Fort Lewis, Pierce Co.	Groundwater	Heavy metals, others
Palermo Well Field	Tumwater, Thurston Co.	Soils, surface water, groundwater	Others

^a Cleanup activities considered complete.

Appendix E. Washington Administrative Code 232-12-011, 232-12-014, and 232-12-297.

WAC 232-12-011 Wildlife classified as protected shall not be hunted or fished.

Protected wildlife are designated into three subcategories: threatened, sensitive, and other.

(1) Threatened species are any wildlife species native to the state of Washington that are likely to become endangered within the foreseeable future throughout a significant portion of their range within the state without cooperative management or removal of threats. Protected wildlife designated as threatened include:

Common Name	Scientific Name
western gray squirrel	<i>Sciurus griseus</i>
Steller (northern) sea lion	<i>Eumetopias jubatus</i>
North American lynx	<i>Lynx canadensis</i>
Aleutian Canada goose	<i>Branta canadensis leucopareia</i>
bald eagle	<i>Haliaeetus leucocephalus</i>
ferruginous hawk	<i>Buteo regalis</i>
marbled murrelet	<i>Brachyramphus marmoratus</i>
green sea turtle	<i>Chelonia mydas</i>
loggerhead sea turtle	<i>Caretta caretta</i>
sage grouse	<i>Centrocercus urophasianus</i>
sharp-tailed grouse	<i>Phasianus columbianus</i>

(2) Sensitive species are any wildlife species native to the state of Washington that are vulnerable or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. Protected wildlife designated as sensitive include:

Common Name	Scientific Name
gray whale	<i>Eschrichtius gibbosus</i>
common Loon	<i>Gavia immer</i>
peregrine falcon	<i>Falco peregrinus</i>
Larch Mountain salamander	<i>Plethodon larselli</i>
pygmy whitefish	<i>Prosopium coulteri</i>
marginated sculpin	<i>Cottus marginatus</i>
Olympic mudminnow	<i>Novumbra hubbsi</i>

(3) Other protected wildlife include:

Common Name	Scientific Name
cony or pika	<i>Ochotona princeps</i>
least chipmunk	<i>Tamias minimus</i>
yellow-pine chipmunk	<i>Tamias amoenus</i>
Townsend's chipmunk	<i>Tamias townsendii</i>
red-tailed chipmunk	<i>Tamias ruficaudus</i>
hoary marmot	<i>Marmota caligata</i>
Olympic marmot	<i>Marmota olympus</i>
Cascade golden-mantled ground squirrel	<i>Spermophilus saturatus</i>
golden-mantled ground squirrel	<i>Spermophilus lateralis</i>
Washington ground squirrel	<i>Spermophilus washingtoni</i>
red squirrel	<i>Tamiasciurus hudsonicus</i>
Douglas squirrel	<i>Tamiasciurus douglasii</i>
northern flying squirrel	<i>Glaucomys sabrinus</i>
wolverine	<i>Gulo gulo</i>
painted turtle	<i>Chrysemys picta</i>
California mountain kingsnake	<i>Lampropeltis zonata</i>

All birds not classified as game birds, predatory birds or endangered species, or designated as threatened species or sensitive species; all bats, except when found in or immediately adjacent to a dwelling or other occupied building; mammals of the order Cetacea, including whales, porpoises, and mammals of the order Pinnipedia not otherwise classified as endangered species, or designated as threatened species or sensitive species. This section shall not apply to hair seals and sea lions which are threatening to damage or are damaging commercial fishing gear being utilized in a lawful manner or when said mammals are damaging or threatening to damage commercial fish being lawfully taken with commercial gear.

[Statutory Authority: RCW 77.12.047, 77.12.655, 77.12.020. 02-11-069 (Order 02-98), § 232-12-011, filed 5/10/02, effective 6/10/02. Statutory Authority: RCW 77.12.047. 02-08-048 (Order 02-53), § 232-12-011, filed 3/29/02, effective 5/1/02; 00-17-106 (Order 00-149), § 232-12-011, filed 8/16/00, effective 9/16/00. Statutory Authority: RCW 77.12.040, 77.12.010, 77.12.020, 77.12.770. 00-10-001 (Order 00-47), § 232-12-011, filed 4/19/00, effective 5/20/00. Statutory Authority: RCW 77.12.040, 77.12.010, 77.12.020, 77.12.770, 77.12.780. 00-04-017 (Order 00-05), § 232-12-011, filed 1/24/00, effective 2/24/00. Statutory Authority: RCW 77.12.020. 98-23-013 (Order 98-232), § 232-12-011, filed 11/6/98, effective 12/7/98. Statutory Authority: RCW 77.12.040. 98-10-021 (Order 98-71), § 232-12-011, filed 4/22/98, effective 5/23/98. Statutory Authority: RCW 77.12.040 and 75.08.080. 98-06-031, § 232-12-011, filed 2/26/98, effective 5/1/98. Statutory Authority: RCW 77.12.020. 97-18-019 (Order 97-167), § 232-12-011, filed 8/25/97, effective 9/25/97. Statutory Authority: RCW 77.12.040, 77.12.020, 77.12.030 and 77.32.220. 97-12-048, § 232-12-011, filed 6/2/97, effective 7/3/97. Statutory Authority: RCW 77.12.020. 93-21-027 (Order 615), § 232-12-011, filed 10/14/93, effective 11/14/93; 90-11-065 (Order 441), § 232-12-011, filed 5/15/90, effective 6/15/90. Statutory Authority: RCW 77.12.040. 89-11-061 (Order 392), § 232-12-011, filed 5/18/89; 82-19-026 (Order 192), § 232-12-011, filed 9/9/82; 81-22-002 (Order 174), § 232-12-011, filed 10/22/81; 81-12-029 (Order 165), § 232-12-011, filed 6/1/81.]

WAC 232-12-014 Wildlife classified as endangered species. Endangered species include:

Common Name	Scientific Name
pygmy rabbit	<i>Brachylagus idahoensis</i>
fisher	<i>Martes pennanti</i>
gray wolf	<i>Canis lupus</i>
grizzly bear	<i>Ursus arctos</i>
sea otter	<i>Enhydra lutris</i>
sei whale	<i>Balaenoptera borealis</i>
fin whale	<i>Balaenoptera physalus</i>
blue whale	<i>Balaenoptera musculus</i>
humpback whale	<i>Megaptera novaeangliae</i>
black right whale	<i>Balaena glacialis</i>
sperm whale	<i>Physeter macrocephalus</i>
Columbian white-tailed deer	<i>Odocoileus virginianus leucurus</i>
woodland caribou	<i>Rangifer tarandus caribou</i>
American white pelican	<i>Pelecanus erythrorhynchos</i>
brown pelican	<i>Pelecanus occidentalis</i>
sandhill crane	<i>Grus canadensis</i>
snowy plover	<i>Charadrius alexandrinus</i>
upland sandpiper	<i>Bartramia longicauda</i>
spotted owl	<i>Strix occidentalis</i>
western pond turtle	<i>Clemmys marmorata</i>
leatherback sea turtle	<i>Dermochelys coriacea</i>
mardon skipper	<i>Polites mardon</i>
Oregon silverspot butterfly	<i>Speyeria zerene hippolyta</i>
Oregon spotted frog	<i>Rana pretiosa</i>
northern leopard frog	<i>Rana pipiens</i>

[Statutory Authority: RCW 77.12.047, 77.12.655, 77.12.020. 02-11-069 (Order 02-98), § 232-12-014, filed 5/10/02, effective 6/10/02. Statutory Authority: RCW 77.12.040, 77.12.010, 77.12.020, 77.12.770, 77.12.780. 00-04-017 (Order 00-05), § 232-12-014, filed 1/24/00, effective 2/24/00. Statutory Authority: RCW 77.12.020. 98-23-013 (Order 98-232), § 232-12-014, filed 11/6/98, effective 12/7/98; 97-18-019 (Order 97-167), § 232-12-014, filed 8/25/97, effective 9/25/97; 93-21-026 (Order 616), § 232-12-014, filed 10/14/93, effective 11/14/93. Statutory Authority: RCW 77.12.020(6). 88-05-032 (Order 305), § 232-12-014, filed 2/12/88. Statutory Authority: RCW 77.12.040. 82-19-026 (Order 192), § 232-12-014, filed 9/9/82; 81-22-002 (Order 174), § 232-12-014, filed 10/22/81; 81-12-029 (Order 165), § 232-12-014, filed 6/1/81.]

WAC 232-12-297 Endangered, threatened, and sensitive wildlife species classification.

PURPOSE

1.1 The purpose of this rule is to identify and classify native wildlife species that have need of protection and/or management to ensure their survival as free-ranging populations in Washington and to define the process by which listing, management, recovery, and delisting of a species can be achieved. These rules are established to ensure that consistent procedures and criteria are followed when classifying wildlife as endangered, or the protected wildlife subcategories threatened or sensitive.

DEFINITIONS

For purposes of this rule, the following definitions apply:

2.1 “Classify” and all derivatives means to list or delist wildlife species to or from endangered, or to or from the protected wildlife subcategories threatened or sensitive.

2.2 “List” and all derivatives means to change the classification status of a wildlife species to endangered, threatened, or sensitive.

2.3 “Delist” and its derivatives means to change the classification of endangered, threatened, or sensitive species to a classification other than endangered, threatened, or sensitive.

2.4 “Endangered” means any wildlife species native to the state of Washington that is seriously threatened with extinction throughout all or a significant portion of its range within the state.

2.5 “Threatened” means any wildlife species native to the state of Washington that is likely to become an endangered species within the foreseeable future throughout a significant portion of its range within the state without cooperative management or removal of threats.

2.6 “Sensitive” means any wildlife species native to the state of Washington that is vulnerable or declining and is likely to become endangered or threatened in a significant portion of its range within the state without cooperative management or removal of threats.

2.7 “Species” means any group of animals classified as a species or subspecies as commonly accepted by the scientific community.

2.8 “Native” means any wildlife species naturally occurring in Washington for purposes of breeding, resting, or foraging, excluding introduced species not found historically in this state.

2.9 “Significant portion of its range” means that portion of a species’ range likely to be essential to the long-term survival of the population in Washington.

LISTING CRITERIA

3.1 The commission shall list a wildlife species as endangered, threatened, or sensitive solely on the basis of the biological status of the species being considered, based on the preponderance of scientific data available, except as noted in section 3.4.

3.2 If a species is listed as endangered or threatened under the federal Endangered Species Act, the agency will recommend to the commission that it be listed as endangered or threatened as specified in section 9.1. If listed, the agency will proceed with development of a recovery plan pursuant to section 11.1.

3.3 Species may be listed as endangered, threatened, or sensitive only when populations are in danger of failing, declining, or are vulnerable, due to factors including but not restricted to limited numbers, disease, predation, exploitation, or habitat loss or change, pursuant to section 7.1.

3.4 Where a species of the class Insecta, based on substantial evidence, is determined to present an unreasonable risk to public health, the commission may make the determination that the species need not be listed as endangered, threatened, or sensitive.

DELISTING CRITERIA

4.1 The commission shall delist a wildlife species from endangered, threatened, or sensitive solely on the basis of the biological status of the species being considered, based on the preponderance of scientific data available.

4.2 A species may be delisted from endangered, threatened, or sensitive only when populations are no longer in danger of failing, declining, are no longer vulnerable, pursuant to section 3.3, or meet recovery plan goals, and when it no longer meets the definitions in sections 2.4, 2.5, or 2.6.

INITIATION OF LISTING PROCESS

5.1 Any one of the following events may initiate the listing process.

5.1.1 The agency determines that a species population may be in danger of failing, declining, or vulnerable, pursuant to section 3.3.

5.1.2 A petition is received at the agency from an interested person. The petition should be addressed to the director. It should set forth specific evidence and scientific data which shows that the species may be failing, declining, or vulnerable, pursuant to section 3.3. Within 60 days, the agency shall either deny the petition, stating the reasons, or initiate the classification process.

5.1.3 An emergency, as defined by the Administrative Procedure Act, chapter 34.05 RCW. The listing of any species previously classified under emergency rule shall be governed by the provisions of this section.

5.1.4 The commission requests the agency review a species of concern.

5.2 Upon initiation of the listing process the agency shall publish a public notice in the Washington Register, and notify those parties who have expressed their interest to the department, announcing the initiation of the classification process and calling for scientific information relevant to the species status report under consideration pursuant to section 7.1.

INITIATION OF DELISTING PROCESS

6.1 Any one of the following events may initiate the delisting process:

6.1.1 The agency determines that a species population may no longer be in danger of failing, declining, or vulnerable, pursuant to section 3.3.

6.1.2 The agency receives a petition from an interested person. The petition should be addressed to the director. It should set forth specific evidence and scientific data which shows that the species may no longer be failing, declining, or vulnerable, pursuant to section 3.3. Within 60 days, the agency shall either deny the petition, stating the reasons, or initiate the delisting process.

6.1.3 The commission requests the agency review a species of concern.

6.2 Upon initiation of the delisting process the agency shall publish a public notice in the Washington Register, and notify those parties who have expressed their interest to the department, announcing the initiation of the delisting process and calling for scientific information relevant to the species status report under consideration pursuant to section 7.1.

SPECIES STATUS REVIEW AND AGENCY RECOMMENDATIONS

7.1 Except in an emergency under 5.1.3 above, prior to making a classification recommendation to the commission, the agency shall prepare a preliminary species status report. The report will include a review of information relevant to the species' status in Washington and address factors affecting its status, including those given under section 3.3. The status report shall be reviewed by the public and scientific community. The status report will include, but not be limited to an analysis of:

7.1.1 Historic, current, and future species population trends.

7.1.2 Natural history, including ecological relationships (e.g. food habits, home range, habitat selection patterns).

7.1.3 Historic and current habitat trends.

7.1.4 Population demographics (e.g. survival and mortality rates, reproductive success) and their relationship to long term sustainability.

7.1.5 Historic and current species management activities.

7.2 Except in an emergency under 5.1.3 above, the agency shall prepare recommendations for species classification, based upon scientific data contained in the status report. Documents shall be prepared to determine the environmental consequences of adopting the recommendations pursuant to requirements of the State Environmental Policy Act (SEPA).

7.3 For the purpose of delisting, the status report will include a review of recovery plan goals.

PUBLIC REVIEW

8.1 Except in an emergency under 5.1.3 above, prior to making a recommendation to the commission, the agency shall provide an opportunity for interested parties to submit new scientific data relevant to the status report, classification recommendation, and any SEPA findings.

8.1.1 The agency shall allow at least 90 days for public comment.

FINAL RECOMMENDATIONS AND COMMISSION ACTION

9.1 After the close of the public comment period, the agency shall complete a final status report and classification recommendation. SEPA documents will be prepared, as necessary, for the final agency recommendation for classification. The classification recommendation will be presented to the commission for action. The final species status report, agency classification recommendation, and SEPA documents will be made available to the public at least 30 days prior to the commission meeting.

9.2 Notice of the proposed commission action will be published at least 30 days prior to the commission meeting.

PERIODIC SPECIES STATUS REVIEW

10.1 The agency shall conduct a review of each endangered, threatened, or sensitive wildlife species at least every five years after the date of its listing. This review shall include an update of the species status report to determine whether the status of the species warrants its current listing status or deserves reclassification.

10.1.1 The agency shall notify any parties who have expressed their interest to the department of the periodic status review. This notice shall occur at least one year prior to end of the five year period required by section 10.1.

10.2 The status of all delisted species shall be reviewed at least once, five years following the date of delisting.

10.3 The department shall evaluate the necessity of changing the classification of the species being reviewed. The agency shall report its findings to the commission at a commission meeting. The agency shall notify the public of its findings at least 30 days prior to presenting the findings to the commission.

10.3.1 If the agency determines that new information suggests that classification of a species should be changed from its present state, the agency shall initiate classification procedures provided for in these rules starting with section 5.1.

10.3.2 If the agency determines that conditions have not changed significantly and that the classification of the species should remain unchanged, the agency shall recommend to the commission that the species being reviewed shall retain its present classification status.

10.4 Nothing in these rules shall be construed to automatically delist a species without formal commission action.

RECOVERY AND MANAGEMENT OF LISTED SPECIES

11.1 The agency shall write a recovery plan for species listed as endangered or threatened. The agency will write a management plan for species listed as sensitive. Recovery and management plans shall address the listing criteria described in sections 3.1 and 3.3, and shall include, but are not limited to:

- 11.1.1 Target population objectives.
- 11.1.2 Criteria for reclassification.
- 11.1.3 An implementation plan for reaching population objectives which will promote cooperative management and be sensitive to landowner needs and property rights. The plan will specify resources needed from and impacts to the department, other agencies (including federal, state, and local), tribes, landowners, and other interest groups. The plan shall consider various approaches to meeting recovery objectives including, but not limited to regulation, mitigation, acquisition, incentive, and compensation mechanisms.
- 11.1.4 Public education needs.
- 11.1.5 A species monitoring plan, which requires periodic review to allow the incorporation of new information into the status report.

11.2 Preparation of recovery and management plans will be initiated by the agency within one year after the date of listing.

- 11.2.1 Recovery and management plans for species listed prior to 1990 or during the five years following the adoption of these rules shall be completed within 5 years after the date of listing or adoption of these rules, whichever comes later. Development of recovery plans for endangered species will receive higher priority than threatened or sensitive species.
- 11.2.2 Recovery and management plans for species listed after five years following the adoption of these rules shall be completed within three years after the date of listing.
- 11.2.3 The agency will publish a notice in the Washington Register and notify any parties who have expressed interest to the department interested parties of the initiation of recovery plan development.
- 11.2.4 If the deadlines defined in sections 11.2.1 and 11.2.2 are not met the department shall notify the public and report the reasons for missing the deadline and the strategy for completing the plan at a commission meeting. The intent of this section is to recognize current department personnel resources are limiting and that development of recovery plans for some of the species may require significant involvement by interests outside of the department, and therefore take longer to complete.

11.3 The agency shall provide an opportunity for interested public to comment on the recovery plan and any SEPA documents.

CLASSIFICATION PROCEDURES REVIEW

12.1 The agency and an ad hoc public group with members representing a broad spectrum of interests, shall meet as needed to accomplish the following:

- 12.1.1 Monitor the progress of the development of recovery and management plans and status reviews, highlight problems, and make recommendations to the department and other interested parties to improve the effectiveness of these processes.
- 12.1.2 Review these classification procedures six years after the adoption of these rules and report its findings to the commission.

AUTHORITY

13.1 The commission has the authority to classify wildlife as endangered under RCW 77.12.020. Species classified as endangered are listed under WAC 232-12-014, as amended.

13.2 Threatened and sensitive species shall be classified as subcategories of protected wildlife. The commission has the authority to classify wildlife as protected under RCW 77.12.020. Species classified as protected are listed under WAC 232-12-011, as amended.

[Statutory Authority: RCW 77.12.047, 77.12.655, 77.12.020. 02-02-062 (Order 01-283), § 232-12-297, filed 12/28/01, effective 1/28/02. Statutory Authority: RCW 77.12.040. 98-05-041 (Order 98-17), § 232-12-297, filed 2/11/98, effective 3/14/98. Statutory Authority: RCW 77.12.020. 90-11-066 (Order 442), § 232-12-297, filed 5/15/90, effective 6/15/90.]

Washington State Status Reports and Recovery Plans

Status Reports

2004	Killer Whale	✓
2002	Peregrine Falcon	✓
2001	Bald Eagle	✓
2000	Common Loon	✓
1999	Northern Leopard Frog	✓
1999	Olympic Mudminnow	✓
1999	Mardon Skipper	✓
1999	Lynx Update	
1998	Fisher	✓
1998	Margined Sculpin	✓
1998	Pygmy Whitefish	✓
1998	Sharp-tailed Grouse	✓
1998	Sage-grouse	✓
1997	Aleutian Canada Goose	✓
1997	Gray Whale	✓
1997	Olive Ridley Sea Turtle	✓
1997	Oregon Spotted Frog	✓
1993	Larch Mountain Salamander	
1993	Lynx	
1993	Marbled Murrelet	
1993	Oregon Silverspot Butterfly	
1993	Pygmy Rabbit	
1993	Steller Sea Lion	
1993	Western Gray Squirrel	
1993	Western Pond Turtle	

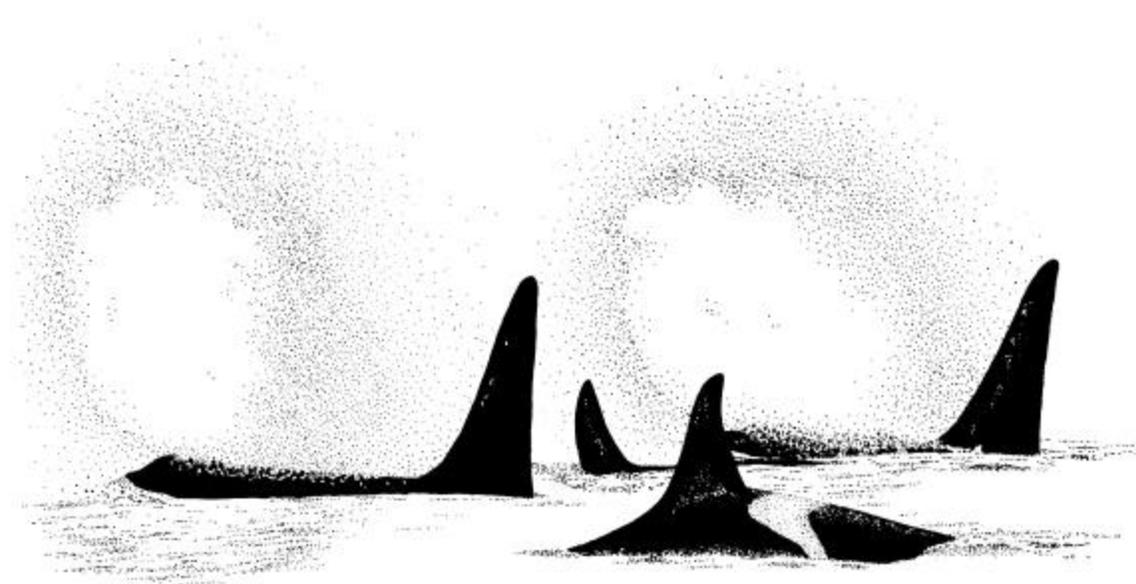
Recovery Plans

2004	Greater Sage-Grouse	✓
2003	Pygmy Rabbit: Addendum	✓
2002	Sandhill Crane	✓
2000	Sea Otter (Draft)	✓
2001	Pygmy Rabbit: Addendum	✓
2001	Lynx	✓
1999	Western Pond Turtle	✓
1996	Ferruginous Hawk	✓
1995	Pygmy Rabbit	✓
1995	Upland Sandpiper	
1995	Snowy Plover	

✓ These reports are available in pdf format on the Department of Fish and Wildlife's web site:

<http://wdfw.wa.gov/wlm/diversty/soc/concern.htm>

To request a printed copy of reports, send an e-mail to wildthing@dfw.wa.gov or call 360-902-2515.



From: Joanruth Baumann <baumann@rockisland.com>
Sent: Friday, August 17, 2012 10:11 AM
To: ECY RE Spills Rule Making
Subject: Suggestion for plan

Follow Up Flag: Follow up
Flag Status: Completed

Just wondering if there is room for a bit more proactivity in the new rules? We are the only county with a proactive derelict vessel program, identifying and acting on boats BEFORE they sink and put oil, gas and Styrofoam in the water. We have to find our own small funding and other counties can't afford to do it at all. But we prevent the problem before it starts with a very vigilant community effort. Could some preventative measures for smaller vessel programs be written in? And maybe with a little funding? The disaster in Penn Cove might well have been prevented this way.

It's worth considering. Many thanks,

Joanruth Baumann

Joanruth Baumann
DERELICT VESSEL REMOVAL
P.O. Box 2967
Friday Harbor, WA 98250
206-999-0547

From: Ronald Zito <ronzito4@gmail.com>
Sent: Monday, October 08, 2012 9:18 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Ronald Zito
1312 NE 89th PL
Vancouver, WA 98664

From: Lesley Ahmed <ahmed@quixnet.net>
Sent: Monday, October 08, 2012 8:33 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Lesley Ahmed
5911 20th Avenue NW
Seattle, WA 98107

From: William Malloy <mimabiqi07@yahoo.com>
Sent: Monday, October 08, 2012 12:19 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

William Malloy
16224A 49th Ave W
Edmonds, WA 98026

From: joel mulder <joel_mulder@msn.com>
Sent: Monday, October 08, 2012 11:39 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

joel mulder
4312 29th Ave W
Seattle, WA 98199

From: Ed Bennett <edbennett@comcast.net>
Sent: Sunday, October 07, 2012 8:43 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Ed Bennett
204 West 27th Street
Vancouver, WA 98660

From: Paula Trimble <trimpaula@aol.com>
Sent: Saturday, October 06, 2012 10:35 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Paula Trimble
620 112th ST SE Unit 103
Everett, WA 98208

From: Lauren Reetz <reetzl@uw.edu>
Sent: Saturday, October 06, 2012 3:50 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Lauren Reetz
710 s lawrence st
tacoma, WA 98405

From: Joan Bykonen <joanclaire@comcast.net>
Sent: Saturday, October 06, 2012 2:46 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Joan Bykonen
3871 Stikes Dr. SE
Lacey, WA 98503

From: David Cheney <cheneydf@comcast.net>
Sent: Friday, October 05, 2012 8:02 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

David Cheney
2710 Oxford Ct
Steilacoom, WA 98388

From: Marjorie Curci <rainbowbend@olympen.com>
Sent: Friday, October 05, 2012 12:34 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Marjorie Curci
Box 502
Beaver, WA 98305

From: Judith Adrian <judieadrian@hotmail.com>
Sent: Friday, October 05, 2012 8:54 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Judith Adrian
435 Edgewood Lane
Port Angeles, WA 98363

From: Heather McFarland <deosil1977@gmail.com>
Sent: Thursday, October 04, 2012 11:14 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Heather McFarland
104 10th ST NE Apt 126
Auburn, WA 98002

From: holly homan <ohoman58@hotmail.com>
Sent: Thursday, October 04, 2012 8:34 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

holly homan
755 N 165th st
shoreline, WA 98133

From: melodie martin <martincat@earthlink.net>
Sent: Thursday, October 04, 2012 5:18 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

melodie martin
2339 11th ave east
seattle, WA 98102

From: gene groom <geneophotos@hotmail.com>
Sent: Wednesday, October 03, 2012 4:28 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

gene groom
306 williams blvd nw
orting, WA 98360

From: Tu-Quyen Nguyen <moonflyrepublic@gmail.com>
Sent: Wednesday, October 03, 2012 1:32 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Tu-Quyen Nguyen
2101 Lindsay Avenue
Bellingham, WA 98225

From: Theo Block <doo1020@gmail.com>
Sent: Wednesday, October 03, 2012 11:44 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Theo Block
173 hickory court
Princeton, NJ 08540

From: Andrea Sandoval <a.sandoval@students.clark.edu>
Sent: Wednesday, October 03, 2012 9:15 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Andrea Sandoval
904 w 21st st #11
Vancouver, WA 98660

From: Sharon Palko <shpalko@hotmail.com>
Sent: Tuesday, October 02, 2012 9:15 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Sharon Palko
625 Memory CT SE
Olympia, WA 98513

From: Mary Sutherland <62marianne@comcast.net>
Sent: Tuesday, October 02, 2012 3:49 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Mary Sutherland
3802 246th Street Court East
Spanaway, WA 98387

From: john Burns <giovanni472000@yahoo.com>
Sent: Tuesday, October 02, 2012 12:26 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

john Burns
1301 E. Yesler Way
Bainbridge Island, WA 98122

From: Katherine Nelson <Nicoeli3@yahoo.com>
Sent: Tuesday, October 02, 2012 12:24 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Katherine Nelson
9445 s 232nd st
Kent, WA 98031

From: Emily Lubahn <elubahn@gmail.com>
Sent: Tuesday, October 02, 2012 11:20 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Emily Lubahn
102 Mechanic St
Shelburne Falls, WA 16505

From: Nancy Ferkingstad <nancyferkingstad@msn.com>
Sent: Tuesday, October 02, 2012 11:12 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Nancy Ferkingstad
6003 35th Ave NW
Seattle, WA 98107

From: Thom Peters <voice4wild@aol.com>
Sent: Tuesday, October 02, 2012 10:34 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Thom Peters
7725 Riverview Road
Snohomish, WA 98290

From: Bruce Gundersen <pandb7@embarqmail.com>
Sent: Tuesday, October 02, 2012 10:07 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Bruce Gundersen
27655 Beham St NW
Poulsbo, WA 98370

From: Robyn Cleaves <Nursekitty83@yahoo.com>
Sent: Tuesday, October 02, 2012 3:29 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Robyn Cleaves
PO Box 65366
University Place, WA 98464

From: Lisa Karas <karas_l@hotmail.com>
Sent: Monday, October 01, 2012 11:09 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Lisa Karas
2819 153rd Ave SE
Kent, WA 98042

From: Thomas Pettitt <thomaspettitt.pettitt@gmail.com>
Sent: Monday, October 01, 2012 10:02 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Thomas Pettitt
210 N. Grant Ave
Goldendale, WA 98620

From: John Weeks <johnhweeks@hotmail.com>
Sent: Monday, October 01, 2012 9:27 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

John Weeks
P.O. Box 478
Twisp, WA 60035

From: K Lyle <Dkyle@centurytel.net>
Sent: Monday, October 01, 2012 9:11 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

K Lyle
Pobox
Gig harbor, WA 98335

From: Bonnie Olson <kamalaolson@yahoo.com>
Sent: Monday, October 01, 2012 9:06 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Bonnie Olson
540 Maple St #202
Edmonds, WA 98155

From: Rita Van Briesen <apshaitwister@yahoo.com>
Sent: Monday, October 01, 2012 9:05 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Rita Van Briesen
4225 27th Ave. W
Seattle, WA 98199

From: Patricia Berezcki <pat.berezcki@gmail.com>
Sent: Monday, October 01, 2012 7:42 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Patricia Berezcki
17003 SE 5th St.
Vancouver, WA 98684

From: Virginia Linstrom <vlinstrom@comcast.net>
Sent: Monday, October 01, 2012 5:21 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Virginia Linstrom
127 Alameda Ave
Fircrest, WA 98466

From: Douglas Yearout <drwildwolf@clearwire.net>
Sent: Monday, October 01, 2012 4:42 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Douglas Yearout
9004 Vernon Rd
Lake Stevens, WA 98258

From: Hugh Lentz <lentzh@evergreen.edu>
Sent: Monday, October 01, 2012 3:26 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Hugh Lentz
612 Governor Stevens Av SE
Olympia, WA 98501

From: Michael Lab <micklab@yahoo.com>
Sent: Monday, October 01, 2012 1:45 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Michael Lab
P.O. Box 1432
Port Townsend, WA 98368

From: Elizabeth Watson <emwatson@earthlink.net>
Sent: Monday, October 01, 2012 1:41 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Elizabeth Watson
4145 2nd Avenue NW
Seattle, WA 98107

From: Jeanne Deller <jkdeller@earthlink.net>
Sent: Monday, October 01, 2012 1:20 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jeanne Deller
4235 164 ave se
issaquah, WA 98027

From: Joshua Adams <joshadamsphotography@gmail.com>
Sent: Monday, October 01, 2012 12:02 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Joshua Adams
1437 S Hinds St
Seattle, WA 98144

From: W.Bruce Wallace <bruce.wallace@earthlink.net>
Sent: Monday, October 01, 2012 11:42 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

W.Bruce Wallace
1004 Blue Heron Ave NE
Bainbridge Island, WA 98110

From: Dolores Hutson <doloresh@tacomaop.org>
Sent: Monday, October 01, 2012 11:40 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Dolores Hutson
935 Fawcett Ave. S.
Tacoma, WA 98402

From: Martha alonzo <marthawic@hotmail.com>
Sent: Monday, October 01, 2012 11:09 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Martha alonzo
412 Lilly Rd NE
OLYMPIA, WA 98506

From: Charli Sorenson <Csoar2004@hotmail.com>
Sent: Monday, October 01, 2012 10:59 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Charli Sorenson
1970 Sage Hills Drive
Ellensburg, WA 98926

From: Anna Roberts <aroberts00@gmail.com>
Sent: Monday, October 01, 2012 10:53 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Anna Roberts
215 S Ellis St.
Palouse, WA 99161

From: Christina Gilman <christina@dolcideria.com>
Sent: Monday, October 01, 2012 9:34 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Christina Gilman
2901 S Adams St
Seattle, WA 98108

From: Debbie Bremner <dbremner@u.washington.edu>
Sent: Monday, October 01, 2012 8:09 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Debbie Bremner
1837 11th Ave NE
Shoreline, WA 98155

From: Ann Cordero <corderoa@teleport.com>
Sent: Monday, October 01, 2012 8:03 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Ann Cordero
2814 Lilac Street
Longview, WA 98632

From: Timothy Casey <tcasey@gbpackersfan.com>
Sent: Monday, October 01, 2012 7:17 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Timothy Casey
2330 12th Avenue
Clarkston, WA 99403

From: Amber Peralta <sleepypoppy@yahoo.com>
Sent: Monday, October 01, 2012 7:01 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Amber Peralta
pull and be damned rd
La Conner, WA 98257

From: Kate Easton <keaston@gardenvisioninc.com>
Sent: Monday, October 01, 2012 6:33 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Kate Easton
3377 Bethel Rd. SE
Port Orchard, WA 98366

From: David McCabe <dpmcca@msn.com>
Sent: Monday, October 01, 2012 2:06 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

David McCabe
PO Box 1051
Bellevue, WA 98009

From: Donna Greathouse Neel <dragonsrest2@comcast.net>
Sent: Monday, October 01, 2012 12:12 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Donna Greathouse Neel
42910 SE 173rd St
North Bend, WA 98045

From: S. J. Jacky <stardancer323@msn.com>
Sent: Monday, October 01, 2012 12:01 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

S. J. Jacky
2411 Lexington St
Steilacoom, WA 98388

From: Jonathan Walter <greatwarrior777@aol.com>
Sent: Sunday, September 30, 2012 10:39 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jonathan Walter
6531 Dennis pl sw
Tumwater, WA 98501

From: debby Mumm Felnagle <tomdebbyfelnagle@harbornet.com>
Sent: Sunday, September 30, 2012 9:53 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

debby Mumm Felnagle
1618 Wilton Rd S
Tacoma, WA 98465

From: Susan Sunshine <susansunshine2003@yahoo.com>
Sent: Sunday, September 30, 2012 9:45 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Susan Sunshine
2800 Limited Lane NW, D6
Olympia, WA 98502

From: Barbara Voss <barbaravoss@earthlink.net>
Sent: Sunday, September 30, 2012 8:52 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Barbara Voss
7001 NE 137th Street
Kirkland, WA 98034

From: Christopher Van Putten <loveasmusic@gmail.com>
Sent: Sunday, September 30, 2012 8:40 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Christopher Van Putten
10030 Dekoven Dr. S.W.
Lakewood, WA 98499

From: Richelle Rausch <rira11@care2.com>
Sent: Sunday, September 30, 2012 8:18 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Richelle Rausch
655 4th St
E. Wenatchee, WA 98802

From: Heather Hall <elfinragdoll@gmail.com>
Sent: Sunday, September 30, 2012 7:32 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Heather Hall
749 N 105th St
Seattle, WA 98133

From: Kathryn Alexandra <kalexandra@comcast.net>
Sent: Sunday, September 30, 2012 6:23 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Kathryn Alexandra
4311 Ginnett Rd.
Anacortes, WA 98221

From: Virginia Davis <ginny1218@yahoo.com>
Sent: Sunday, September 30, 2012 6:01 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Virginia Davis
17721 NE 156th St.
Woodinville, WA 98072

From: Paulette Doulatshahi <pdoulatshahi@hotmail.com>
Sent: Sunday, September 30, 2012 5:51 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Paulette Doulatshahi
4525 Ferncroft Road
Mercer Island, WA 98040

From: Gabriel Newton <gabenewton@yahoo.com>
Sent: Sunday, September 30, 2012 5:16 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Gabriel Newton
3707 Corliss Ave N
Seattle, WA 98103

From: Nicole Green <nmsdiamond@gmail.com>
Sent: Sunday, September 30, 2012 3:53 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Nicole Green
16208 10th ave NE
Shoreline, WA 98155

From: K. Pendergrass <westandtogether@comcast.net>
Sent: Sunday, September 30, 2012 2:03 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

We stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, we support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Thank you for your time and consideration in strengthening the oil spill cleanup measures to preserve Puget Sound.

Sincerely,

K. Pendergrass
12216 10 Ave. S.
Burien, WA 98168

From: Barbara Robinson <barbie53@msn.com>
Sent: Sunday, September 30, 2012 2:02 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Barbara Robinson
4012 N Nevada St
Spokane, WA 99207

From: Ella Melik <ella.melik@gmail.com>
Sent: Sunday, September 30, 2012 1:45 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Ella Melik
PO Box 866
Moxee, WA 98936

From: Barbara Wallesz <wallesz@comcast.net>
Sent: Sunday, September 30, 2012 1:31 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Barbara Wallesz
4915 Samish Way #79
Bellingham, WA 98229

From: Wonono Rubio <wononorb@gmail.com>
Sent: Sunday, September 30, 2012 12:48 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Wonono Rubio
5629 Kuhn St.
Port Townsend, WA 98368

From: Saab Lofton <saablofton@hotmail.com>
Sent: Sunday, September 30, 2012 11:48 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Saab Lofton
619 Third Avenue
Seattle, WA 98104

From: Aaron Gunderson <amsonofagun@gmail.com>
Sent: Sunday, September 30, 2012 10:33 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Aaron Gunderson
1615 SE Bleasner Dr. #40
Pullman, WA 99163

From: Samantha Novak <Samminovak19@hotmail.com>
Sent: Sunday, September 30, 2012 10:22 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Samantha Novak
136 102nd AVE SE apt 213
Bellevue, WA 98004

From: Nancy Hepp <funanddynamic@whidbey.com>
Sent: Sunday, September 30, 2012 9:59 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Nancy Hepp
6427 Maxwellton Road
Clinton, WA 98260

From: Eleanor Dowson <eleanordowson@comcast.net>
Sent: Sunday, September 30, 2012 9:27 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Eleanor Dowson
2007 Millpointe Drive SE
Mill Creek, WA 98012

From: Patricia Rodgers <patriciam@clearwire.net>
Sent: Sunday, September 30, 2012 9:13 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Patricia Rodgers
8121 NE 141st Street
Bothell, WA 98034

From: Sherril Gerell <sherril@dshwebart.com>
Sent: Sunday, September 30, 2012 9:01 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Sherril Gerell
15705 SE 157th St
Renton, WA 98058

From: Alice Zillah <alicezillah@yahoo.com>
Sent: Sunday, September 30, 2012 9:00 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Alice Zillah
2616 Otis St. SE
Olympia, WA 98501

From: Tracy Ouellette <tajenkins@pol.net>
Sent: Sunday, September 30, 2012 8:43 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Tracy Ouellette
14078 MacTaggart Ave
Bow, WA 98232

From: Niki Vogt <n.vogt@comcast.net>
Sent: Sunday, September 30, 2012 7:32 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Niki Vogt
17502 Evergreen Hwy SE
Vancouver, WA 98683

From: Penny Brooks <pabseattle@hotmail.com>
Sent: Sunday, September 30, 2012 6:58 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Penny Brooks
4819 165th Place SW
Edmonds, WA 98026

From: Julie Briggs <ez160@aol.com>
Sent: Sunday, September 30, 2012 5:25 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Julie Briggs
6528 60th St SE
Snohomish, WA 98290

From: Nancy Bomgardner <duplicateme@iglide.net>
Sent: Sunday, September 30, 2012 1:40 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Nancy Bomgardner
27109 NE 45th St
Redmond, WA 98053

From: Allison Lovell <alovell333@yahoo.com>
Sent: Sunday, September 30, 2012 12:24 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Allison Lovell
1105 13 th street
Bellingham, WA 98225

From: C W <carolyne.eulene@juno.com>
Sent: Saturday, September 29, 2012 11:23 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

C W
cjcklbb vkvlffm 999 Street
Seattle, WA 98125

From: Aleese Zehm <zemros@aol.com>
Sent: Saturday, September 29, 2012 11:07 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Aleese Zehm
8104 ne 9th st
Vancouver, WA 98664

From: Chris Howie <chrishowie@centurytel.net>
Sent: Saturday, September 29, 2012 10:43 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Chris Howie
1304 E. Jennings Rd.
Spangle, WA 99031

From: Pamir Karusagi <pamir1153@gmail.com>
Sent: Saturday, September 29, 2012 10:15 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Pamir Karusagi
26114 NE 219th Pl
Battle Ground, WA 98604

From: barb lord <radiator81@hotmail.com>
Sent: Saturday, September 29, 2012 9:57 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I worked on oil tankers in the 80s. I know that the corporations I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

bl

barb lord

WA 98178

From: Justin Sweet <dulce1021@hotmail.com>
Sent: Saturday, September 29, 2012 9:39 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Justin Sweet
4132 3rd Ave NW Apt 3
Seattle, WA 98107

From: Wade Higgins <whiggi@juno.com>
Sent: Saturday, September 29, 2012 9:26 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Wade Higgins
2200 NE 10th Pl Apt 23
Renton, WA 98056

From: Sharon D'Amico <harkentraveler@yahoo.com>
Sent: Saturday, September 29, 2012 9:23 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Sharon D'Amico
10418 NE 52nd St
Kirkland, WA 98033

From: john eschen <desperatelyseekingcompanionship@hotmail.com>
Sent: Saturday, September 29, 2012 7:41 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

john eschen
308 E St
Grand Coulee, WA 99133

From: Charlene Lauzon <oceanlvr1111@hotmail.com>
Sent: Saturday, September 29, 2012 7:25 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Charlene Lauzon
5715 202nd Street SW
Lynnwood, WA 98036

From: Gary Murrow <g.murrow@earthlink.net>
Sent: Saturday, September 29, 2012 7:14 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Gary Murrow
5524 Johnson Point RD NE
olympia, WA 98516

From: Thelma Follett <thelmafollett@yahoo.com>
Sent: Saturday, September 29, 2012 7:09 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,
Trans Pacific Partnership, Import/Export of GMO agriculture and widgets to and from Washington State pushed by Gore and Obama -there is no need for any of that.

Human-induced global warming is here. The Arctic ice will all be gone in 4 years (look it up).

Keep the tankers and the Panamax out of our waters.
There is absolutely no excuse other than over the top greed to do otherwise.

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Thelma Follett
P. O. Box 28804, Bellingham, WA 98228
Bellingham, WA 98228

From: Linda Archer <archerls@msn.com>
Sent: Saturday, September 29, 2012 6:17 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Linda Archer
P. O. Box 39748
Lakewood, WA 98496

From: matt courter <courter_matthewr@hotmail.com>
Sent: Saturday, September 29, 2012 6:10 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

matt courter
10612 dixon drive south
seattle, WA 98178

From: Glen Duncan <duncag@comcast.net>
Sent: Saturday, September 29, 2012 5:32 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Glen Duncan
6529 Latona Avenue NE
Seattle, WA 98115

From: Mary Rausch <maryr425@aol.com>
Sent: Saturday, September 29, 2012 5:21 PM
To: ECY RE Spills Rule Making
Subject: Update Spill Plan Requirements Under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Mary Rausch
15201 Admiralty Way Unit C-7
Lynnwood, WA 98087 2437

From: Benjamin Sibelman <ben@bensibelman.info>
Sent: Saturday, September 29, 2012 4:47 PM
To: ECY RE Spills Rule Making
Subject: Update oil spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Tragically, companies are now seeking to transport dirty coal and tar sands oil to Asia, which will increase ship traffic still further. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA (which will hopefully never be built). In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico, and with a watchful eye to the possibility of increased shipments of dirty fuels through the Sound, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities, to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Benjamin Sibelman
15817 NE 90th St, Apt. H362
Redmond, WA 98052

From: kim groom <kimgroom@hotmail.com>
Sent: Saturday, September 29, 2012 4:47 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

kim groom
306 williams blvd nw
orting, WA 98360

From: Willie McCoy <spankyho@hotmail.com>
Sent: Saturday, September 29, 2012 4:35 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Willie McCoy
702 2nd Ave West Apt 103
Seattle, WA 98119

From: Roberta Copenhefer <cedarwaxwing90@hotmail.com>
Sent: Saturday, September 29, 2012 4:15 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Roberta Copenhefer
17800 glade Rd
Mabton, WA 98935

From: Barbara Robinson <barbie53@msn.com>
Sent: Saturday, September 29, 2012 4:09 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Barbara Robinson
4012 N Nevada St
Spokane, WA 99207

From: Judith Cosby <judithcosby@hotmail.com>
Sent: Saturday, September 29, 2012 3:54 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Judith Cosby
542 Juniper St.
Walla Walla, WA 99362

From: John Dunn <jdunn936@yahoo.com>
Sent: Saturday, September 29, 2012 3:34 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

John Dunn
P.O. Box 1024
Vashon, WA 98070

From: zoe escobar <zcescobar@comcast.net>
Sent: Saturday, September 29, 2012 3:32 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

zoe escobar
PO Box 407
Issaquah, WA 98027

From: Dr Jay Sullivan <Drjaysullivan@aol.com>
Sent: Saturday, September 29, 2012 3:30 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Dr Jay Sullivan
7710 61st Ave Nw
Gig Harbor, WA 98335

From: David Cosby <earthlightbooks@hotmail.com>
Sent: Saturday, September 29, 2012 3:11 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

David Cosby
321 E. MAIN
WALLA WALLA, WA 99362

From: David Arntson <dchristiemusic@hotmail.com>
Sent: Saturday, September 29, 2012 2:12 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

David Arntson
1615 208th St SE, Unit3
Bothell, WA 98012

From: Judith Carter <judith@rockisland.com>
Sent: Saturday, September 29, 2012 2:07 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Having been involved in different aspects of more than one oil spill in Puget Sound and the coast, I know all too well the horrific impact even a "small" oil spill can have.

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Judith Carter
PO Box 513
Friday Harbor, WA 98250

From: karen hartman <KLBHARTMAN@PEOPLEPC.COM>
Sent: Saturday, September 29, 2012 1:52 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

karen hartman
9758 NE 127TH PLACE
KIRKLAND, WA 98034

From: Lorree Gardener Milne <lorreeg@gmail.com>
Sent: Saturday, September 29, 2012 1:41 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Lorree Gardener Milne
9810 Dempsey Lane SW
Olympia, WA 98512

From: Linda Dodson <dodluk@msn.com>
Sent: Saturday, September 29, 2012 1:39 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

The protection of Puget Sound from potential oil spills is very important.

Therefore I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Linda Dodson
615 Boren Ave #5
Seattle, WA 98104

From: Martha Thompson <marflarg@gmail.com>
Sent: Saturday, September 29, 2012 1:28 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Martha Thompson
2739 Cedarwood Ave
Bellingham, WA 98225

From: larry mahlis <larrymahlis@hotmail.com>
Sent: Saturday, September 29, 2012 1:07 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

larry mahlis
9611 12
Seattle, WA 98115

From: Jennifer Basaraba Sprague <jbsprague@hotmail.com>
Sent: Saturday, September 29, 2012 1:05 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Jennifer Basaraba Sprague
3224 Biscay Ct. NW
Olympia, WA 98502

From: Tiffany Chao <tiffany_chao@hotmail.com>
Sent: Saturday, September 29, 2012 12:51 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Tiffany Chao
4144 11th Ave NE
Seattle, WA 98105

From: Nick Page <nickpage502@hotmail.com>
Sent: Saturday, September 29, 2012 12:48 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Nick Page
5720 Windgate Drive
Ferndale, WA 98248

From: Gary Larson <garbltoo@gmail.com>
Sent: Saturday, September 29, 2012 12:31 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day, Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar-sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, Wash. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the water body, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling on the State of Washington to update oil spills plan requirements for ships and facilities to make sure Puget Sound is protected when an accident happens. In addition, I support Friends of the Earth's comments to the agency about specific improvements needed for oil-spill-response capability in the sound.

Sincerely,

Gary Larson
6723 35th Ave SW
Seattle, WA 98126

From: Domingo Hermosillo <domingohermosillo@hotmail.com>
Sent: Saturday, September 29, 2012 12:09 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Domingo Hermosillo
1024 Central Ave N Apt H16
Kent, WA 98032

From: Liz White <lizinseattle@msn.com>
Sent: Saturday, September 29, 2012 11:56 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Liz White
1402 N. 135th pl
Seattle, WA 98133

From: Michael Barton <mbarton@teleport.com>
Sent: Saturday, September 29, 2012 11:37 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Michael Barton
3516 NE 113th St.
Seattle, WA 98125

From: C Kanemori <rayka@frontier.com>
Sent: Saturday, September 29, 2012 11:24 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

C Kanemori
9733-112th Ave. NE
Kirkland, WA 98033

From: Shirley Allyn <saallyn@aol.com>
Sent: Saturday, September 29, 2012 11:22 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Shirley Allyn
Grandview Loop
Wenatchee, WA 98801

From: Barbara Zatrine <babzat@gmail.com>
Sent: Saturday, September 29, 2012 11:21 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Barbara Zatrine
5196 Graveline Rd
Bellingham, WA 98226

From: Floyd Rollefstad <rollefstad@comcast.net>
Sent: Saturday, September 29, 2012 10:47 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Floyd Rollefstad
5101 - 145th Pl SE
Bellevue, WA 98006

From: Karen Hedwig Backman <madmaker13@msn.com>
Sent: Saturday, September 29, 2012 10:46 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Karen Hedwig Backman
31010 18th Ave S Apt 4
Federal Way, WA 98003

From: Ingrid Erickson <kashmirdream@aol.com>
Sent: Saturday, September 29, 2012 10:44 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Ingrid Erickson
1104 E Maryland St Apt 1
Bellingham, WA 98226

From: AISHA FARHOUD <mingamoomu@yahoo.com>
Sent: Saturday, September 29, 2012 10:44 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

AISHA FARHOUD
6161 REIMS RD
HOUSTON, WA 77036

From: Janine Lewis <charlenana@hotmail.com>
Sent: Saturday, September 29, 2012 10:42 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Janine Lewis
1823 W Northridge Ct
spokane, WA 99208

From: David Walseth <walseth@msn.com>
Sent: Saturday, September 29, 2012 10:41 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

David Walseth
1919 NE 123rd Ave
Vancouver, WA 98684

From: Margaret Hood <SSSmirk@aol.com>
Sent: Saturday, September 29, 2012 10:32 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Margaret Hood
6778 137th Pl. N.E.
Redmond, WA 98052

From: Hal Enerson <ensn@lycos.com>
Sent: Saturday, September 29, 2012 10:31 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Hal Enerson
P.O. Box 1375
Port Angeles, WA 98362

From: Sonja Aikens <aikenss@hotmail.com>
Sent: Saturday, September 29, 2012 10:25 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Sonja Aikens
1020 Waverly
Walla Walla, WA 99362

From: Marsha Shaiman <meshaiman@hotmail.com>
Sent: Saturday, September 29, 2012 10:25 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Marsha Shaiman
824 29th Ave
Seattle, WA 98122

From: Linda Dennis <catspayneuter@msn.com>
Sent: Saturday, September 29, 2012 10:22 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Linda Dennis
P.O. Box 184
Sequim, WA 98382

From: Jeriene Walberg <jeriene@comcast.net>
Sent: Saturday, September 29, 2012 10:16 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Jeriene Walberg
3857 Williams Avenue W
Seattle, WA 98199

From: Cynthia Jatul <jatul3563@msn.com>
Sent: Saturday, September 29, 2012 10:12 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Cynthia Jatul
5512 Canfield Pl, N.
Seattle, WA 98103

From: Mary Keeler <mkeeler@uw.edu>
Sent: Saturday, September 29, 2012 10:06 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Mary Keeler
1102 NW 83rd Street
Seattle, WA 98117

From: Joe Mabel <jmabel@speakeasy.org>
Sent: Saturday, September 29, 2012 10:00 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Joe Mabel
3164 NE 83rd Street
Seattle, WA 98115

From: Fuoad Shashani <z6zmusic@hotmail.com>
Sent: Saturday, September 29, 2012 10:00 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Fuoad Shashani
25905 29th ave south #A-301
Kent, WA 98032

From: Caroline Allen <ks2wa@comcast.net>
Sent: Saturday, September 29, 2012 9:57 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Caroline Allen
12 211th Place SE
Sammamish, WA 98074

From: mary cottingham <marycottingham@gmail.com>
Sent: Saturday, September 29, 2012 9:52 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

mary cottingham
16330 38th ave nw
stanwood, WA 98292

From: Jane Oberlander <janeo448@yahoo.com>
Sent: Saturday, September 29, 2012 9:52 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jane Oberlander
8713 238th St SW #A10
Edmonds, WA 98026

From: Ken Benoit <kenbenoit@yahoo.com>
Sent: Saturday, September 29, 2012 9:51 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Ken Benoit
15721 44th Ave W
Lynnwood, WA 98087

From: Mike Conlan <mickconlan@hotmail.com>
Sent: Saturday, September 29, 2012 9:41 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Mike Conlan
6421 139th Place NE, 52
Redmond, WA 98052

From: Carole Henry, MSW <xmas_carole@hotmail.com>
Sent: Saturday, September 29, 2012 9:36 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Carole Henry, MSW
6109 Seabeck Holly Road NW
Seabeck, WA 98380

From: Nancy Herr <ncherr@aol.com>
Sent: Saturday, September 29, 2012 9:24 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Nancy Herr
3407 N Pioneer Canyon Dr.
Ridgefield, WA 98642

From: Jennifer Fenswick <jfenswick@sonic.net>
Sent: Saturday, September 29, 2012 9:24 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jennifer Fenswick
1210 S. 16th St.
Mt. Vernon, WA 98274

From: Polly Tarpley <tarpleypolly@hotmail.com>
Sent: Saturday, September 29, 2012 9:18 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Polly Tarpley
24585 Waghorn Rd NW
Poulsbo, WA 98370

From: Claudia Karll <ckarll@centurytel.net>
Sent: Saturday, September 29, 2012 9:17 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Claudia Karll
PO Box 2852
Vashon, WA 98070

From: S Simonet <slsimonet@gmail.com>
Sent: Saturday, September 29, 2012 9:16 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

S Simonet
10913 NE 29th Ave
Vancouver, WA 98686

From: Dan Hess <dmhess@comcast.net>
Sent: Saturday, September 29, 2012 9:08 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Dan Hess
1620 45th Ave SW
Seattle, WA 98116

From: ANNA Hauksdottir <akhauksdottir@hotmail.com>
Sent: Saturday, September 29, 2012 9:03 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

ANNA Hauksdottir
21088 88th PL W
Edmonds, WA 98026

From: Susan Dawson <LaPianta@aol.com>
Sent: Saturday, September 29, 2012 9:02 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Susan Dawson
17855 W Spring Lake Dr SE
Renton, WA 98058

From: Nick Barcott <nbarcott@msn.com>
Sent: Saturday, September 29, 2012 8:52 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Nick Barcott
1318 N. Lake Stickney Dr.
Lynnwood, WA 98087

From: Wesley Banks <vancdanbanks@hotmail.com>
Sent: Saturday, September 29, 2012 8:49 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Wesley Banks
P.O. Box 823234
Vancouver, WA 98682

From: Michael Tomazic <miketomazic@gmail.com>
Sent: Saturday, September 29, 2012 8:46 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Michael Tomazic
2442 129th Ave SE
Bellevue, WA 98005

From: Helga Riehlein <her@olyphen.com>
Sent: Saturday, September 29, 2012 8:40 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Helga Riehlein
PO Box5
Carlsborg, WA 98324

From: Laura Craig <laurettcraig@gmail.com>
Sent: Saturday, September 29, 2012 8:21 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

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Sincerely,

Laura Craig
21840 Piessner Rd Se
Yelm, WA 98597

From: Glenn Eklund <glostluggage@hotmail.com>
Sent: Saturday, September 29, 2012 8:19 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Glenn Eklund
4975 Jones Rd.
Oak Harbor, WA 98277

From: Kathy Kestell <jkestell@q.com>
Sent: Saturday, September 29, 2012 8:06 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Kathy Kestell
15611 N Little Spokane Dr
Spokane, WA 99208

From: christopher grannis <chrgra@ymail.com>
Sent: Saturday, September 29, 2012 8:06 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

christopher grannis
701 Chuckanut Drive N
Bellingham, WA 98229

From: Bea Soss <bbbeatricedianee@voila.fr>
Sent: Saturday, September 29, 2012 8:03 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Bea Soss
W 1128 19th
Spokane, WA 99203

From: Cathleen Lindsay <crlindsay@comcast.net>
Sent: Saturday, September 29, 2012 8:01 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Cathleen Lindsay
2025 NE100th St
Seattle, WA 98125

From: Lura Irish <lirish@earthlink.net>
Sent: Saturday, September 29, 2012 8:01 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Lura Irish
POB 578
Lakebay, WA 98349

From: Patricia Ransyrom <tnpranstrom@gmail.com>
Sent: Saturday, September 29, 2012 7:59 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Patricia Ransyrom
PO box 2181
Vashon, WA 98070

From: Janet Pocsi <jplanetary@gmail.com>
Sent: Saturday, September 29, 2012 7:58 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Janet Pocsi
1225 E Sunset Drive PMB 692
Bellingham, WA 98226

From: Lloyd Hedger <lloydmhedger@msn.com>
Sent: Saturday, September 29, 2012 7:52 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Lloyd Hedger
224 N G St. #405
Tacoma, WA 98403

From: Peter Rimbo <primbos@comcast.net>
Sent: Saturday, September 29, 2012 7:45 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Peter Rimbo
19711 241st Ave SE
Maple Valley, WA 98038

From: John Adkins <jadkins@nbbj.com>
Sent: Saturday, September 29, 2012 7:39 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

John Adkins
10604 231 street SW
Edmonds, WA 98020

From: Ramona Menish <bluestwo2@msn.com>
Sent: Saturday, September 29, 2012 7:30 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Ramona Menish
25 Horseshoe Circle
Bellingham, WA 98229

From: Sallie Becker <salliebecker@hotmail.com>
Sent: Saturday, September 29, 2012 7:25 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Sallie Becker
PO Box 66674
Anacortes, WA 98029

From: mary ann kirsling <kaidmak@aol.com>
Sent: Saturday, September 29, 2012 7:25 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

mary ann kirsling
p.o. box 3063
pasco, WA 99302

From: Carol Rolf <sacred.sage@msn.com>
Sent: Saturday, September 29, 2012 7:22 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Carol Rolf
679 1/2 N. Maple
Colville, WA 99114

From: April Atwood <hissrattlesnap@yahoo.com>
Sent: Saturday, September 29, 2012 6:54 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

April Atwood

WA 98119

From: richard wertz <wertzwhitman@frontier.com>
Sent: Saturday, September 29, 2012 6:42 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

richard wertz
pobox441
snohomish, WA 98290

From: John Niendorf <jrniendorf@cs.com>
Sent: Saturday, September 29, 2012 6:37 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

John Niendorf
508 Kelsando Cir
Friday Harbor, WA 98250

From: John S <jleestim@aol.com>
Sent: Saturday, September 29, 2012 6:21 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

John S
10726 Stone Ave N
Seattle, WA 98133

From: Wendy Stevens <wagothro@hotmail.com>
Sent: Saturday, September 29, 2012 6:14 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Wendy Stevens
12625 NE 156th Pl
Woodinville, WA 98072

From: Shelly Peterson <shellyslily@live.com>
Sent: Saturday, September 29, 2012 6:14 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Shelly Peterson
301 So. 82nd St. Apt.#5
Tacoma, WA 98499

From: Jack Burg <jack@montlakemousse.com>
Sent: Saturday, September 29, 2012 5:32 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jack Burg
Pioneer Square Box 4005
Seattle, WA 98194

From: Ann E. Wales <trout222@abhost.us>
Sent: Saturday, September 29, 2012 5:14 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Ann E. Wales
2545 MacKenzie Road
Bellingham, WA 98226

From: Carolyn Marshall <scrapadoo11@hotmail.com>
Sent: Saturday, September 29, 2012 3:23 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Carolyn Marshall
8601 Anderson Mill Road
Austin, WA 98040

From: Rick Harlan <rickharlan@igc.org>
Sent: Saturday, September 29, 2012 3:13 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Rick Harlan

WA 98112

From: Amanda Mikalson <amikalson@gmail.com>
Sent: Saturday, September 29, 2012 1:42 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Amanda Mikalson
PO Box 135
Farmington, WA 99128

From: Mike Sherman <mlsherm@w-link.net>
Sent: Saturday, September 29, 2012 1:03 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Mike Sherman
11556 Greenwood Avenue North
Seattle, WA 98133

From: Lisa Jester <whonu@comcast.net>
Sent: Saturday, September 29, 2012 1:02 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Lisa Jester
PO Box 173
Vancouver, WA 98666

From: gayle palmer <gayle1041@hotmail.com>
Sent: Saturday, September 29, 2012 12:49 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

gayle palmer
4745 fernridge lane
Mercer Island, WA 98040

From: mark russell <mthomasrussell@hotmail.com>
Sent: Saturday, September 29, 2012 12:41 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

mark russell
5256 beach dr sw
seattle, WA 98136

From: Lisa Vandermay <aussipug@aol.com>
Sent: Saturday, September 29, 2012 12:38 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Lisa Vandermay
16203 se 175th pl
Renton, WA 98058

From: Mike Smith <mike55smith@gmail.com>
Sent: Saturday, September 29, 2012 12:34 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

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Sincerely,

Mike Smith
1531 1st Ave
Seattle, WA 98101

From: lesah curatolo <lesahx@hotmail.com>
Sent: Saturday, September 29, 2012 12:33 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

lesah curatolo
1475 graham drive
camano island, WA 98282

From: Kyle Waller <TarnSilverwolf@Gmail.com>
Sent: Saturday, September 29, 2012 12:27 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Kyle Waller
12021 140th st ct e
Puyallup, WA 98374

From: Deborah Efron <catsforme@hotmail.com>
Sent: Saturday, September 29, 2012 12:22 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Deborah Efron
10129 Main Street
Bellevue, WA 98004

From: Lara connor <dizzyflygvapnet@hotmail.com>
Sent: Friday, September 28, 2012 11:54 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Lara connor
17721 Crooked Mile Road
Granite Falls, WA 98252

From: Mary Solum <mesolum@q.com>
Sent: Friday, September 28, 2012 11:49 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Mary Solum
5 Berry Wood Place
Bellingham, WA 98229

From: Keith Hawes <wkhawes@comcast.net>
Sent: Friday, September 28, 2012 11:40 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Keith Hawes
19944 Kuper Ct
Centralia, WA 98531

From: Doris (Jody) Wilson <jodyhere24doris@comcast.net>
Sent: Friday, September 28, 2012 11:34 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Doris (Jody) Wilson
12711 NE 129th Court, G-104
Kirkland, WA 98034

From: Virginia Alexander <valexander97@hotmail.com>
Sent: Friday, September 28, 2012 11:29 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Virginia Alexander
57th Ct S
Kent, WA 98032

From: Adam Levine <adamlevine@earthlink.net>
Sent: Friday, September 28, 2012 11:25 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Adam Levine
1819 E. Republican St. #311
Seattle, WA 98112

From: Billie Watkins <billiewatkins@juno.com>
Sent: Friday, September 28, 2012 11:23 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Billie Watkins
300 W 8th St unit 236
Vancouver, WA 98660

From: Leanne Gravette <frodo_ringbearer@msn.com>
Sent: Friday, September 28, 2012 11:14 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Leanne Gravette
425 Mtn Park Blvd SW
Issaquah, WA 98027

From: Susan Vossler <vosslerm1@comcast.net>
Sent: Friday, September 28, 2012 11:10 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Susan Vossler
12945 64th Ave NE
Kirkland, WA 98034

From: Jared Widman <rithemking@hotmail.com>
Sent: Friday, September 28, 2012 10:56 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jared Widman
504 1/2 DeKalb St
Port Orchard, WA 98366

From: J. C. Thrush <nachtzoen1@yahoo.com>
Sent: Friday, September 28, 2012 10:52 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

J. C. Thrush
90 sherry Ave
Naches, WA 98937

From: Joe Thompson <jlt4203@yahoo.com>
Sent: Friday, September 28, 2012 10:51 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Joe Thompson
809 N. 5th St.
Kalama, WA 98625

From: Wesley Banks <vanccdanbanks@hotmail.com>
Sent: Friday, September 28, 2012 10:50 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Wesley Banks
P.O. Box 823234
Vancouver, WA 98682

From: Ji-Young Kim <jyoungk98@hotmail.com>
Sent: Friday, September 28, 2012 10:45 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Ji-Young Kim
19230 25th Ave SE
Bothell, WA 98012

From: Ann Marie Frodel <annfrodel@mac.com>
Sent: Friday, September 28, 2012 10:40 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Ann Marie Frodel
P.O. Box 342
Poulsbo, WA 98370

From: Hannah Gardner <Hannahgardne@hotmail.com>
Sent: Friday, September 28, 2012 10:32 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Hannah Gardner
3607 227th st sw
Brier, WA 98036

From: Bert Hoff <hoffbert@hotmail.com>
Sent: Friday, September 28, 2012 10:31 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Bert Hoff
7552 31st Ave NE
Seattle, WA 98115

From: Lynnette Anderson <lianderso@hotmail.com>
Sent: Friday, September 28, 2012 10:22 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Lynnette Anderson
504 W Smith St
Seattle, WA 98119

From: Robert A Ethington <eltomategordo@hotmail.com>
Sent: Friday, September 28, 2012 10:20 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Robert A Ethington
13216 N Stevens St
Spokane, WA 99208

From: Florence Wagner <flojac@interisland.net>
Sent: Friday, September 28, 2012 10:18 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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This is not a learning experience - there's no 2nd chance - oil spills must be stopped. And the big guys who rake in all the big money from moving oil around are the ones who must be held responsible. We, as taxpayers, should not be held responsible for their neglect and carelessness..we don't need to bail them out..again!

Sincerely,

Florence Wagner
392 Whiskey Hill Rd.
Lopez Island, WA 98261

From: Rodolfo Franco <deaztlan2@aol.com>
Sent: Friday, September 28, 2012 10:16 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Rodolfo Franco
4526 Delridge Way SW
Seattle, WA 98106

From: janice marshall <black_panther111111@yahoo.com>
Sent: Friday, September 28, 2012 10:13 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

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Sincerely,

janice marshall
1101 ulery st se
lacey, WA 98503

From: Mike Monteleone <mike.monteleone@gmail.com>
Sent: Friday, September 28, 2012 10:12 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

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Sincerely,

Mike Monteleone
4234 36th Ave SW
Seattle, WA 98126

From: Mathew Metcalf <mathewmetcalf@hotmail.com>
Sent: Friday, September 28, 2012 10:00 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

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Sincerely,

Mathew Metcalf
2110 Amhurst St SE
Olympia, WA 98501

From: Larry Franks <pearsonfr@comcast.net>
Sent: Friday, September 28, 2012 9:56 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Larry Franks
24001 SE 103rd St
Issaquah, WA 98027

From: Carol Crow <carol@songaia.com>
Sent: Friday, September 28, 2012 9:52 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Carol Crow
4018 224th St. SE
Bothell, WA 98021

From: albert bechtel <bigjbechtel4711@msn.com>
Sent: Friday, September 28, 2012 9:52 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

albert bechtel
4131-11th.ave.ne apt.109
seattle, WA 98105

From: Jude Waller <judewall@comcast.net>
Sent: Friday, September 28, 2012 9:48 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jude Waller
15212 Sunwood Blvd
Tukwila, WA 98188

From: William Sneiderwine <indexter46219@yahoo.com>
Sent: Friday, September 28, 2012 9:46 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

William Sneiderwine
14901 SE Sun Park Ct.
Vancouver, WA 98683

From: Morgan Girling <raventalk@comcast.net>
Sent: Friday, September 28, 2012 9:41 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Morgan Girling
364-145th PI SE
Bellevue, WA 98007

From: Frances Mead <lycett8@gmail.com>
Sent: Friday, September 28, 2012 9:41 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Best of all would be, of course, to outlaw & completely ban the traffic of oil in the Puget Sound.

Sincerely,

Frances Mead
3953 S. Americus Street
Seattle, WA 98118

From: Paul Booker <p_booker@hotmail.com>
Sent: Friday, September 28, 2012 9:39 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Paul Booker
24 Vista del Mar
Camano Island, WA 98282

From: Gary Bennett <Garyeunicebennett@msn.com>
Sent: Friday, September 28, 2012 9:38 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Gary Bennett
1436 Toledo st
Bellingham, WA 98229

From: Lee Buffington <arcadiagardendesign@mindspring.com>
Sent: Friday, September 28, 2012 9:38 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Lee Buffington
2257 80th Ave SE
Mercer Island, WA 98040

From: Patricia Tall-Takacs <patriciaandgary@comcast.net>
Sent: Friday, September 28, 2012 9:36 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Patricia Tall-Takacs
1356 E. Boston St.
Seattle, WA 98102

From: MARGARET HASHMI <sakibaytu@comcast.net>
Sent: Friday, September 28, 2012 9:28 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

MARGARET HASHMI
3704 TREE FARM LANE
BELLINGHAM, WA 98226

From: James Hipp <jrhipp010@gmail.com>
Sent: Friday, September 28, 2012 9:28 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

James Hipp
523 West Kellogg Rd
Bellingham, WA 98226

From: Roger deRoos <rderoos@rockisland.com>
Sent: Friday, September 28, 2012 9:28 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Oil spills will occur in the future. Not being able to predict when and where is excusable, but not being prepared is not. Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Roger deRoos
PO Box 3058
Friday Harbor, WA 98250

From: Ai McCarthy <aym73@hotmail.com>
Sent: Friday, September 28, 2012 9:28 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Ai McCarthy
13526 NE 70th St.
Redmond, WA 98052

From: Diane Shaughnessy <dshau1@aol.com>
Sent: Friday, September 28, 2012 9:26 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Diane Shaughnessy
7308 N Skyview PL A208
Tacoma, WA 98406

From: June Dean <junestan2007@yahoo.com>
Sent: Friday, September 28, 2012 9:24 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

June Dean
641 W Horton Way, #130
Bellingham, WA 98226

From: Kimberly Leeper <kimberly@mariposanaturescapes.com>
Sent: Friday, September 28, 2012 9:22 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Kimberly Leeper
4742 - 42nd Ave. SW PMB 322
Seattle, WA 98136

From: Eric Fosburgh <ericfosburgh@gmail.com>
Sent: Friday, September 28, 2012 9:15 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Eric Fosburgh
1415 E Republican St #203
Seattle, WA 98112

From: Melissa Thirloway <thirloway@msn.com>
Sent: Friday, September 28, 2012 9:14 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Melissa Thirloway
235 10th Ave W
Kirkland, WA 98033

From: peter smith <petertumpy@comcast.net>
Sent: Friday, September 28, 2012 9:14 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

peter smith
14021 232nd ave se
issaquah, WA 98027

From: yulia gorbanyova <gorbanyova@hotmail.com>
Sent: Friday, September 28, 2012 9:12 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

yulia gorbanyova
123 main st
Seattle, WA 98102

From: Joseph and Diane Williams <dwilliams3880@aol.com>
Sent: Friday, September 28, 2012 9:11 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Joseph and Diane Williams
3880 Stikes Drive SE
Lacey, WA 98503

From: Laura Goldberg <dickandlaura@peoplepc.com>
Sent: Friday, September 28, 2012 9:04 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Laura Goldberg
9225 N. Cedarvale Loop Rd
Arlington, WA 98223

From: FORREST RODE <onlyonesf@yahoo.com>
Sent: Friday, September 28, 2012 9:02 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

FORREST RODE
1616 SUMMIT AVE 502
SEATTLE, WA 98122

From: Raelyn Michaelson <measlecat@hotmail.com>
Sent: Friday, September 28, 2012 9:01 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Raelyn Michaelson
14244 29th Ave S
Seatac, WA 98168

From: Annette Way <away69rw@hotmail.com>
Sent: Friday, September 28, 2012 8:54 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

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I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Annette Way
3451 E Lk Samm Sh Ln NE
Sammamish, WA 98074

From: Gerry and Genny Foley <gfoley@kendra.com>
Sent: Friday, September 28, 2012 8:52 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely AND thanks for doing what you do.

Gerry and Genny Foley
8503 44th St W
University Place, WA 98466

From: Nancy Harter <nharter@hotmail.com>
Sent: Friday, September 28, 2012 8:51 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Nancy Harter
1616 Capitol Wy S Apt 3
Olympia, WA 98501

From: Antoinette Bonsignore <antoinettebonsignore@hotmail.com>
Sent: Friday, September 28, 2012 8:50 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Antoinette Bonsignore
16191 NE 83rd Street Unit C413
Redmond, WA 98052

From: Robert Bamford <rob_bamford@hotmail.com>
Sent: Friday, September 28, 2012 8:50 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Robert Bamford
2315 26th Avenue East
Seattle, WA 98112

From: Deborah Rawlings <rawlings1841@msn.com>
Sent: Friday, September 28, 2012 8:50 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Deborah Rawlings
5264 NE 121st Ave apt 228
Vancouver, WA 98682

From: Michelle Keating <mkaction52@comcast.net>
Sent: Friday, September 28, 2012 8:46 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Michelle Keating
517 SE 99th Ave.
Vancouver, WA 98664

From: Alexander Hosea <shuteyetrain915@hotmail.com>
Sent: Friday, September 28, 2012 8:45 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Alexander Hosea
623 N. Trafton Apt. C
Tacoma, WA 98403

From: Glenn and Janice Perry <glennrp@earthlink.net>
Sent: Friday, September 28, 2012 8:41 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Glenn and Janice Perry
5516 Broadview Ave NE
Tacoma, WA 98406

From: debbi pratt <debbi77777@hotmail.com>
Sent: Friday, September 28, 2012 8:41 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

debbi pratt
3535 27th pl. w #505
seattle, WA 98199

From: Karen Collins <Collik@pobox.com>
Sent: Friday, September 28, 2012 8:40 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Karen Collins
200 N 70th Ave #4
Yakima, WA 98908

From: David Richard <David_Richard@nocharge.zzn.com>
Sent: Friday, September 28, 2012 8:37 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

David Richard
1009 W. Blaine
Seattle, WA 98119

From: Noryne Chappelle <nchappelle1@hotmail.com>
Sent: Friday, September 28, 2012 8:34 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Noryne Chappelle
424 N.W. Overlook Drive
Vancouver, WA 98665

From: Scott Bohart <crowscall@gmail.com>
Sent: Friday, September 28, 2012 8:33 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Scott Bohart
7451 4th Ave NE
Seattle, WA 98115

From: Peter Albrecht <petenpals@hotmail.com>
Sent: Friday, September 28, 2012 8:32 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Peter Albrecht
5021 E. Fairview Ave.
Spokane, WA 99217

From: Milton Clark <miltwend2@q.com>
Sent: Friday, September 28, 2012 8:30 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Milton Clark
125234 Greenwood Ave N
Seattle, WA 98133

From: Milton Clark <miltwend2@q.com>
Sent: Friday, September 28, 2012 8:29 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Milton Clark
125234 Greenwood Ave N
Seattle, WA 98133

From: Werner Bergman <wernerbergman@frontier.com>
Sent: Friday, September 28, 2012 8:27 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Werner Bergman
26910 92nd Ave NW, C-5
Stanwood, WA 98292

From: Jacqueline Dern <jackiedern@hotmail.com>
Sent: Friday, September 28, 2012 8:25 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jacqueline Dern
9708 116th Ave NE
Kirkland, WA 98033

From: jerry miller <jermil2@hotmail.com>
Sent: Friday, September 28, 2012 8:24 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

jerry miller
15204 se. sunpark dr.
vancouver, WA 98683

From: Michelle Pavcovich <ladiabla333@hotmail.com>
Sent: Friday, September 28, 2012 8:22 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Michelle Pavcovich
11351 20th Ave NE
Seattle, WA 98125

From: Jayson Luu <jayjay_p3@hotmail.com>
Sent: Friday, September 28, 2012 8:21 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jayson Luu
10455 62nd Ave S.
Seattle, WA 98178

From: Steven Fenwick <fenwizard@earthlink.net>
Sent: Friday, September 28, 2012 8:19 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Steven Fenwick
4929 Cooper Point Rd NW
Olympia, WA 98502

From: Gene Engene <resorter@earthlink.net>
Sent: Friday, September 28, 2012 8:10 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Gene Engene
3 N 3rd St
Cheney, WA 99004

From: Roseanna Page <roseannapage@gmail.com>
Sent: Friday, September 28, 2012 8:00 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Roseanna Page
1404 Toledo St
Bellingham, WA 98229

From: Diane Weinstein <diane_weinstein@msn.com>
Sent: Friday, September 28, 2012 7:55 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Diane Weinstein
24116 SE 45th Place
Issaquah, WA 98029

From: Scott Species <sspecies@yahoo.com>
Sent: Friday, September 28, 2012 7:44 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Scott Species
1922 9th Ave., # 401
Seattle, WA 98101

From: Dianna MacLeod <dmacleod@msn.com>
Sent: Friday, September 28, 2012 7:43 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Dianna MacLeod
4246 Indian Point Lane
Langley, WA 98260

From: Kimberlee Kerley <kim.kerley@earthlink.net>
Sent: Friday, September 28, 2012 7:40 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Tourism dollars will be greatly impacted once a tragic event like the spill in the Gulf happens in Puget Sound. We cannot count on oil companies to do their fair share of the clean up.

Sincerely,

Kimberlee Kerley
397 Deep Creek Rd
Chehalis, WA 98532

From: Paul Franzmann <paulie627@gmail.com>
Sent: Friday, September 28, 2012 7:37 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

I write today as a concerned citizen of Washington state. Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Paul Franzmann
420 Catherine St., # 12
Walla Walla, WA 99362

From: BOB ROLSKY <BROLSKY@PRODIGY.NET>
Sent: Friday, September 28, 2012 7:35 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

BOB ROLSKY
PO BOX 348
SUQUAMISH, WA 98392

From: Lois Fenstermaker <grannyhosa@msn.com>
Sent: Friday, September 28, 2012 7:33 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Lois Fenstermaker
1115 NW. Market St. #211
Seattle, WA 98107

From: Barbara Kendziorski <kupersmom@comcast.net>
Sent: Friday, September 28, 2012 7:30 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Barbara Kendziorski
11731 Bartlett Ave. NE
Seattle, WA 98125

From: Kathleen Beavin <kbeavin@frontier.com>
Sent: Friday, September 28, 2012 7:30 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Kathleen Beavin
22210 17th Pl W
Bothell, WA 98021

From: Don Thomsen <don_a_t@live.com>
Sent: Friday, September 28, 2012 7:22 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Don Thomsen
1106 S Woodfern
Spokane, WA 99202

From: Betty Chan <bettychan1@aol.com>
Sent: Friday, September 28, 2012 7:21 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Betty Chan
P O Box 65106
Shoreline, WA 98155

From: Betty Chan <bettychan1@aol.com>
Sent: Friday, September 28, 2012 7:21 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Betty Chan
P O Box 65106
Shoreline, WA 98155

From: Ivy Sacks <Ivys@centurytel.net>
Sent: Friday, September 28, 2012 7:20 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Ivy Sacks
11525 SW 212th Pl
Vashon, WA 98070

From: Matthew Burtner <EmCeeBurtner@gmail.com>
Sent: Friday, September 28, 2012 7:19 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Matthew Burtner
11719 1st Ave NW
Seattle, WA 98177

From: Angela Bellacosa <angelabella100@yahoo.com>
Sent: Friday, September 28, 2012 7:08 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Angela Bellacosa
4249 9th Ave. NE, #1
Seattle, WA 98105

From: Angela Smith <enlightened@earthlink.net>
Sent: Friday, September 28, 2012 6:59 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Angela Smith
13641 26th Pl S
SeaTac, WA 98168

From: Susan Kay <classicalsculptor@msn.com>
Sent: Friday, September 28, 2012 6:55 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Susan Kay
P. O. Box 451
Vashon, WA 98070

From: mary ellen anderson <meander001@msn.com>
Sent: Friday, September 28, 2012 6:53 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

mary ellen anderson
18514 SE 22nd Way
Vancouver, WA 98683

From: Elisabeth Perrin <e_perrin@earthlink.net>
Sent: Friday, September 28, 2012 6:51 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Elisabeth Perrin
8620 3rd Ave NW #D3
Seattle, WA 98117

From: Kenneth Stinnett <krstinnett@centurytel.net>
Sent: Friday, September 28, 2012 6:47 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Kenneth Stinnett
119 Belcher Rd
Randle, WA 98377

From: Lael Bradshaw <laelbrad@yahoo.com>
Sent: Friday, September 28, 2012 6:46 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

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Sincerely,

Lael Bradshaw
325 forest glen lane
Camano Island, WA 98282

From: Kathleen Wolfe <catlight45@msn.com>
Sent: Friday, September 28, 2012 6:45 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Kathleen Wolfe
28701 6th Pl S #201
Des Moines, WA 98198

From: craig stetina <cstetina@gmail.com>
Sent: Friday, September 28, 2012 6:38 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

craig stetina
13522 37th ave ne
seattle, WA 98125

From: Carolyn Gregg <cgregg@valleyint.com>
Sent: Friday, September 28, 2012 6:33 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Carolyn Gregg
524 N 18th Pl
Mount Vernon, WA 98273

From: Allan Nicholson <car166@earthlink.net>
Sent: Friday, September 28, 2012 6:32 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Allan Nicholson
16th
Seattle, WA 98168

From: Patricia Mellon <Bridgie1@aol.com>
Sent: Friday, September 28, 2012 6:28 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Patricia Mellon
99 NE Teri Court
Bremerton, WA 98311

From: Kenneth Brinkerhoff <ken.brinkerhoff@comcast.net>
Sent: Friday, September 28, 2012 6:24 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Kenneth Brinkerhoff
17005 NE 20th St
Bellevue, WA 98008

From: Marilyn Hurrell <redhlm@comcast.net>
Sent: Friday, September 28, 2012 6:20 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Marilyn Hurrell
9910 S 248th Place
Kent, WA 98030

From: martha Norwalk <marthelight@aol.com>
Sent: Friday, September 28, 2012 6:15 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

martha Norwalk
19916 Old Owen Rd
Monroe, WA 98272

From: Sandra Cole <snlcol@msn.com>
Sent: Friday, September 28, 2012 6:11 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Sandra Cole
806 NE Pinebrook Ave
Vancouver, WA 98684

From: Aimee Cervenka <acervenka@rollins.edu>
Sent: Friday, September 28, 2012 6:06 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Aimee Cervenka
1001 S westcliff pl
SPOKANE, WA 99224

From: Judy Dunsire <jpdaffodil@cablespeed.com>
Sent: Friday, September 28, 2012 6:06 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Judy Dunsire
22425 SE Highland Ln Unit 204
Issaquah, WA 98029

From: Joyce Grajczyk <jag4848@comcast.net>
Sent: Friday, September 28, 2012 5:54 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Joyce Grajczyk
12026 SE 216th St.
Kent, WA 98031

From: Mary Ferm <mmferm@gmail.com>
Sent: Friday, September 28, 2012 5:54 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

As a resident of Puget Sound, I see that every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I strongly support Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Mary Ferm
5062 New Sweden Rd NE
Bainbridge Island, WA 98110

From: Thomas Reidy <tjs_rebirth07@yahoo.com>
Sent: Friday, September 28, 2012 5:47 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Thomas Reidy
9708 10th Pl. SW. #202
Seattle, WA 98106

From: stephanie colony <spcolony@earthlink.net>
Sent: Friday, September 28, 2012 5:46 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

stephanie colony
1822 38th Ave. E.
Seattle, WA 98112

From: Michael Oaks <michaeloaks@clearwire.net>
Sent: Friday, September 28, 2012 5:45 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Michael Oaks
1711 13th Ave S Apt 203
Seattle, WA 98144

From: Trevor Strandness <strandtc21@gmail.com>
Sent: Friday, September 28, 2012 5:43 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Trevor Strandness
Pacific Lutheran University, WA
Tacoma, WA 98447

From: Maxine Holden <maxine2009@eagles.ewu.edu>
Sent: Friday, September 28, 2012 5:43 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Maxine Holden
1921 first street #125
Cheney, WA 99004

From: Jill Timm <Jtimm@aol.com>
Sent: Friday, September 28, 2012 5:40 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Jill Timm
10 cove ave #11
Wenatchee, WA 98801

From: James Mulcare <xsecretsx@cableone.net>
Sent: Friday, September 28, 2012 5:38 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

James Mulcare
1110 Benjamin St
Clarkston, WA 99403

From: Michael Cowsert <amy.mike@wavecable.com>
Sent: Friday, September 28, 2012 5:38 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Michael Cowsert
5039 Country Club Way SE
Port Orchard, WA 98367

From: Emily Willoughby <emilya57@comcast.net>
Sent: Friday, September 28, 2012 5:37 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Emily Willoughby
17000 53rd. Ave. S.
Tukwila, WA 98188

From: Don Ferkingstad <donferkingstad@msn.com>
Sent: Friday, September 28, 2012 5:31 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Don Ferkingstad
6003 35th Ave NW
Seattle, WA 98107

From: Cecilia Bertrand <serindipity803@gmail.com>
Sent: Friday, September 28, 2012 5:28 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Cecilia Bertrand
16524 14th Dr. SE
Mill Creek, WA 98012

From: John Vinson <kazumtv@juno.com>
Sent: Friday, September 28, 2012 5:28 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

John Vinson
3700 14th Ave SE, #154
Olympia, WA 98501

From: constance rodman <elycia@msn.com>
Sent: Friday, September 28, 2012 5:26 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

constance rodman
1920 1st ave #507
seattle, WA 98101

From: Jean Pauley <jeanlunnemann@yahoo.com>
Sent: Friday, September 28, 2012 5:21 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Jean Pauley
242 32nd Ave.
Seattle, WA 98112

From: Joanne McMillen <jojomcmillen@aol.com>
Sent: Friday, September 28, 2012 5:21 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Joanne McMillen
1066 Halsey Dr
Coupeville, WA 98239

From: Dusty Collings <dustycollings@juno.com>
Sent: Friday, September 28, 2012 5:20 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Dusty Collings
9216 NE Ruys Ln
Brainbridge Island, WA 98110

From: Gerald Burnett <gerryburnett@jps.net>
Sent: Friday, September 28, 2012 5:19 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Gerald Burnett
4336 NE 22nd ct
Renton, WA 98059

From: Cathy Seay <seaymouse@yahoo.com>
Sent: Friday, September 28, 2012 5:19 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Cathy Seay
402 Park Place
Everett, WA 98203

From: David Anderson <dca1949@yahoo.com>
Sent: Friday, September 28, 2012 5:18 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

David Anderson
16004 E. Longfellow
Spokane Valley, WA 99216

From: Adriana Faria <AdeSFaria@aol.com>
Sent: Friday, September 28, 2012 5:17 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Adriana Faria
17747 93rd Ave E
Puyallup, WA 98375

From: Douglass Merrell <dmerrell@uw.edu>
Sent: Friday, September 28, 2012 5:14 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Douglass Merrell
9500 Rainier Ave. So. #306
Seattle, WA 98118

From: Richard Reuther <upstage@charter.net>
Sent: Friday, September 28, 2012 5:13 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Richard Reuther
402 Sailfish Ct.
Richland, WA 99354

From: mimi israel <remedytiger@live.com>
Sent: Friday, September 28, 2012 5:12 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

mimi israel
9229 4th ave. nw
seattle, WA 98117

From: Robert Simpson <321gold@gmail.com>
Sent: Friday, September 28, 2012 5:09 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Robert Simpson
254 trumpeter
Friday Harbor, WA 98250

From: stephen philpin <5@5-Track.com>
Sent: Friday, September 28, 2012 5:05 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

stephen philpin
#4 Pabst Building Coronado Terrace
Seattle, WA 98117

From: Buzz Marcus <buzzmarcus@whidbey.com>
Sent: Friday, September 28, 2012 5:01 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Buzz Marcus
3569 Shady Glen Lane
Greenbank, WA 98253

From: kevin watkins <kcwatkins@comcast.net>
Sent: Friday, September 28, 2012 4:59 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

kevin watkins
1714 e south riverton
spokane, WA 99207

From: kevin orme <bi670@scn.org>
Sent: Friday, September 28, 2012 4:56 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

kevin orme
502 N 80th
seattle, WA 98103

From: Tim Allen <timaroo1@comcast.net>
Sent: Friday, September 28, 2012 4:55 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Tim Allen
1831 8th Ave
Seattle, WA 98101

From: Jeffrey Panciera <jeffiejimmie@gmail.com>
Sent: Friday, September 28, 2012 4:47 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jeffrey Panciera
3636 S. Orcas St.
Seattle, WA 98118

From: Holly Graham <hollypatrice@comcast.net>
Sent: Friday, September 28, 2012 4:46 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Holly Graham
5900 Brenner NW
Olympia, WA 98502

From: Lorraine Hartmann <lorrainehartmann@comcast.net>
Sent: Friday, September 28, 2012 4:44 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Lorraine Hartmann
10627 Durland NE
Seattle, WA 98125

From: Tim Burns <chair@30thdems.wa.gov>
Sent: Friday, September 28, 2012 4:44 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Tim Burns
32117 42nd Pl SW
Federal Way, WA 98023

From: mimi israel <remedytiger@live.com>
Sent: Friday, September 28, 2012 4:42 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

mimi israel
9229 4th ave. nw
seattle, WA 98117

From: chad stemm <meristem@clear.net>
Sent: Friday, September 28, 2012 4:41 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

chad stemm
4505 nw washington st
Vancouver, WA 98663

From: R Cottrell <hjarten@yahoo.com>
Sent: Friday, September 28, 2012 4:35 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

R Cottrell
1933 Walnut Ave sw
Seattle, WA 98116

From: Keith Milligan <kongakeith@yahoo.com>
Sent: Friday, September 28, 2012 4:33 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Keith Milligan
Post Office Box 1124
Veradale, WA 99037

From: James Roberts <jimrobj@yahoo.com>
Sent: Friday, September 28, 2012 4:33 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

James Roberts
215 S Ellis St
Palouse, WA 99161

From: Barbara DelGiudice <barbaradell1@comcast.net>
Sent: Friday, September 28, 2012 4:27 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Barbara DelGiudice
16901 32 Avenue SW
Burien, WA 98166

From: Virgene Link <linkerwan@yahoo.com>
Sent: Friday, September 28, 2012 4:26 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Thank you.

Sincerely,

Virgene Link
P.O.Box 543
Anacortes, WA 98221

From: Samantha Rich <rich_sam@comcast.net>
Sent: Friday, September 28, 2012 4:22 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Samantha Rich
13710 Burke Avenue N
Seattle, WA 98133

From: Thomas Marshall <tomasaurus@gmail.com>
Sent: Friday, September 28, 2012 4:21 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Thomas Marshall
5008 39th Ave S
Seattle, WA 98118

From: Mo Olds <marylin.olds@gmail.com>
Sent: Friday, September 28, 2012 4:11 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Mo Olds
32235 Old Hansville Rd NE
Kingston, WA 98346

From: Ellen McKinley <Ellen_davin@yahoo.com>
Sent: Friday, September 28, 2012 4:11 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Ellen McKinley
3826 80th Avenue SE
Olympia, WA 98501

From: Dennis Marceron <denmatmar@yahoo.com>
Sent: Friday, September 28, 2012 4:09 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Dennis Marceron
3720 37th Ave S
Seattle, WA 98144

From: Cherie Warner <cheriedwarner@yahoo.com>
Sent: Friday, September 28, 2012 4:08 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Cherie Warner
645 SW Mies Street
Pullman, WA 99163

From: Blair Hopkins <cbhobby@frontier.com>
Sent: Friday, September 28, 2012 4:08 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

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Sincerely,

Blair Hopkins
936 W Metaline Ave
Kennewick, WA 99336

From: Grant Low <melvingladys@yahoo.com>
Sent: Friday, September 28, 2012 3:57 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Grant Low
2110 Highland Dr
Prosser, WA 99350

From: Ben Knudsen <ontharoad@yahoo.com>
Sent: Friday, September 28, 2012 3:55 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Ben Knudsen
313 N 8th St
Mount Vernon, WA 98273

From: Pamela Engler <pengler@nwlinc.com>
Sent: Friday, September 28, 2012 3:54 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Pamela Engler
7022 - 21st Avenue NE
Seattle, WA 98115

From: James Ledford <jwledford@gmail.com>
Sent: Friday, September 28, 2012 3:52 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

James Ledford
8 West 5th Street
Cheney, WA 99004

From: Linda Moore Kurth <kurthgal@gmail.com>
Sent: Friday, September 28, 2012 3:52 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Linda Moore Kurth
4002 Seneca Drive
Mount Vernon, WA 98273

From: Rachel Whalley <rachelwhalley@gmail.com>
Sent: Friday, September 28, 2012 3:52 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Rachel Whalley
2233 NW 58th St #340
Seattle, WA 98107

From: Robert Blumenthal <rblument@comcast.net>
Sent: Friday, September 28, 2012 3:45 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Robert Blumenthal
2812 NE 62nd St.
Seattle, WA 98115

From: Phillip Collins <yeah104@juno.com>
Sent: Friday, September 28, 2012 3:45 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Phillip Collins
2332 N 128th St.
Seattle, WA 98133

From: Carol Watts <carolwatts@watts-associates.com>
Sent: Friday, September 28, 2012 3:43 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Carol Watts
6247 26th Ave NE
Seattle, WA 98115

From: Donna Hanson <dannahanson@pullman.com>
Sent: Friday, September 28, 2012 3:40 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Donna Hanson
1555 NW Leland St
Pullman, WA 99163

From: Dorothy Carpenter <sk8er@zeninternet.com>
Sent: Friday, September 28, 2012 3:39 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Dorothy Carpenter
21411 18th St E
Lake Tapps, WA 98391

From: MIKE LYMAN <mike@mikelyman.com>
Sent: Friday, September 28, 2012 3:36 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

MIKE LYMAN
3718 SAND CREEK RD
KETTLE FALLS, WA 99141

From: Paula Shafransky <pshafransky@gmail.com>
Sent: Friday, September 28, 2012 3:32 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Paula Shafransky
22461 Prairie Road
Sedro Woolley, WA 98284

From: Jon Hansen <jnesnah@gmail.com>
Sent: Friday, September 28, 2012 3:31 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jon Hansen
228 SW 186th St.
Seattle, WA 98166, WA 98166

From: Michael Murphy <rosevale@mindspring.com>
Sent: Friday, September 28, 2012 3:28 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Michael Murphy
150 NE 95TH ST APT 411
Seattle, WA 98115

From: Dan Gerhard <revdanger@live.com>
Sent: Friday, September 28, 2012 3:27 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Dan Gerhard
17058 Kokanee Court
Mt Vernon, WA 98274

From: Marie Weis <marieweis@yahoo.com>
Sent: Friday, September 28, 2012 3:27 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

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Sincerely,

Marie Weis
248 Shorewood Ct
Fox Island, WA 98333

From: Cami Cameron <dragon78923@yahoo.com>
Sent: Friday, September 28, 2012 3:26 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Cami Cameron
1521 X Street
Vancouver, WA 98661

From: Charles Haskell <haskell.charlie@gmail.com>
Sent: Friday, September 28, 2012 3:20 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Charles Haskell
3800 14th ave se apt d168
Lacey, WA 98503

From: Jacqueline Ermey <seashells23.j@gmail.com>
Sent: Friday, September 28, 2012 3:18 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jacqueline Ermey
1754 N.E. Mesford Rd. #53
Poulsbo, WA 98370

From: William C. Johnson <wjohnson1@mac.com>
Sent: Friday, September 28, 2012 3:17 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

William C. Johnson
18529 26th Ave NE
Lake Forest Park, WA 98155

From: Joan Beldin <joaniebeldin@cablespeed.com>
Sent: Friday, September 28, 2012 3:15 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

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Sincerely,

Joan Beldin
2003 Kuhn St.
Pt. Townsend, WA 98368

From: Jane metcalfe <metjc@comcast.net>
Sent: Friday, September 28, 2012 3:15 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

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Sincerely,

Jane metcalfe
811 NE 55th
Seattle, WA 98105

From: marya kutler <princessdragonfly2005@yahoo.com>
Sent: Friday, September 28, 2012 3:09 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

marya kutler
1005 cherry
pt, WA 98368

From: Julie Webb <jules.webb@yahoo.com>
Sent: Friday, September 28, 2012 3:06 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Julie Webb
16541 Redmond Way Suite 304c
Redmond, WA 98052

From: Amy Schoppert <amykingschoppert@gmail.com>
Sent: Friday, September 28, 2012 3:05 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Amy Schoppert
3320 N 30th St
Tacoma, WA 98407

From: Mary Bonnier <newparadigm@olympus.net>
Sent: Friday, September 28, 2012 3:03 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Mary Bonnier
5790 Old Mill Rd NE
Bainbridge Island, WA 98110

From: Sarah Salter <ssalter11@comcast.net>
Sent: Friday, September 28, 2012 2:59 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Sarah Salter
19432 71st Pl. W.
Lynnwood, WA 98036

From: Dean Windh <karaokeking1@gmail.com>
Sent: Friday, September 28, 2012 2:58 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Dean Windh
7506 95th Avenue SW
Lakewood, WA 98498

From: Justin Maddox <bubbamaddox@gmail.com>
Sent: Friday, September 28, 2012 2:56 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Justin Maddox
2310 122nd Dr SE
Lake Stevens, WA 98258

From: George Lawrence <sandy.george.lawrence@gmail.com>
Sent: Friday, September 28, 2012 2:54 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

I live in Bellingham, not quite within view of Puget Sound. I enjoy kayaking or taking one of the ferries, and we delight in showing off the San Juans to visiting friends and family.

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

George Lawrence
5775 Schickler Lane
Bellingham, WA 98226

From: Richard Plancich <tweet@sanet.com>
Sent: Friday, September 28, 2012 2:53 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Richard Plancich
14529 32nd Ave NE
Shoreline, WA 98155

From: Jane Kepner <janekepner@spiritone.com>
Sent: Friday, September 28, 2012 2:53 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jane Kepner
P.O.
salmonWhite, WA 98672

From: Michael von Sacher-Masoch <mvsm666@yahoo.com>
Sent: Friday, September 28, 2012 2:53 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

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Sincerely,

Michael von Sacher-Masoch
PO Box 5273
Everett, WA 98206

From: Sarah Dean <sarahgsyfan@gmail.com>
Sent: Friday, September 28, 2012 2:53 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Sarah Dean
43 Mountain Vista Ct
Port Townsend,, WA 98368

From: Preston Wheaton <preston.wheaton@comcast.net>
Sent: Friday, September 28, 2012 2:51 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Preston Wheaton
PO Box 1403
Olympia, WA 98501

From: Jack Stansfield <jacks8981@frontier.com>
Sent: Friday, September 28, 2012 2:50 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jack Stansfield
16314 62nd Ave. NW
Stanwood, WA 98292

From: lauren atkinson <laurenjatkinson@gmail.com>
Sent: Friday, September 28, 2012 2:49 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

lauren atkinson
POB 143
Greenbank, WA 98253

From: Katherine Morgan <waktbm@msn.com>
Sent: Friday, September 28, 2012 2:49 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Katherine Morgan

Port Orchard, WA 98367

From: Laurie Dils <ldils@comcast.net>
Sent: Friday, September 28, 2012 2:47 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Laurie Dils
3915 South Bay Lp NE
Olympia, WA 98516

From: Norman Crouter <normancrouter@comcast.net>
Sent: Friday, September 28, 2012 2:46 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Norman Crouter
4126 1/2 Baker Ave NW
Seattle, WA 98107

From: Donna Kirby <Mtswoods66@gmail.com>
Sent: Friday, September 28, 2012 2:44 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Donna Kirby

newburyport, MA 01950

From: Doris Davis <djdavis@peoplepc.com>
Sent: Friday, September 28, 2012 2:42 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Doris Davis
P O Box69761
Tukwila, WA 98168

From: Mary Masters <mmasters@stanfordalumni.org>
Sent: Friday, September 28, 2012 2:41 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Mary Masters
123 Falling Tree Rd.
Orcas, WA 98280

From: david robinson <dlrobinson49@rcabletv.com>
Sent: Friday, September 28, 2012 2:38 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

david robinson
pobox 151
curlew, WA 99118

From: Barbara Gross <barbara.gross48@gmail.com>
Sent: Friday, September 28, 2012 2:30 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Barbara Gross
6536 44th Avenue NE
Seattle, WA 98115

From: Peter Beckford <beckfordph@w-link.net>
Sent: Friday, September 28, 2012 2:29 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Peter Beckford
7529 Earl Ave NW
seattle, WA 98117

From: Thomas Swoffer <swofftr@q.com>
Sent: Friday, September 28, 2012 2:22 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Thomas Swoffer
32607 SE 341 St
Ravensdale, WA 98051

From: Dorothy Burgess <dotburgess@comcast.net>
Sent: Friday, September 28, 2012 2:19 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Dorothy Burgess
3303 Iowa Drive
Bellingham, WA 98229

From: Anne Pope <kulufarm@rockisland.com>
Sent: Friday, September 28, 2012 2:18 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Anne Pope
P.O. Box 156
Friday Harbor, WA 98250

From: Fred Karlson <fkarlson@frontier.com>
Sent: Friday, September 28, 2012 2:18 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Fred Karlson
5779 vista
Ferndale, WA 98248

From: Margery Barlow <margery@lewiscounty.com>
Sent: Friday, September 28, 2012 2:18 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Margery Barlow
PO Box 146
Packwood, WA 98361

From: Margery Barlow <margery@lewiscounty.com>
Sent: Friday, September 28, 2012 2:18 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

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Sincerely,

Margery Barlow
PO Box 146
Packwood, WA 98361

From: Penny Platt <Bythesea8c@comcast.net>
Sent: Friday, September 28, 2012 2:14 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Penny Platt
12954 Sunset lane
Anacortes, WA 98221

From: Dan Astro <pugetsoundsailer@yahoo.com>
Sent: Friday, September 28, 2012 2:13 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Dan Astro
po box
sea, WA 98105

From: William Harpham <harpham1@gmail.com>
Sent: Friday, September 28, 2012 2:13 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,
Wm.Harpham
1403 Portalis Ct.
Anacortes, Wa 98221

William Harpham
1403 Portalis Court
Anacortes, WA 98221

From: Valerie Anderson <sudsnsax@gmail.com>
Sent: Friday, September 28, 2012 2:12 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Valerie Anderson
14011 NE 88th St.
Vancouver, WA 98682

From: Jenny Gronholt <jgscully@yahoo.com>
Sent: Friday, September 28, 2012 2:11 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jenny Gronholt
315 N Yakima Avenue
Tacoma, WA 98403

From: Mary Guard <guard52@yahoo.com>
Sent: Friday, September 28, 2012 2:11 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Mary Guard
453 Rockledge Rd
Friday Harbor, WA 98250

From: Lorraine D. Johnson <lorraine.d.johnson@gmail.com>
Sent: Friday, September 28, 2012 2:10 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Lorraine D. Johnson
4858 S. Kenny St.
Seattle, WA 98118

From: Alec & Sandy McDougall <amcd@wavecable.com>
Sent: Friday, September 28, 2012 2:09 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Alec & Sandy McDougall
16387 Calhoun Road
Mount Vernon, WA 98273

From: James French <forrestfrench@gmail.com>
Sent: Friday, September 28, 2012 2:09 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

James French
9233 Interlake Avenue North, #301
Seattle, WA 98103

From: Ellen Dorfman <ejdorfman@comcast.net>
Sent: Friday, September 28, 2012 2:09 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Ellen Dorfman
1823 Orange ST
Olympia, WA 98501

From: Michael Gamble <Buddhaland3@gmail.com>
Sent: Friday, September 28, 2012 2:08 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Michael Gamble
85 Pike St. Apt. 207
Seattle, WA 98101

From: Gayle Janzen <cgjanzen@comcast.net>
Sent: Friday, September 28, 2012 2:07 PM
To: ECY RE Spills Rule Making
Subject: Please Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

It's really unfortunate that we continue to ship oil through our waters and scarier yet that tar sands will also be shipped. Why aren't we using less oil instead of more! We should be working on developing alternative energy sources instead of building a coal terminal at Cherry Pt!. This will only exacerbate global warming. Sometimes I think that's the govt's goal, since shipping dirty energy overseas seems to be one of their top priorities. Since we continue to go backwards when it comes to oil, WA state must be proactive and be prepared if a spill should occur. We've just got too much to lose to not be prepared. So please strengthen your oil spill cleanup measure and make sure Puget Sound will never be destroyed by an oil spill.

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Gayle Janzen
11232 Dayton Ave N
Seattle, WA 98133

From: Wendy Weger <wdywgr@yahoo.com>
Sent: Friday, September 28, 2012 2:02 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Wendy Weger
1806 Military Road
Centralia, WA 98531

From: Teresa Bryan <teresebry@gmail.com>
Sent: Friday, September 28, 2012 2:02 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Teresa Bryan
224 Louise St
Kelso, WA 98626

From: Julie Whitacre <julie@fourthcornernurseries.com>
Sent: Friday, September 28, 2012 2:01 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Julie Whitacre
659 E Laurel Rd
BELLINGHAM, WA 98226

From: Erica Meade <erica.helm@comcast.net>
Sent: Friday, September 28, 2012 1:56 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Erica Meade
5002 Erskine Way SW
Seattle, WA 98136

From: marion moat <marion.moat@frontier.com>
Sent: Friday, September 28, 2012 1:55 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

marion moat
22309 17th Pl W
Bothell, WA 98021

From: Rae Pearson <rpse@comcast.net>
Sent: Friday, September 28, 2012 1:50 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Rae Pearson
5527 36th Ave NE
Seattle, WA 98105

From: Margo Margolis <margo.margolis@gmail.com>
Sent: Friday, September 28, 2012 1:49 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Margo Margolis
4915 Samish Way #7
Bellingham, WA 98229

From: Bob Farrell <bobjpfar@yahoo.com>
Sent: Friday, September 28, 2012 1:47 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Bob Farrell
6307 California Ave SW
Seattle, WA 9813

From: Jessica Vaughan <j_vaughan16@yahoo.com>
Sent: Friday, September 28, 2012 1:46 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jessica Vaughan
1408 E Union St #612
Seattle, WA 98117

From: Rhonda Paulson <moondancer5@frontier.com>
Sent: Friday, September 28, 2012 1:44 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Rhonda Paulson
4076 Eagle Ridge Dr.
Camano Island, WA 98282

From: marilyn evenson <lowrider3111@yahoo.com>
Sent: Friday, September 28, 2012 1:43 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

marilyn evenson
16016 29th ave ct-e
tacoma, WA 98445

From: Christy Cornelsen <opal_1978@yahoo.com>
Sent: Friday, September 28, 2012 1:42 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Christy Cornelsen
212 E. Hillside Dr.
Warden, WA 98857

From: Douglas Risedorf <docrisedorf@gmail.com>
Sent: Friday, September 28, 2012 1:42 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

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Sincerely,

Douglas Risedorf
P.O. Box 984
Concrete, WA 98237

From: Michael Taylor <twigman+political@gmail.com>
Sent: Friday, September 28, 2012 1:41 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Michael Taylor
14352 Stone Ave N
Seattle, WA 98133

From: Stephanie Kalgren <Kalgrenstephanie@yahoo.com>
Sent: Friday, September 28, 2012 1:38 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Stephanie Kalgren
7728 Grant Dr.
Everett, WA 98203

From: Larry L Donelan <ldonelan@whidbey.com>
Sent: Friday, September 28, 2012 1:38 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

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Sincerely,

Larry L Donelan
950 Sandy Point Rd
Langley, WA 98260

From: Mark Wirth <Mark.Purple@Gmail.Com>
Sent: Friday, September 28, 2012 1:37 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Mark Wirth
101 Boylston Ave. E. #35
Seattle, WA 98102

From: Araceli Magallanes <chelimon31@gmail.com>
Sent: Friday, September 28, 2012 1:37 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Araceli Magallanes
3324 99th pl SE
Everett, WA 98208

From: Christopher Key <ckey2048@comcast.net>
Sent: Friday, September 28, 2012 1:33 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Christopher Key
1571 H Street #201
Bellingham, WA 98225

From: James Rodden <rodden@mac.com>
Sent: Friday, September 28, 2012 1:28 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

James Rodden
16316 80th Ave NW
Stanwood, WA 98292

From: Susan Alter <salter9835@comcast.net>
Sent: Friday, September 28, 2012 1:28 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Susan Alter
204 Nth 195th St.
Shoreline, WA 98133

From: Diana Somerville <writer@olympen.com>
Sent: Friday, September 28, 2012 1:26 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound and the Strait of Juan de Fuca experience an immense amount of ship traffic. Now, greater vessel traffic through these waterways is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America.

Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability to protect all the state's vital waterways.

Sincerely,

Diana Somerville
P.O. Box 744
Port Angeles, WA 98362

From: marie gladwish <MARIEGLADWISH@YAHOO.COM>
Sent: Friday, September 28, 2012 1:23 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

marie gladwish
644 Hillside Drive East
seattle, WA 98112

From: Ruth Neuwald Falcon <neuwald.falcon@gmail.com>
Sent: Friday, September 28, 2012 1:23 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Ruth Neuwald Falcon
13730 15th Ave NE #F203
Seattle, WA 98125

From: Leanne Mizell <serafyn12@yahoo.com>
Sent: Friday, September 28, 2012 1:23 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Leanne Mizell
381 McTurnal Rd
Shelton, WA 98584

From: James Murphy <j.murphy.7@mac.com>
Sent: Friday, September 28, 2012 1:20 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

James Murphy
1122 East Pike St, 1125
Seattle, WA 98122

From: Wally Bubelis <wbubelis@gmail.com>
Sent: Friday, September 28, 2012 1:20 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Wally Bubelis
5432 45th Ave SW
Seattle, WA 98136

From: Phoebe Underwood <phoebe@shesellsseattle.com>
Sent: Friday, September 28, 2012 1:19 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Phoebe Underwood
11807 20th SW
burien, WA 98146

From: Rachael Allert <ryuuchan1010@gmail.com>
Sent: Friday, September 28, 2012 1:19 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Rachael Allert
5652 Lancaster Road
St. John, WA 99171

From: Jacqueline Davis <davisjt@fairpoint.net>
Sent: Friday, September 28, 2012 1:16 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jacqueline Davis
533 Crusoe Lane
Ellensburg, WA 98926

From: Dan Schneider <danny83@q.com>
Sent: Friday, September 28, 2012 1:14 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Dan Schneider
814 NE 84th Street
Seattle, WA 98115

From: Clayton Jones <seajay12@clearwire.net>
Sent: Friday, September 28, 2012 1:13 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Clayton Jones
13437 Greenwood Ave N
Seattle, WA 98133

From: Gordon Hait <joeythegrey@gmail.com>
Sent: Friday, September 28, 2012 1:12 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Gordon Hait
503 Mission Dr. NE
Olympia, WA 98506

From: Judy Palmer <vjpalmer@nvinet.com>
Sent: Friday, September 28, 2012 1:11 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Judy Palmer
P. O. Box 705
Tonasket, WA 98855

From: Scott Hayes <scotthayes2110@comcast.net>
Sent: Friday, September 28, 2012 1:05 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Scott Hayes
623 NW 185th St.
Shoreline, WA 98177

From: Felicia Dale <felicia@pintndale.com>
Sent: Friday, September 28, 2012 1:03 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,
I grew up on Vashon Island and spent every day on the beach. I sailed through Puget Sound with my parents as far north as the tip of Vancouver Island. I do NOT want to have any kind of oil spill in Puget Sound!!!

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Felicia Dale
321 Ave. G
Snohomish, WA 98290

From: Bryan Nelson <brynel@fairpoint.net>
Sent: Friday, September 28, 2012 1:02 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Bryan Nelson
17018 Filbert CT SE
Yelm, WA 98597

From: Bette Nelson <bettenelson@clearwire.net>
Sent: Friday, September 28, 2012 1:02 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Bette Nelson
1219 SW 126th St #1
Burien, WA 98146

From: Michael Foster <michael.foster2@comcast.net>
Sent: Friday, September 28, 2012 1:02 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Oil companies should pay for the best equipment and effective training needed to protect Puget Sound from potential catastrophe.

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Michael Foster
3808 Carr Place N
Seattle, WA 98103

From: Mark Simpson <bravoshark44@gmail.com>
Sent: Friday, September 28, 2012 1:02 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Mark Simpson
1313 Cota Street #9
Shelton, WA 98584

From: Leah Eister-Hargrave <leaheisterhargrave@gmail.com>
Sent: Friday, September 28, 2012 1:01 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Leah Eister-Hargrave
1010 N Allen Pl
Seattle, WA 98103

From: Laura Ackerman <simahafarm@gmail.com>
Sent: Friday, September 28, 2012 1:00 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Laura Ackerman
3118 S. Windsor
Spokane, WA 99224

From: Kathryn Ellis <doug@daybreak-technology.com>
Sent: Friday, September 28, 2012 12:59 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Kathryn Ellis
5405 N Vista Grande Drive
Otis Orchards, WA 99027

From: Judith Mackenzie <JPMackenzie@comcast.net>
Sent: Friday, September 28, 2012 12:57 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Judith Mackenzie
16011 36th Avenue NE
Lake Forest Park, WA 98155

From: w Cisney <alencisney@gmail.com>
Sent: Friday, September 28, 2012 12:57 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

w Cisney
1463 Prichard Road East
Port Orchard, WA 98366

From: Ronda Snider <rondasnider@eml.cc>
Sent: Friday, September 28, 2012 12:56 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Ronda Snider
13805 Easy Street Kp N
Gig Harbor, WA 98329

From: Nita Hildenbrand <omaanna1@comcast.net>
Sent: Friday, September 28, 2012 12:55 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Nita Hildenbrand
97th Ave NE
Kirkland, WA 98034

From: stephen austin <11.14@comcast.net>
Sent: Friday, September 28, 2012 12:55 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

stephen austin
P.O.Box 7522
Spokane, WA 99207

From: Steve Hamm <steveh@olyphen.com>
Sent: Friday, September 28, 2012 12:55 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Steve Hamm
PO Box 82
Nordland, WA 98358

From: Edward Vaughn <imkleggett@frontier.com>
Sent: Friday, September 28, 2012 12:55 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

I was taught as a child to clean up my own mess. I still do it today. I spill, I clean up.
Why aren't companies held to the same simple standard?

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Edward Vaughn
10710 Evergreen Way H-106
Everett, WA 98204

From: Wendy James <wendy@jrkerr.com>
Sent: Friday, September 28, 2012 12:53 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Wendy James
520 Whitecap Rd
Bellingham, WA 98229

From: Maradel Gale <mkgale@uoregon.edu>
Sent: Friday, September 28, 2012 12:53 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

I live on the shore of the Puget Sound. I can see the tremendous amount of traffic that passes through Elliott Bay. I am also a Beach Naturalist, and I spend a lot of time on our beaches and shorelines. It is of great concern to me that we have in place a very strong response program for the inevitable oil spills that will occur in our precious waterway.

If the proposals to ship more coal and oil from ports in the Puget Sound to Asia come to fruition (and I sincerely hope they do not), nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA.

In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with an awareness that a similar situation could occur in our Puget Sound, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Maradel Gale
239 Parfitt Way SW, Unit 2A
Bainbridge Island, WA 98110

From: Delia Surprenant <liawia@gmail.com>
Sent: Friday, September 28, 2012 12:52 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Delia Surprenant
26107 11th Pl S
Des Moines, WA 98198

From: Christopher Lawrence <simba82047@comcast.net>
Sent: Friday, September 28, 2012 12:52 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Christopher Lawrence
19 East 32nd Avenue
Spokane, WA 99203

From: Glen Anderson <glen@olywa.net>
Sent: Friday, September 28, 2012 12:50 PM
To: ECY RE Spills Rule Making
Subject: STRENGTHEN oil spill protections from HB 1186

Dear Washington Department of Ecology,

An oil spill could DEVASTATE Puget Sound. The Department of Ecology is RESPONSIBLE FOR PROTECTING US from that.

I call upon DOE to UPDATE AND STRENGTHEN THE PLANS for doing this under HB 1186.

Many ships containing oil and other toxic materials -- perhaps including tar sands and coal -- flow through Puget Sound, the Strait of Juan de Fuca, the Columbia River, and other waterways.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Glen Anderson
5015 15th Ave SE
Lacey, WA 98503

From: Judith Cummings <jcummings@bridgeband.com>
Sent: Friday, September 28, 2012 12:50 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Judith Cummings
27004 14th Ave. S
Des Moines, WA 98198

From: Steven Gilbert <sgilbert@innd.org>
Sent: Friday, September 28, 2012 12:49 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Steven Gilbert
3711 47th Place NE
Seattle, WA 98105

From: virginia lindsey <virginia@whidbey.com>
Sent: Friday, September 28, 2012 12:48 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

virginia lindsey
5639 Eveningside
Freeland, WA 98249

From: Elyse Kleidon <faire@comcast.net>
Sent: Friday, September 28, 2012 12:48 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Elyse Kleidon
3109 Mapleridge Ct
Bellingham, WA 98229

From: Lorraine Marie <lmarie@basicisp.net>
Sent: Friday, September 28, 2012 12:48 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,
Lorraine Marie
Colville, WA.

Lorraine Marie
POBox 546
Colville, WA 99114

From: Robert Ball <alpineapes@comcast.net>
Sent: Friday, September 28, 2012 12:48 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Robert Ball
11213 EAST 17TH AVE
SPOKANE VALLEY, WA 99206

From: Richard Hieronymus <rhmusic_netsuke@interisland.net>
Sent: Friday, September 28, 2012 12:47 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Richard Hieronymus
167 Kilsburr Road
Friday Harbor, WA 98250

From: theresa sullivan <theresa15321@gmail.com>
Sent: Friday, September 28, 2012 12:47 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

theresa sullivan
15321 virginia lp.
poulsbo, WA 98370

From: ronnie mitchell <ronniemitchell1@comcast.net>
Sent: Friday, September 28, 2012 12:47 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

ronnie mitchell
401 w. champion st.
bellingham, WA 98225

From: gretchen mcllarky <gretchen@pillarpet.com>
Sent: Friday, September 28, 2012 12:43 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

gretchen mcllarky
PO Box 397
Fall City, WA 98024

From: William Nerin <nerin@comcast.net>
Sent: Friday, September 28, 2012 12:43 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

William Nerin
11221 35th Ave Ct NW
Gig Harbor,, WA 98332

From: Paula Rotondi <perotondi@comcast.net>
Sent: Friday, September 28, 2012 12:43 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Paula Rotondi
8217 Chehalis Rd
Blaine, WA 98230

From: Wolfgang Loera <WOLF57327@COMCAST.NET>
Sent: Friday, September 28, 2012 12:42 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Wolfgang A. Loera

Wolfgang Loera
2381 132nd Ave SE
Bellevue, WA 98005

From: Gina Pantier <gsvesey@excite.com>
Sent: Friday, September 28, 2012 12:41 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Gina Pantier
29225 MILITARY RD, I-2
Federal Way, WA 98003

From: Edward Mills <edward@kidem.org>
Sent: Friday, September 28, 2012 12:40 PM
To: ECY RE Spills Rule Making
Subject: Please update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Edward Mills
264 WL Sammamish NE
Bellevue, WA 98008

From: Joy Broach <joy@broach.net>
Sent: Friday, September 28, 2012 12:39 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Joy Broach
State Street
Bellingham, WA 98225

From: Gwenna Carlson <wesaagehya@gmail.com>
Sent: Friday, September 28, 2012 12:37 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Gwenna Carlson
654 Chestnut
Richland, WA 99352

From: John Spencer <jmspencer@gmail.com>
Sent: Friday, September 28, 2012 12:35 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

John Spencer
22620 93rd Place West
Edmonds, WA 98020

From: gina hicks <ginahixx@gmail.com>
Sent: Friday, September 28, 2012 12:34 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Traffic in Puget Sound is increasing. We need to make sure our waters stay safe.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

gina hicks
1420 E Pine St Unit E610
Seattle, WA 98122

From: Greg Smith <glassabattoir@gmail.com>
Sent: Friday, September 28, 2012 12:33 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Greg Smith
34th St NW
Gig Harbor, WA 98407

From: Robert Mueller <4dbob@comcast.net>
Sent: Friday, September 28, 2012 12:33 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Robert Mueller
7247 NE 171st LN
Kenmore, WA 98028

From: Erin Streitz <erinrae.s@gmail.com>
Sent: Friday, September 28, 2012 12:32 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Erin Streitz
3815 33rd Ave W
Seattle, WA 98199

From: Jim Unwin <jimunwin50@gmail.com>
Sent: Friday, September 28, 2012 12:31 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Jim Unwin
15024 Pacific Way
Long Beach, WA 98631

From: Kristin Fernald <kristin@rockisland.com>
Sent: Friday, September 28, 2012 12:31 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Kristin Fernald
98 Salmonberry Lane
Lopez Island, WA 98261

From: David Luxem <dave.luxem@zones.com>
Sent: Friday, September 28, 2012 12:30 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

David Luxem
1903 SW Hillcrest Rd
Seattle, WA 98166

From: Tim Upham <uphamtimothy@gmail.com>
Sent: Friday, September 28, 2012 12:30 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Tim Upham
P.O. Box 1016
Tum Tum, WA 99034

From: David Schatz <toolbarn12@comcast.net>
Sent: Friday, September 28, 2012 12:30 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

David Schatz
2208 60th St SE
Everett, WA 98203

From: Henry & Judy Koepfle <jhkoepfle@charter.net>
Sent: Friday, September 28, 2012 12:30 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Henry & Judy Koepfle
1302 Olive St.
Walla Walla, WA 99362

From: Carol Kibble <clkibble@gmail.com>
Sent: Friday, September 28, 2012 12:29 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Carol Kibble
Seattle
WA, WA 98115

From: Sherry Bupp <sherry_bupp@joimail.com>
Sent: Friday, September 28, 2012 12:29 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Sherry Bupp
PO Box 2394
Redmond, WA 98073

From: Juliette Brush-Hoover <juliette@thestranger.com>
Sent: Friday, September 28, 2012 12:28 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Juliette Brush-Hoover
1820 16th Ave Apt 106
Seattle, WA 98122

From: Fran Koehler <koehler.fran@gmail.com>
Sent: Friday, September 28, 2012 12:27 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Fran Koehler
6225 Palatine Ave N
Seattle, WA 98103

From: Norman Baker <ntbakerphd@gmail.com>
Sent: Friday, September 28, 2012 12:27 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Norman Baker
3789 Lost Mountain Road
Sequim, WA 98382

From: madelaine moir <madelainemoir@gmail.com>
Sent: Friday, September 28, 2012 12:25 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

madelaine moir
233 riverside road
Sequim, WA 98382

From: Ian MacDuff <ianmacduff@gmail.com>
Sent: Friday, September 28, 2012 12:25 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Ian MacDuff
403 23rd Ave E
Seattle, WA 98112

From: Robert Moore <jobobmoore@gmail.com>
Sent: Friday, September 28, 2012 12:24 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Robert Moore
450 NE 100th St
Seattle, WA 98125

From: Peggy Page <peggy.page@gmail.com>
Sent: Friday, September 28, 2012 12:24 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Peggy Page
24324 Miller Rd
Stanwood, WA 98292

From: Sandra Perkins <sandraperkins@seanet.com>
Sent: Friday, September 28, 2012 12:23 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Sandra Perkins
13226 42nd Avenue NE
Seattle, WA 98125

From: Scott Bishop <sbishop@oly-wa.us>
Sent: Friday, September 28, 2012 12:23 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Scott Bishop
1710 Giles NW
Olympia, WA 98502

From: Ovina Feldman <omfeldman@comcast.net>
Sent: Friday, September 28, 2012 12:23 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an enormous amount of ship traffic, and even greater vessel traffic through the Sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America.

Nine hundred additional vessel transits in the Sound may be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA.

In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the water body, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Ovina Feldman
13021 127th DR NE
Kirkland, WA 98034

From: sharon crespi <samcrespi@gmail.com>
Sent: Friday, September 28, 2012 12:23 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

sharon crespi
23824 State Route 530NE, Arlington
Arlington, WA 98223

From: Penny Derleth <penny.derleth@gmail.com>
Sent: Friday, September 28, 2012 12:22 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Penny Derleth
PO Box 421
Deer Park, WA 99006

From: Tobi Braverman <bravermant@centurylink.net>
Sent: Friday, September 28, 2012 12:22 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

I stand with Friends of the Earth in calling upon the State of Washington to update oil spills plan requirements for ships and facilities to make sure that Puget Sound is protected when an accident occurs. In addition, I support Friends of the Earth's comments to the agency about specific improvements that are needed regarding oil spill response capability in the Sound.

Sincerely,

Tobi Braverman
4343 26th Ave NE
Olympia, WA 98516

From: Micaiah Evans <micaiah.evans@gmail.com>
Sent: Friday, September 28, 2012 12:22 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Micaiah Evans
7502 1ST AVE NE
Seattle, WA 98115

From: Charlotte Sutherland <charlottea@me.com>
Sent: Friday, September 28, 2012 12:21 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Charlotte Sutherland
14835 SE 18th Place
B, WA 98007

From: Iris Moore <iamfree360@fairpoint.net>
Sent: Friday, September 28, 2012 12:21 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Iris Moore
16937 Port Orford Blvd. SE
Yelm, WA 98597

From: Scott Martin <scottdouglasmartin@comcast.net>
Sent: Friday, September 28, 2012 12:20 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Scott Martin
2611 Eastlake Ave. E #102
Seattle, WA 98102

From: Mike Cremer <cremerm@ohsu.edu>
Sent: Friday, September 28, 2012 12:20 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Mike Cremer
34510 N.E. 74th Ave.
La Center, WA 98629

From: Art Brown <mr.art.brown@gmail.com>
Sent: Friday, September 28, 2012 12:19 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Art Brown
1916 N 45th St Unit B
Seattle, WA 98103

From: Craig Garcia <craigg@portfridayharbor.org>
Sent: Friday, September 28, 2012 12:19 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Having studied the marine eco-systems of Puget Sound with NOAA and on university grants for the marine region for 40 years and having seen the destruction of the San Francisco Bay Area it is foolish not to do all that is possible to ensure our waters life !!

Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Craig Garcia
2343 San Juan Valley RD
Friday Harbor, WA 98250

From: Devin Kearns <DevinLeigh@gmail.com>
Sent: Friday, September 28, 2012 12:18 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Devin Kearns
750 N. 143rd St. #308
Seattle, WA 98133

From: Sara King <sara.king@pobox.com>
Sent: Friday, September 28, 2012 12:17 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Sara King
6647 Montevista Dr SE
Auburn, WA 98092

From: Sandra Diamond <sdiamond@unfi.com>
Sent: Friday, September 28, 2012 12:16 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Sandra Diamond
13201 StoneyRidge Lane SW
Port Orchard, WA 98367

From: Michael Osgood-Graver <themog@gmail.com>
Sent: Friday, September 28, 2012 12:15 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Michael Osgood-Graver
115th
Bellevue, WA 98004

From: Eliot Kaplan <eliot@joslan.com>
Sent: Friday, September 28, 2012 12:14 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Eliot Kaplan
8328 Fawn Crescent
Blaine, WA 98112

From: Gerry Milliken <dolphin@communitynet.org>
Sent: Friday, September 28, 2012 12:13 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Gerry Milliken
522 West Cotta Ave
Spokane, WA 99204

From: Lee Ann Greaves <leeannng1@me.com>
Sent: Friday, September 28, 2012 12:13 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Lee Ann Greaves
13810 E 41st Ave
Spokane, WA 99206

From: Fabiola Vasquez <wolfstar77@gmail.com>
Sent: Friday, September 28, 2012 12:12 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the Sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Fabiola Vasquez
401 NE 40th St 301
Seattle, WA 98105

From: Verene Martin <verene.martin@gmail.com>
Sent: Friday, September 28, 2012 12:12 PM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

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Sincerely,

Verene Martin
1616 E. Howell St. Apt. 302
Seattle, WA 98122

From: Lisa Matthes <lmattes@foe.org>
Sent: Friday, September 28, 2012 11:23 AM
To: ECY RE Spills Rule Making
Subject: Update spill plan requirements under HB 1186

Dear Washington Department of Ecology,

Every day the Puget Sound experiences an immense amount of ship traffic. Now, greater vessel traffic through the sound is likely as companies seek to transport tar sands oil and coal to Asia from interior sections of North America. Nine hundred additional vessel transits in the sound are to be expected from just one proposed project -- the Gateway Pacific Terminal at Cherry Point, WA. In light of lessons learned from the devastating BP oil spill in the Gulf of Mexico and with a watchful eye to the possibility of increased shipments of dirty fuels through the waterbody, all efforts should be made to equip first responders with the tools they need to safely contain spills and to put proper vessel safeguards into place.

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Sincerely,

Lisa Matthes
1100 15th St NW
Washington, DC 20005