



Response to Comments:

2014 Draft Petition to Designate the Waters of Puget Sound as a No Discharge Zone



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Response to Comments:

**2014 Draft Petition to Designate
the Waters of Puget Sound as a
No Discharge Zone**

by

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Table of Contents

	<u>Page</u>
Introduction.....	iii
Comments Submitted.....	1
Commenter Index.....	5
Response to Comments.....	12
Response to form letters.....	12
Response to Form Letter A.....	12
Response to Form Letter B.....	12
Response to Form Letter C.....	14
Support for the Draft Petition and NDZ (73,418 total combined comments)	15
RTC #1 Support for the Draft Petition/Puget Sound-wide NDZ	15
RTC #2 NDZ has not yet been established in the Puget Sound	15
RTC #3 NDZ Reasonable and called for.....	15
RTC #4 Pollution/vessel discharges.....	16
Vessel Sewage Compared to other Pollution (25,691 total combined comments).....	16
RTC #5 Addressing all pollution sources including vessel sewage	16
RTC #6 Vessel sewage small in comparison	17
Public Health Protection (22,975 total combined comments).....	18
RTC #7 Vessel sewage a public health concern.....	18
RTC #8 Shellfish protection	18
Marine Life Protection (22,890 total combined comments)	18
RTC #9 Marine life protection	18
Sewage Effects and Studies (1,038 total combined comments).....	19
RTC #10 Studies on sewage effects insufficient.....	19
RTC #11 Negative effect of vessel sewage in water.....	20
RTC #12 Sewage effects - marine sanitation devices and standards	21
RTC #13 Vessel sewage effect minimal	21
Hydrology and Geography of Puget Sound (580 total combined comments).....	22
RTC #14 Geographic extent of NDZ	22
RTC #15 Unique hydrology, poor flushing, water movement = sewage discharge risk	23
RTC #16 Victoria discharges	23
RTC #17 Puget Sound - great flushing and deep	23
Against the Draft Petition and NDZ (503 total combined comments)	24
RTC #18 Against the Draft Petition – keep status quo	24
Enforcement (323 total combined comments).....	24
RTC #19 Concerns with enforcement approach	24
RTC #20 Need for enforcement and education with NDZ.....	25
Marine Sanitation Devices (286 total combined comments)	26
RTC #21 Marine sanitation devices	26
Pumpouts (181 total combined comments)	26
RTC #22 Pumpouts – not available.....	26

RTC #23 Pumpouts - available.....	27
Retrofits and Operational Costs for Vessels (180 total combined comments)	28
RTC #24 Phase-in time	28
RTC #25 For recreational vessels - cost prohibitive	28
RTC #26 For commercial vessels - cost prohibitive	29
RTC #27 Not cost prohibitive	29
Economy (125 total combined comments).....	30
RTC #28 Puget Sound economic viability	30
RTC #29 NDZ economic impact.....	30
Recreational Usage Protection (121 total combined comments).....	31
RTC #30 Recreational usage protection.....	31
Vessel Sizes and Types (91 total combined comments)	31
RTC #31 Vessel sizes and types.....	31
Cruise Ships, Advanced Wastewater Treatment Systems and the Vessel General Permit (12 total combined comments)	31
RTC #32 Cruise Ships, Advanced Wastewater Treatment Systems (AWTS) and the Vessel General Permit (VGP).....	31
NDZ Process (5 total combined comments).....	33
RTC #33 NDZ process	33

Tables

Table 1. Summary of comments by category.....	1
Table 2. Summary of form letters.....	1
Table 3. Commenter index.....	5

Introduction

The Washington State Department of Ecology (Ecology) conducted a public comment period on its Draft Petition to Designate the Waters of Puget Sound as a No Discharge Zone (Draft Petition). This document is Ecology's Response to Comments (RTC).

A No Discharge Zone (NDZ) is a designated body of water where the discharge of sewage (blackwater/toilet waste) from boats, whether treated or not, is prohibited. There are currently 90 NDZs in 26 states. Washington State has no designated NDZs. Consistent with the plan to restore Puget Sound, Ecology is considering a NDZ for all or parts of Puget Sound.

A state can petition the U.S. Environmental Protection Agency (EPA) to establish a NDZ under the federal Clean Water Act. If accepted by EPA, a NDZ proposal is then published in the Federal Register for formal comment by EPA prior to a final determination.

Ecology held a 60-day public comment period (February 19, 2014 – April 21, 2014) on the Draft Petition following a detailed two-year evaluation process. Ecology's process included research about Puget Sound vessels, pumpout facilities, the conditions of Puget Sound, marine sanitation device (MSD) performance and boater surveys. Ecology studied other states with NDZs. Ecology conducted an evaluation of implementation, and did a great deal of outreach to stakeholders.

The Draft Petition and the RTC are not required elements of the process for petitioning the EPA for a NDZ designation. During Ecology's outreach efforts, it was requested by a small commercial sector that the public be allowed to provide input on the Draft Petition. Ecology honored this request and conducted the comment period to provide for additional stakeholder input and to allow for an open transparent process regarding the NDZ evaluation. As of the date of the issuance of the RTC, Ecology has not submitted a final petition to EPA.

The Draft Petition proposed that a NDZ apply to all recreational and commercial vessels in Washington's inland marine waters, Lake Washington and the water bodies that connect the lake to Puget Sound.

The purpose of the RTC is to characterize, summarize, and provide generalized responses to comments and is not meant to be a direct response for each individual commenter. Ecology identified individual concepts in each e-mail, and is providing a generalized response to similar subjects. Ecology will consider the comments received during the comment period for any potential final petition to EPA, as appropriate.

To find more information about a NDZ for Puget Sound, please visit Ecology's website: www.ecy.wa.gov/programs/wq/nonpoint/CleanBoating/nodischargezone.html.

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Comments Submitted

Ecology received 26,016 e-mails or letters during the public comment period. Of those, 25,150 were form letters and 866 were individualized letters. The majority of the individualized letters came from individuals and some from groups or associations such as environmental organizations, vessel associations, companies and yacht clubs, state and local government, and other interested groups. 25,466 e-mails or letters expressed support for the Draft Petition, 524 expressed opposition or concern, and 26 were mixed. Table 1 provides a summary of the types of comment e-mails/letters submitted as categorized by general response of support for the Draft Petition or those conveying concerns with the Draft Petition.

Table 1. Summary of comments by category

Letter Type	Number of Letters
Form Letter in Support	24,971
Form Letter with Concerns	179
Individualized or Group/Association in Support	495
Individualized or Group/Association with Concerns	345
Mixed Support/Concern	26

There were three different types of form letters (Form Letter “A”, “B”, and “C”) submitted. Ecology received 25,150 form letters which included the following concepts. Table 2 summarizes the form letters received.

Table 2. Summary of form letters

Form Letter ID	Language from form letter	Number of Form Letters Submitted
A	<p>“As a resident of Washington State and someone who cares about clean water and the health of our ecosystem, I am writing to express support for a No Discharge Zone for Puget Sound, Lake Washington and the associated waters.</p> <p>This has been a long time coming! We need to address all sources of pollution to Puget Sound so that we can restore its health.</p> <p>Please do not delay and send the petition to EPA as soon as possible.”</p>	2,301

Form Letter ID	Language from form letter	Number of Form Letters Submitted
B	<p>“Thank you for the opportunity to respond to DOE's draft petition to EPA proposing a Puget Sound No Discharge Zone.</p> <p>Along with many recreational boaters, I oppose DOE's petition to the EPA to make Puget Sound a No Discharge Zone. Quite simply, it is a misguided solution to water quality issues in Puget Sound. DOE's petition is lacking in science to document recreational boaters as anything more than a minuscule part of a much larger problem.</p> <p>The discharge of raw sewage is already prohibited. Thus, DOE is targeting the recreational boat owners who have made the substantial investment to make use of USCG-approved Type 1 & 2 Marine Sanitation Devices (MSDs). The petition proposes that the only acceptable method of disposal of treated sewage is holding tanks and pump-outs.</p> <p>Type 1 & 2 MSDs should be encouraged, not outlawed. Type 1 & 2 MSDs are reliable and federally approved. If not outlawed, Type 1 & 2 MSD technology will continue to improve in the future and will become more dependable and less expensive. Thus, it can be argued that an NDZ may actually increase the potential of pollution in the future as it will eliminate treatment options for recreational boaters.</p> <p>Neither the 75-page draft petition nor a report by DOE consultants, Herrera Environmental Consultants, presents a significant body of scientific evidence or data to show that an NDZ is necessary to address any perceived "problem" caused by recreational boaters, or that it would lead to measurable improvements. David Dicks, the first Director of the Puget Sound Partnership, has stated publicly that "boaters are not the problem".</p> <p>Further, Seattle and King County recently agreed to pay fines of \$750 million and invest \$1.46 billion in improvements as they were dumping 1.1 billion gallons of raw sewage annually into Puget Sound from 2006 - 2010. In 2013, Kirkland had a 68,000 gallon sewage spill. Everett had a 40,000 gallon sewage spill in July. DOE fined King County \$22,000 for 11 waste water spills from a pipeline in 2012-2013.</p> <p>Clearly the proposed NDZ does not address the major sources of pollution in Puget Sound-untreated storm water runoff, municipal spills, and failing septic systems.</p> <p>The petition also fails to meet the Clean Water Act requirement for demonstrating that an NDZ will enhance protection of Puget Sound over and above that currently provided by Federal Law. The NDZ will waste valuable public resources as marine law enforcement will be out on the water stopping, boarding, and inspecting recreational boats to check for compliance.</p> <p>Understand that boaters want a clean Puget Sound. Boaters already protect and are stewards of Puget Sound. We support efforts to reduce pollution from scientifically proven sources such as storm water runoff and failing septic systems.</p> <p>5.6 million gallons were pumped from boat holding tanks in 2013, up from 4 million gallons in 2012, and these numbers don't include mobile pump out services. Clearly recreational boaters care about Puget Sound. Education works. Treatment technology works. An NDZ will not. Listen to the recreational boaters and withdraw this ill-advised and counter-productive petition.”</p>	179

Form Letter ID	Language from form letter	Number of Form Letters Submitted
C	<p>“As a citizen concerned with the recovery of Puget Sound, I am writing to strongly support the Washington State Department of Ecology’s proposal to establish a ship sewage No Discharge Zone for all of Puget Sound, from Olympia to the border with Canada. I support establishing a No Discharge Zone because of the critical protection it will provide to the people, marine creatures, and water quality of Puget Sound. No Discharge Zones have become more common across the United States and, to date, the Northwest is the only region in the nation that has not designated any No Discharge Zones. Puget Sound is a national treasure and it needs this type of protection.</p> <p>Puget Sound and its tributaries are threatened by many sources of pollution and while no one source is solely responsible for the Sound’s water quality problems, all of the sources add up. It is time to address ship pollution in order to help Puget Sound recover the health of its ecosystem.</p> <p>Please implement a No Discharge Zone for Puget Sound in order to join California, the Florida Keys, most of the Great Lakes and the eastern seaboard in protecting the people, marine waters and entire ecosystem of Puget Sound from ship sewage.”</p>	22,670

DOE = Department of Ecology

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Commenter Index

Ecology received numerous e-mails or letters with multiple concepts. To better organize and structure our responses to the concepts, Ecology has identified, grouped, and assigned an identification number to each concept. Table 3 below is the Commenter Index that lists the Concept ID numbers for each concept, a brief paraphrased description of the concept, and the number of times each concept was submitted as a comment. The concepts have been organized by greatest number of comments received to the least number of comments received.

Table 3. Commenter index

Concept ID Number	Brief Description of Concept	Number of Comments with Concept Submitted
C1	Need to address all sources of pollution/ no matter how small/vessel sewage is part of big picture of pollution prevention	25,303
C2	Support NDZ/Draft Petition	25,066
C3	A NDZ is better late than never/ surprised NDZ not already done/ NDZs completed in other states	22,866
C4	Need healthy water for marine life/loss of marine life, need to address all pollution sources	22,864
C5	Waters need protection/legacy/future generations	22,838
C6	Public health concern - sewage	22,743
C7	A NDZ has been a long time coming	2,464
C8	Take targeted approach instead of whole Puget Sound for NDZ	395
C9	Sewage pollution from other sources/amount from vessels is small	310
C10	Already illegal/enforce existing laws/current regulations sufficient	298
C11	More study needed/no proof of effect	292
C12	Should be able to use MSD treatment/incentive/recreational boats have made steady improvements in sewage disposal	282
C13	Concerns with boarding/inspection/fines concerns	210
C14	Against NDZ/oppose NDZ	194
C15	There has been an increase in pumped out sewage without NDZ	192

Concept ID Number	Brief Description of Concept	Number of Comments with Concept Submitted
C16	State hasn't demonstrated that enhanced protection over and above Federal law is needed. This demonstration cannot logically be made without numerical analysis.	186
C17	Shellfish protection needed/vessels can be directly over shellfish and discharge /sensitive waters	122
C18	Need healthy water for recreation/swimming	121
C19	Toxins/algae blooms/ deterioration	121
C20	Sad news laws needed for behavior change/NDZ law reasonable/provides clarity	115
C21	Concerns over virus and pathogen discharges from vessels	108
C22	Support time for retrofits/commercial pumpouts	100
C23	Puget Sound has unique drainage/hydrology	75
C24	Not enough recreational pumpout stations/focus on pumpouts	73
C25	Sewage plant problems are a bigger issue than vessels	50
C26	Military vessels -no mention of restrictions on military vessels, should be treated the same	44
C27	Blackwater exacerbates conditions/it is harmful	44
C28	Local industries/tourism/life depend on clean water	43
C29	Plenty of pumpouts/easy to find and use	39
C30	Need strict enforcement/ deterrence/education/ability to enforce	36
C31	NDZ will harm boating industry/economy	35
C32	Good idea for commercial or larger vessels/reasonable action with such large vessels	34
C33	MSD treatment not sufficient, studies/experience show, not operated/maintained properly	34
C34	Puget Sound is a resource for economy and wildlife	28
C35	Water quality has improved/Ecology should not back peddle/ NDZ provides Puget Sound with an opportunity to recover	28
C36	Should be compelled to protect	27
C37	Higher concentrations of pollutants from vessel sewage in marinas, shallow bays	25
C38	Funds better spent on other pollution sources	25
C39	No one is checking/monitoring "treated" vessel sewage	24
C40	Cruise MOU only voluntary, need enforcement mechanism	23
C41	Orcas are struggling	22

Concept ID Number	Brief Description of Concept	Number of Comments with Concept Submitted
C42	PSP Action Agenda/shellfish strategic initiative calls for Ecology to conduct the evaluation and submit a petition for NDZ to EPA (minimize pathogens, recover shellfish growing areas)	21
C43	Targeted instead of blanket Puget Sound not protective enough/dumping zones	20
C44	Enforcement of targeted approach would be difficult	20
C45	Unnecessary cost/time to boaters	20
C46	Pumpouts not working or accessible	20
C47	Don't leave trash on land or water so why should vessels	19
C48	USCG MSD standards haven't been updated in more than 30 yrs/only 2 pollutants covered	19
C49	Victoria dumps in the Strait/ coordinate with Canada	19
C50	Better to prevent than mitigate	18
C51	Areas should be expanded to Strait or further	18
C52	Discharges are gross	17
C53	Puget Sound doesn't quickly disperse pollutants to ocean/poor flushing	17
C54	NDZ would be hard to enforce, not practical	16
C55	Commercial retrofit and operational cost estimates low/cost impact	16
C56	Not expensive to pumpout/ no large investments needed	15
C57	Add even more funding for pumpouts/assure operational	15
C58	Have observed dumping in marinas/easy to not see dumping occur	14
C59	Restrictions on holding tanks would be cumbersome/older classic boats difficult to add	14
C60	NDZ should be for all size vessels	13
C61	Greater education	13
C62	Does not address commercial pumpout availability	12
C63	Entrance to Sound gets great flushing/north Admiralty gets great flushing	11
C64	Local fisheries viability/fisheries closures impact economy	10
C65	Washington State's land-side treatment is better than Victoria/should pressure Victoria for better treatment	10
C66	Surface water movement moves around pollutants, but doesn't flush out well	7
C67	Too much government	7

Concept ID Number	Brief Description of Concept	Number of Comments with Concept Submitted
C68	Holding tanks too small	7
C69	Data only shows problems in urban areas	7
C70	Cost estimate for recreational retrofit is too low	6
C71	No economic/environmental impact study	6
C72	Commercial retrofits might not be feasible, stability challenges, etc.	5
C73	Protection of aquatic reserves needed - NDZ would have a direct positive impact	4
C74	Human waste and marine life waste natural to ecology	4
C75	No place in Puget Sound greater than 3 miles	4
C76	Treated effluent discharges have cumulative effect	3
C77	Regulate treatment of MSDs/require monitoring	3
C78	Need to make all pump stations free	3
C79	Consider California NDZ conditions for commercial holding	3
C80	Not concerned with added enforcement/boating rights	2
C81	Other states haven't measured success of NDZs/no metrics for success	2
C82	Would create legal battles related to municipal discharges	2
C83	NDZ would lead to greater confusion/recognize fed regulations and USCG/MSDs satisfy federal laws but not state, so no problem	2
C84	Recreational survey inadequate	2
C85	Shellfish industry big employer/economic viability	2
C86	CWA doesn't allow phase-ins	2
C87	Phase in time not sufficient	2
C88	The Certification of Need needs to be subject to PCHB review or rulemaking	2
C89	AWTS dilution /mixing zone not considered	2
C90	3 yrs to comply too long	1
C91	Invested money to remove poor treatment systems and put in holding tanks	1
C92	Need to change attitude that dumping is okay	1
C93	Should use tracer dye to deter/confirm no dumping/sticker program	1
C94	Require holding for vessel registration	1
C95	A positive step for one type of pollution shouldn't mean continuing another type of pollution	1

Concept ID Number	Brief Description of Concept	Number of Comments with Concept Submitted
C96	Commercial vessels show lack of detail on cost burden for retrofits/operational financial impacts	1
C97	Commercial vessels should welcome studies on MSD/boarding to do so	1
C98	Would need to keep discharges far away from shellfish areas for protection, studies say	1
C99	Need to have Canada do the same, then effective	1
C100	Polluting is not a right	1
C101	Controlling one's sewage is the cost of doing business	1
C102	Technology tools exist to help find pumpouts	1
C103	Public education programs to reduce fecal from boats hasn't been enough	1
C104	Need to be >3 miles from shellfish beds to protect public health/study	1
C105	Expect US Dept of Commerce to challenge impacts to international commerce	1
C106	If problem with MSDs change federal requirements/USCG	1
C107	Petition developed in meetings not open to the public	1
C108	Receiving sewage systems can't handle pumped out waste	1
C109	Pumpouts too busy	1
C110	Sewage goes to Puget Sound anyways	1
C111	Pumpouts dirty, unpleasant to use	1
C112	Puget Sound deep so okay for sewage disposal	1
C113	Allow vessel discharges near WWTP outfalls	1
C114	Would put small passenger vessels in tougher/costlier USCG subchapter	1
C115	Finalizing a petition not part of current PSP Action Agenda	1
C116	NDZs haven't worked in other states	1
C117	USCG standards don't require nutrients, DO to be addressed because so few vessels use Type II's compared to other pollution sources	1
C118	Need to show where all pump out waste is treated	1
C119	Cruise MOU effective/based on allowed discharges w/conditions MOU &VGP combined = addressed	1
C120	Doesn't consider natural occurring effects to low DO	1

Concept ID Number	Brief Description of Concept	Number of Comments with Concept Submitted
C121	VGPs 401 certification operates under permit would not cause violation of WQ standards, should exclude AWTS	1
C122	Ecology chose expedience over precision in choosing all vs. precisely choosing specific areas	1
C123	Cruise ship effluent data out of date/misrepresentative/ consider effect of discharging underway	1
C124	Cruise ships' AWTS superior compared to on-land municipals in Alaska, comparison not evaluated	1
C125	Should use 312f4 and be able to choose vessel categories and distinguish AWTS	1
C126	AWTS combined blackwater & graywater effluent quality same as POTWs = AKART	1
C127	May cause significant changes to itineraries, increase in fuel consumption resulting in increased CO2 emissions ~\$500,000 (large cruise ships)	1
C128	AWTS not differentiated from traditional MSD type II	1
C129	Only certain vessels can be directly over sensitive environmental resources (not cruise ships)	1
C130	MOU precautions to address risk of malfunction of AWTS shows that an outright ban is unnecessary	1
C131	Bacteria impairments mostly near-shore phenomenon	1
C132	Discussion about nutrients more alarmist than should be/trivial impact	1
C133	Lacks flexibility for emerging technology/prototypes	1

Acronyms used in table:

AKART = All Known and Reasonable Technology

AWTS = Advanced Wastewater Treatment Systems

CO2 = carbon dioxide

CWA = Clean Water Act

DO= dissolved oxygen

Draft Petition = Draft Petition to Designate the Waters of Puget Sound as a No Discharge Zone

EPA = Environmental Protection Agency

MOU = Memorandum of Understanding, Cruise Operations in Washington State

MSD = marine sanitation device

NDZ = No Discharge Zone

PCHB = Pollution Control Hearings Board

POTW = publically owned treatment works
PSP = Puget Sound Partnership
USCG = United States Coast Guard
VGP = Vessel General Permit
WQ = water quality
WWTP = Wastewater Treatment Plant

Response to Comments

The purpose of the RTC is to characterize, summarize, and provide generalized responses to comments and is not meant to be a direct response for each individual commenter. Ecology identified individual concepts in each e-mail, and is providing a generalized response to similar concepts. Multiple concepts have been grouped together based on similar subject matter. The numbered RTC are listed in order of total comments received for each subject matter (i.e. combined concept identification numbers) from greatest number of combined comments to smallest number of combined comments received. Ecology will consider all appropriate comments prior to any final petition. Additionally, there were some minor comments directed to the language in the Draft Petition that will be taken into consideration prior to any final petition.

Response to form letters

Response to Form Letter A

C1, C2, C7

Summary of range of comments:

- Need to address all sources of pollution to Puget Sound so that we can restore its health.
- Support for a NDZ for Puget Sound, Lake Washington and the associated waters.
- This has been a long time coming, please do not delay and send the petition to EPA as soon as possible.

Ecology's response to range of comments:

As noted above, the mission of Ecology's Water Quality Program is to protect and restore Washington's waters. In accordance with this mission, Ecology undertook the NDZ evaluation process. Ecology agrees that all sources of water pollution need to be addressed, especially easily preventable sources.

The Draft Petition previously submitted to EPA includes a NDZ for all of Puget Sound. A NDZ has not been established in the Puget Sound. There are currently 90 NDZs in 26 states, none in Washington State to date.

Response to Form Letter B

C9, C10, C11, C12, C13, C14, C15, C16

Summary of range of comments:

- NDZ does not address the major sources of pollution in Puget Sound-untreated storm water runoff, municipal spills, and failing septic systems.
- Discharge of raw sewage already prohibited.
- Petition lacking in science to document recreational boaters anything more than minuscule part of much larger problem.

- More study needed; no scientific evidence or data to show NDZ necessary to address perceived problem by recreational boaters or NDZ would lead to improvement.
- Recreational vessels made substantial investment in Type I and Type II MSD treatment systems; are reliable and should be encouraged not outlawed.
- Waste of valuable resources for boardings and inspections of recreational boats for compliance.
- Oppose Ecology's petition to EPA for Puget Sound NDZ; misguided solution.
- There has been an increase in pumped out sewage without NDZ.
- State hasn't demonstrated that enhanced protection over and above Federal law is needed; need numerical analysis.
- Boaters want a clean Puget Sound. Boaters already protect and are stewards of Puget Sound. Education works. Treatment technology works. An NDZ will not.

Ecology's response to range of comments:

While vessel sewage is small in volume compared to other sources of pollution, treatment MSDs typically do not meet standards for water quality and public health protection. Further, unlike stationary pollution sources such as outfalls associated with wastewater treatment plants (WWTP), vessels move around, creating the risk from discharges directly to or near sensitive areas within the water bodies. Other pollution prevention measures occurring include such actions as repairing/replacing failing septic tanks, addressing combined sewer overflow (CSO) discharges, and stormwater pollution prevention.

Under current federal law, boats are prohibited from discharging raw sewage within 3 miles from shore but can discharge treated sewage anywhere in Puget Sound. The Type I and Type II MSDs typically don't meet our water quality standards for fecal coliform bacteria and other pollutants and can cause pollution that can be a problem of particular concern over or near sensitive water bodies. Discharges of untreated vessel sewage are already illegal within 3 miles from shore, but beyond 3 miles, untreated sewage can be discharged and there are areas in Puget Sound beyond 3 miles.

Ecology's NDZ website includes links to the various reports that were done prior to and including the Draft Petition. These reports cite a number of studies and include information on both the current conditions of the Puget Sound and the quality of effluent coming out of the various MSDs.

A NDZ does not eliminate the option to have a treatment system on board for use in non NDZ areas; it can be installed along with holding capacity for NDZ areas if there is room on board. The MSD treatment technology hasn't changed significantly in the last 30 years since the MSD standards were set, so while treatment technology can continue to advance (including emerging and prototype technology), it hasn't been shown to be readily available to meet Washington State's water quality standards. Any possible advances in treatment technology do not guarantee success as the treatment systems need to be properly operated and maintained over time. Ecology's experience has shown that MSD maintenance is typically given a very low priority compared to other vessel tasks.

A review of implementation of NDZs in other states showed that a focus on outreach and education with the ability to enforce works best, which would be Ecology's strategy as well. It is not Ecology's intent to create multiple layers of law enforcement, but rather use the existing framework such as USCG or WA State Fish & Wildlife to conduct blackwater inspections. The current authority for enforcing the existing laws lies with USCG. A NDZ would allow for localized authority for regulating vessel sewage discharges.

The Clean Water Act (CWA) allows for the establishment of areas in which the discharge of sewage from vessels is not allowed. This has been done in 90 locations within 26 different states. A GAO report cites that "a number of EPA, state, and local officials believe that water quality and environmental stewardship have increased after designation of these zones."

While there has been an increase in the volume of sewage pumped out at pump stations, there is still concern over raw discharges occurring and the discharges taking place from MSDs, especially to the unique waters of the Puget Sound. Ecology has provided a demonstration of the enhanced protection need per the CWA requirements in Section 4 of the Draft Petition. The data provided in the Draft Petition and supporting documents show impaired water bodies near-shore, but it also shows and describes sensitive water bodies such as shellfish growing areas, marine protected areas, aquatic reserves, forage fish spawning areas, and kelp and eelgrass areas throughout the Puget Sound and describes the complex hydrology of the Puget Sound. Ecology continues to evaluate the complexities of water movement and how vessel discharges effect natural resources.

Response to Form Letter C

C1, C2, C7

Summary of range of comments:

- Puget Sound and tributaries threatened by many pollution sources; Need to address all sources of pollution, including vessel sewage; while no one source is solely responsible for the Sound's water quality problems, all of the sources add up.
- Strongly support Ecology's proposal to establish a vessel sewage NDZ for all of Puget Sound, from Olympia to the border with Canada; NDZ will provide critical protection to people, marine creatures, and water quality.
- NDZs have become more common, Northwest only region without a NDZ.
- Puget Sound is a national treasure that needs this type of protection.

Ecology's response to range of comments:

The mission of Ecology's Water Quality Program is to protect and restore Washington's waters. In accordance with this mission, Ecology undertook the NDZ evaluation process. Ecology agrees that all sources of water pollution need to be addressed, and especially easily preventable sources. Ecology is also addressing other pollution sources including such actions as repairing/replacing failing septic tanks, addressing CSO discharges, and stormwater pollution prevention.

The Draft Petition previously submitted to EPA includes a NDZ for all of Puget Sound. A NDZ has not been established in the Puget Sound. There are currently 90 NDZs in 26 states, none in Washington State to date.

Support for the Draft Petition and NDZ (73,418 total combined comments)

RTC #1 Support for the Draft Petition/Puget Sound-wide NDZ

C2, C5, C36

Summary of range of comments:

- Support for an NDZ for Puget Sound, Lake Washington, and the associated waters; strongly support Ecology's proposal to establish a vessel sewage NDZ for all of Puget Sound, from Olympia to the border with Canada.
- Should be compelled to protect what makes Washington such a special place.
- Waters need protection, national treasure, restore health of Puget Sound.
- Leave a legacy of protection for future generations.

Ecology's response to range of comments:

The Draft Petition previously submitted to EPA includes a NDZ for all of Puget Sound. The mission of Ecology's Water Quality Program is to protect and restore Washington's waters. In accordance with this mission, Ecology undertook the NDZ evaluation process.

RTC #2 NDZ has not yet been established in the Puget Sound

C3, C7

Summary of range of comments:

- A NDZ has been a long time coming.
- Surprised a NDZ hasn't already been done, not already state policy.
- Better late than never.
- This has been done in so many other states that have paved the way and has worked in other States, it should be done here.

Ecology's response to range of comments:

A NDZ has not been established in the Puget Sound. There are currently 90 NDZs in 26 states, none in Washington State to date.

RTC #3 NDZ Reasonable and called for

C20, C42

Summary of range of comments

- Sad news that NDZ laws needed for behavior change of vessel sewage discharges.

- NDZ law reasonable.
- Provides clarity to vessel operators on discharge requirements. Establishing a NDZ would clarify the confusion that now already exists, in addition to prohibiting discharges that violate water quality standards.
- PSP Action Agenda and Shellfish Strategic Initiative calls for Ecology to conduct the evaluation and submit a petition for NDZ to EPA, key strategy.

Ecology's response to range of comments:

Ecology is conducting the NDZ evaluation process for many reasons including the directive in the Puget Sound Partnership's (PSP) Action Agenda and the Shellfish Strategic Initiative.

RTC #4 Pollution/vessel discharges

C50, C92, C95, C100

Summary of range of comments:

- Better to prevent than mitigate.
- Need to change attitude that dumping is okay.
- A positive step for one type of pollution prevention shouldn't mean continuing another type of pollution.
- Polluting is not a right.

Ecology's response to range of comments:

Ecology concurs with the statement that it is better to prevent pollution than to mitigate for it after it has occurred. Although vessel sewage is small in volume compared to other pollution sources, a NDZ would be an important pollution prevention measure.

Vessel Sewage Compared to other Pollution (25,691 total combined comments)

RTC #5 Addressing all pollution sources including vessel sewage

C1

Summary of range of comments:

- Need to address all sources of pollution, including vessel sewage; while no one source is solely responsible for the Sound's water quality problems, all of the sources add up.
- Vessel sewage is part of the bigger picture of pollution prevention.

Ecology's response to range of comments:

As noted above, the mission of Ecology's Water Quality Program is to protect and restore Washington's waters. Ecology agrees that all sources of water pollution need to be addressed, especially easily preventable sources.

RTC #6 Vessel sewage small in comparison

C9, C25, C38, C82, C117

Summary of range of comments:

- Vessel sewage pollution is small compared to other sources of pollution (such as sewage plants, stormwater, etc).
- Sewage treatment plant problems are the bigger issue (CSO discharges, plant overflows, volume from sewage plants, etc).
- Funds are better spent on other pollution sources.
- Seattle and King County recently agreed to pay fines of \$750 million and invest \$1.46 billion in improvements as they were dumping 1.1 billion gallons of raw sewage annually into Puget Sound from 2006 – 2010, Kirkland had a 68,000 gallon sewage spill, Everett had a 40,000 gallon sewage spill in July, and Ecology fined King County \$22,000 for 11 waste water spills from a pipeline in 2012-2013. The proposed NDZ does not address the major sources of pollution in Puget Sound-untreated storm water runoff, municipal spills, and failing septic systems.
- NDZ would create legal battles related to municipal discharges.
- Vessel discharge standards (USCG) don't require other parameters besides fecal and solids because so few Type II MSDs compared to other pollution sources.

Ecology's response to range of comments:

While vessel sewage is small in volume compared to other sources of pollution, treatment MSDs typically do not meet standards for water quality and public health protection. Further, unlike stationary pollution sources such as outfalls associated with WWTPs, vessels move around, creating the risk from discharges directly to or near sensitive areas within the water bodies. Other pollution prevention measures occurring include such actions as repairing/replacing failing septic tanks, addressing CSO discharges, and stormwater pollution prevention. Ecology, along with EPA for CSO has taken steps with a Federal Consent Decree to require both King County and the City of Seattle to complete CSO reduction projects to bring the entities into compliance with the CWA. Ecology continues to address sewage spills with enforcement actions and require various projects to prevent reoccurrence. Ecology is unaware of any legal battles that a NDZ would create from municipal discharges. The CWA requirements for vessel sewage allow for states to petition EPA for a NDZ and the CWA has separate requirements for the permitting of municipal discharges. Ecology agrees that the current MSD standards are limited on which parameters are addressed by only having criteria for fecal coliform and solids, but disagree that the reason for that is that the volume is smaller than other pollution sources.

Public Health Protection (22,975 total combined comments)

RTC #7 Vessel sewage a public health concern

C6, C21

Summary of range of comments:

- Public health concern - sewage discharged from vessels threatens public health, contact recreation and shellfish harvesting, particularly in areas where boats go.
- Virus discharges concerning/pathogens - even treated vessel sewage discharges can contain high concentrations of pathogens; fishery closures in Puget Sound due to water quality issues, such as fecal coliform and pathogen pollution.

Ecology's response to range of comments:

Ecology is also concerned about the effects of vessels' raw and poorly treated discharges on public health, including contaminated shellfish consumption.

RTC #8 Shellfish protection

C17, C98, C104

Summary of range of comments:

- Shellfish protection needed, prevent contamination, huge local industry.
- Variety of pollutants such as pathogens, toxics, cleaners and pharmaceuticals released from marine vessels can potentially harm shellfish.
- Vessels can discharge directly over or near shellfish beds and sensitive waters. Vessels move, treatment plant outfalls don't.
- Would need to keep discharges far away from shellfish areas for public health protection (studies show).

Ecology's response to range of comments:

Please see Ecology's response to RTC #7 above.

Marine Life Protection (22,890 total combined comments)

RTC #9 Marine life protection

C4, C41, C73

Summary of range of comments:

- Need healthy water for marine life; fragile eco-systems support many species of life.
- Concern for loss of marine life, orcas struggling; orca whales bring in tourist dollars.

- Need to address all sources to protect marine life; waters will not fully recover healthy living populations if halfway measures are applied.
- Protection of aquatic reserves needed - NDZ direct positive impact; preventing degradation of water quality essential to the successful preservation of these critical habitats and species.

Ecology's response to range of comments:

Please see Ecology's response to RTC #5

Sewage Effects and Studies (1,038 total combined comments)

RTC #10 Studies on sewage effects insufficient

C11, C15, C16, C69, C81, C84

Summary of range of comments:

- More study needed; no proof of effect or that it would lead to measurable improvements; lacking in science to document boaters as anything more than a minuscule part of a much larger problem.
- There has been an increase in pumped out sewage without NDZ.
- State hasn't demonstrated that enhanced protection over and above Federal law is needed; need numerical analysis.
- Data only shows problems in urban areas; the areas within Puget Sound that exhibit the poorest water quality are not areas frequented by commercial vessels.
- Other states haven't measured success of NDZs; no metrics for success.
- Recreational Boater Survey inadequate; only addressed untreated waste.

Ecology's response to range of comments:

Ecology's NDZ website includes links to the various reports that were done prior to and including the Draft Petition. These reports cite a number of studies and include information on both the current conditions of the Puget Sound and the quality of effluent coming out of the various MSDs. Providing a specific numerical percentage of pollution associated with vessel sewage discharges compared to other pollution sources in the Puget Sound would be near impossible to do with the various sources and the essence of the moving discharges from vessels. We can point to the quality of effluent that can come out of MSDs and the risk associated with the discharges to sensitive areas. And in response, Ecology is taking a closer look at studies and modeling for effects of vessel sewage on Puget Sound. While there has been an increase in the volume of sewage pumped out at pump stations, there is still concern over raw discharges occurring and the discharges taking place from MSDs, especially to the unique waters of the Puget Sound. Ecology has provided a demonstration of the enhanced protection need per the CWA requirements in Section 4 of the Draft Petition. The data provided in the Draft Petition and supporting documents show impaired water bodies

near-shore, but it also shows and describes sensitive water bodies such as shellfish growing areas, marine protected areas, aquatic reserves, forage fish spawning areas, and kelp and eelgrass areas throughout the Puget Sound and describes the complex hydrology of the Puget Sound. Ecology continues to evaluate the complexities of water movement and how vessel discharges effect natural resources. Other states have had successful NDZs in place, some since the mid 70s. Evaluating the success of NDZs is challenging when other efforts to prevent pollution sources are occurring at the same time. The Recreational Boater Survey is included on Ecology's NDZ website and evaluated boater practices and attitudes and pumpout accessibility.

RTC #11 Negative effect of vessel sewage in water

C19, C27, C35, C37, C47, C52, C58, C76

Summary of range of comments:

- Toxins/algae blooms/deterioration discharges of human wastes from marine vessels contain toxic chemicals, bacteria, pathogens and viruses that threaten human health and harm water quality and the marine environment; deterioration of water quality; ecological decline and nitrate level (can lead to algae blooms) increase despite ocean variability over many years.
- Nutrient releases contribute to dissolved oxygen (DO) and ocean acidification problems; exacerbate.
- Blackwater exacerbates conditions; harmful to water quality.
- Water Quality has improved, don't back peddle, allow opportunity to recover.
- Concentrations of pollutants from vessel sewage in marinas, shallow bays, where boats moor; fecal bacteria elevated around marinas and in small bays with many occupied recreation boats.
- Don't leave trash on land or water; recreational vehicles (RV) don't flush on the road – why should vessels.
- Discharges are gross; the yuck factor - the idea of somebody else's boat that is anchored next to you and pumping out their raw or poorly treated sewage into the water where you want to swim and dig clams is disgusting and may be a danger to your health.
- Observe dumping in marinas; easy to not see dumping; witnessed fellow boaters dump their waste water.
- Treated effluent discharges - cumulative effect.

Ecology's response to range of comments:

Ecology acknowledges that vessel discharges can contain toxic chemicals, viruses, and bacteria that threaten human health and impair our environment. Ecology has reviewed studies which indicate increased levels of bacteria pollution near marinas.

RTC #12 Sewage effects - marine sanitation devices and standards

C33, C39, C48, C97

Summary of range of comments:

- MSD treatment not sufficient, studies and experience show, not operated or maintained properly.
- No one is checking or monitoring "treated" vessel sewage.
- USCG MSD standards haven't been updated in more than 30 yrs; only 2 pollutants covered.
- Commercial vessels should welcome studies on MSDs, boarding to do so.

Ecology's response to range of comments:

Ecology concurs that MSD treatment technology is insufficient to meet water quality standards based on reviewed studies. Currently, Ecology cannot board vessels to monitor the vessels' discharge without voluntary permission, as USCG has jurisdiction. When Ecology staff have been granted permission to board some small cruise passenger vessels, our inspections have revealed that the MSD treatment systems are typically not being properly maintained.

RTC #13 Vessel sewage effect minimal

C74, C110, C120, C131, C132

Summary of range of comments:

- Human waste is natural/aquatic life waste; marine life waste is not an issue to the natural ecology, because it is natural, and human waste is just as natural.
- Sewage from pumpouts goes to Puget Sound anyways.
- Doesn't consider naturally occurring effects to low DO.
- Bacteria impairments mostly near-shore phenomenon.
- Discussion about nutrients more alarmist than should be/trivial impact.

Ecology's response to range of comments:

Human vessel sewage waste potentially carries pathogens (including viruses) and toxic chemicals in their waste that aquatic life does not. The Puget Sound is also their natural home for aquatic organisms. Sewage from pumpouts does go to the Puget Sound, however, it first receives treatment at shore-side WWTPs. These WWTPs provide much better treatment and a higher quality effluent than traditional MSDs. The WWTPs are legally covered under an NPDES discharge permit with a fixed outfall. The outfall has an established shellfish bed closure around it. The NPDES permits contain permit pollutant limits established to meet water quality standards and require regular monitoring and are subject to inspections. These WWTPs are also subject to enforcement actions including monetary penalties for non-compliance.

Ecology has considered the naturally occurring effects of DO and acknowledges that there are other sources of pollutants, naturally occurring or not in the Puget Sound, and does not believe that any of the information provided is being alarmist.

Language from Draft Petition: “In many regions of Puget Sound, low DO is a natural consequence of the Sound’s deep, fjord-like bathymetry, where water column stratification and slow flushing lead to long residence times of deep water that is not in contact with the atmosphere...”

Ecology is taking the proactive approach of preventing pollution sources. The bacteria impairments typically are located near-shore because there is limited monitoring for fecal coliform far-shore and there are also other fecal coliform inputs from near-shore that may account for the listings.

Hydrology and Geography of Puget Sound (580 total combined comments)

RTC #14 Geographic extent of NDZ

C8, C43, C51, C75, C113, C122

Summary of range of comments:

- Take targeted approach instead of whole Puget Sound; support for targeting the most sensitive areas of the Sound by implementing a number of NDZs around areas of impaired water quality or areas of high-risk such as shallow-water areas and shellfish beds.
- No place in Puget Sound that is 3 miles from land so all of Puget Sound is already a NDZ.
- Allow discharges only near WWTP outfalls.
- Ecology chose expedience over precision in choosing all vs precisely choosing specific areas.
- Targeted instead of blanket Puget Sound not protective enough, would be difficult to enforce, would leave dumping zones, would lead to confusion, focus on shellfish areas would negate cleanup efforts, ignore other sensitive water bodies.
- Areas should be expanded to Strait or further; Clallam County folks concerned that the Strait's waters also have considerable value for shellfishing and tourism and that tidal flows through the Strait influences the water quality of Puget Sound itself; coastal waters and shellfish beds from Dungeness Spit to Neah Bay are just as vulnerable as those to the east and we urge Ecology to include these waters in its petition.

Ecology’s response to range of comments:

As Ecology considers the geographic extent of a NDZ, it will consider such factors as water quality and public health impacts, pumpout availability, cost-benefit, cost impact, water movement, hydrology, flushing, vessel movements and locations, sensitive water bodies, recreational impacts, aquatic life and habitat, tribal interests, stakeholder input, clarity of a boundary line and implementation and other considerations. There are four areas of the Puget Sound that are beyond 3 miles from shore (two large areas -west of Whidbey Island and north of the San Juan Islands).

RTC #15 Unique hydrology, poor flushing, water movement = sewage discharge risk

C23, C53, C66

Summary of range of comments:

- Unique hydrology of Puget Sound and drainage; unique water drainage system that is NOT part of the open ocean, thus it is easier to contaminate, and much harder to cleanup.
- Puget Sound doesn't quickly disperse pollutants to ocean; acts like a lake or bathtub - whatever enters stays for a long time and can seriously impact water quality; Puget Sound is a sensitive water body especially prone to poor water quality due to limited tidal flushing.
- Surface water movement moves around pollutants, but doesn't flush out well; tide can carry waste from open Puget Sound onto a beach or a sensitive bay before the waste has a chance to disperse or degrade.

Ecology's response to range of comments:

Ecology concurs that the Puget Sound's hydrology and drainage is unique and susceptible to poor flushing and circulation.

RTC #16 Victoria discharges

C49, C65, C99

Summary of range of comments:

- Victoria dumps in the Strait; get Canada to fix its problems.
- Washington State better than Victoria (we treat), should be no exception.
- Pressure Victoria to do the same, even more effective if Canada also prevents sewage.

Ecology's response to range of comments:

As a state government entity, Ecology does not have the legal authority to compel a city in a different country (Victoria, Canada) to provide better treatment of its shore-side sewage.

RTC #17 Puget Sound - great flushing and deep

C63, C112

Summary of range of comments:

- Entrance to Puget Sound and north Admiralty gets great flushing; a portion of the Straits of Juan De Fuca, San Juan Islands and adjoining waters, Rosario Strait, Bellingham Channel, Guemes Channel, and the Straits of Georgia are subject to high tidal fluctuations and considerable tidal movement.
- Puget Sound deep so okay for sewage disposal.

Ecology's response to range of comments:

There are numerous areas within Puget Sound that do not have good flushing or circulation patterns. Ecology does not agree that it is acceptable to discharge raw sewage or poorly treated sewage to Puget Sound.

Against the Draft Petition and NDZ (503 total combined comments)

RTC #18 Against the Draft Petition – keep status quo

C10, C14, C67, C83, C106, C116

Summary of range of comments:

- Already illegal; enforce existing laws; current regulations sufficient.
- Against this, oppose the NDZ.
- Too much government; restricting activity; bureaucratic overreach.
- NDZ would lead to greater confusion; Recognize federal regulations and USCG.
- If problem with MSDs change federal requirements or USCG criteria.
- NDZs haven't worked in other states.

Ecology's response to range of comments:

Under current federal law, boats are prohibited from discharging raw sewage within 3 miles from shore but can discharge treated sewage anywhere in Puget Sound. The Type I and Type II MSDs typically don't meet our water quality standards for fecal coliform bacteria and other pollutants and can cause pollution that can be a problem of particular concern over or near sensitive water bodies. Discharges of untreated vessel sewage are already illegal within 3 miles from shore, but beyond 3 miles, untreated sewage can be discharged and there are areas in Puget Sound beyond 3 miles. The current authority for enforcing the existing laws lies with USCG. A NDZ would allow for localized authority to regulate vessel sewage discharges. Ecology has been evaluating a NDZ as a preventable pollution measure to protect and restore the Puget Sound. It is our understanding that there is currently confusion about existing regulations for vessel sewage and a NDZ could have the advantage of clearing up the confusion. The CWA allows for the establishment of areas in which the discharge of sewage from vessels is not allowed. This has been done in 90 locations within 26 different states. A GAO report cites that "a number of EPA, state, and local officials believe that water quality and environmental stewardship have increased after designation of these zones."

Enforcement (323 total combined comments)

RTC #19 Concerns with enforcement approach

C13, C54, C61

Summary of range of comments:

- Boardings, inspections, fines concerns; already find multiple layers of law enforcement agencies having the authority to board private vessels - this would just increase the reasoning for more boardings; being boarded by law enforcement while underway for inspection of toilet facilities is not only disconcerting but in some cases, given wind and current, could be dangerous.

- NDZ would be hard to enforce, not practical; for those boats that disregard the now existing laws there is no practical way a new law is going to be any more enforceable than what now exists.
- Greater education; focus on education

Ecology's response to range of comments:

A review of implementation of NDZs in other states showed that a focus on outreach and education with the ability to enforce works best, which would be Ecology's strategy as well. It is not Ecology's intent to create multiple layers of law enforcement, but rather use the existing framework such as USCG or WA State Fish & Wildlife to conduct blackwater inspections. The current authority for enforcing the existing laws lies with USCG. A NDZ would allow for localized authority for regulating vessel sewage discharges.

RTC #20 Need for enforcement and education with NDZ

C30, C40, C44, C80, C93, C94, C103

Summary of range of comments:

- Need strict enforcement, deterrence, education; all polluting discharges must be banned under strict enforcement with heavy disincentives for violators; enforcement will depend on boaters understanding a real problem and recognizing their part in its solution; Need adequate fines to deter the violation.
- Cruise MOU only voluntary, need enforcement mechanism to allow Ecology to address deficiencies in the existing law and to enforce prohibitions that are now only addressed by voluntary agreements.
- Enforcement of targeted approach would be difficult.
- Not concerned with added enforcement or boating rights.
- Tracer dye to deter, confirm no dumping; boats moored in fresh water should require use of a tracer dye in the holding tanks to deter dumping; provide an annual certification sticker that can be issued to boats after a United States Coast Guard (USCG) inspection that the blackwater system is pumped out and no overboard capability is installed.
- Require holding tanks for vessel registration.
- Public education programs to reduce fecal from boats hasn't been enough.

Ecology's response to range of comments:

Ecology's approach to enforcing a possible NDZ would be to provide technical assistance first and foremost and rely on formal enforcements only when necessary. It is Ecology's intent to work with vessel owners to gain compliance and protect the Puget Sound. Ecology recognizes that enforcement of a targeted or piecemeal NDZ would be much more difficult than a Puget Sound wide NDZ. There are a number of strategies that could be used to verify discharges within a NDZ. Ecology will further develop strategies as part of the implementation phase, should a NDZ be established.

Ecology recognizes the voluntary nature of the MOU.

Marine Sanitation Devices (286 total combined comments)

RTC #21 Marine sanitation devices

C12, C77, C133

Summary of range of comments:

- MSD treatment systems are reliable and should be encouraged not outlawed; would limit incentive to install treatment systems; recreational boats have made investments in treatment systems and steady improvements in sewage disposal.
- Regulate MSD treatment systems and require monitoring; set a standard for treated sewage (no higher than treatment plants).
- Lacks flexibility for emerging technology or prototypes.

Ecology's response to range of comments:

The studies on MSD treatment effluent shows that the discharges typically do not meet water quality standards set out to protect water quality and public health. A NDZ does not eliminate the option to have a treatment system on board for use in non NDZ areas, it can be installed along with holding capacity for NDZ areas if there is room on board. The MSD treatment technology hasn't changed significantly in the last 30 years since the MSD standards were set, so while treatment technology can continue to advance (including emerging and prototype technology), it hasn't been shown to be readily available to meet Washington State's water quality standards. Any possible advances in treatment technology do not guarantee success as the treatment systems need to be properly operated and maintained over time. Ecology's experience has shown that MSD maintenance is typically given a very low priority compared to other vessel tasks. Recreational vessels have shown improvement over the years in pumping out more vessel sewage, but there still continues to be raw discharges and discharges from MSD treatment systems. The CWA specifically only allows states to regulate vessel sewage with a NDZ. The state cannot set-up standards or monitoring for vessel sewage and the CWA federal standards for MSDs are unlikely to be changed.

Pumpouts (181 total combined comments)

RTC #22 Pumpouts – not available

C24, C46, C62, C78, C108, C109, C111

Summary of range of comments:

- Not enough recreational vessel pumpout stations; focus on adding/improving pumpouts; providing many more convenient, easy-to-use, and accessible low-fee pump-out facilities would help, a NDZ will not; boats are unlikely to travel for hours to find an adequate pumpout.

- Pumpouts not working or not accessible. Pumpouts sometimes blocked by other vessels; broken or shut off during the winter; inaccessible to boats longer than 40 feet or requiring large turning radius.
- Does not address commercial pumpout availability; no commercial pumpouts for tugs, fishing vessels or small passenger vessels; not adequate shore-side pumpouts for commercial vessels.
- Need to make all pump stations free; ensure the currently free ones stay free.
- Receiving sewage systems can't handle pumped out waste.
- Pumpouts too busy; during the summer weekends, the lines will become impossibly long with many large pleasure boats requiring pump out at the same time.
- Pumpouts dirty, unpleasant to use.

Ecology's response to range of comments:

The Puget Sound has between two to six times more pumpout facilities for recreational vessels than what is suggested in the Clean Vessel Act guidelines depending on how vessel numbers are evaluated. Most commercial vessels hold their vessel sewage and either pumpout at sea or use a pumpout facility. Only a small, yet important, number of vessels may need more pumpouts, and Ecology is working on using grant funding to put in a couple of more pumpouts for commercial vessels in key locations. The vast majority of recreational pumpouts has been put in under the Clean Vessel Act grant program administered by State Parks and is limited to \$5 per pumpout with most being free. No reason to see that change. There has been no concern identified from any of the municipal sewage treatment plants on the receiving volume from vessel pumpouts, nor is there expected to be, given the fact that the peak time of the year for vessel volume is in the summer when flows to the treatment plants are low.

RTC #23 Pumpouts - available

C29, C56, C57, C102

Summary of range of comments:

- There are plenty of pumpouts; easy to find and use; pump-out facilities are in nearly all marinas and many state parks; Parks has also sponsored a new pilot program in Lake Washington offering free traveling pump-out services; many pump out stations with more planned in the most used boating recreation areas.
- Not expensive to pumpout; no large investments needed; not a hardship
- Add even more funding for pumpouts and assure operational; support putting in additional commercial pumpout options; boating public also needs enough convenient and accessible boat sewage pumpout locations in order to make a sewage discharge ban feasible - supports continued efforts to site, install and upgrade such facilities
- Technology tools exist to help find pumpouts; Recreation and Conservation Office has created a mobile phone application which locates, along with additional services, all the locations of pump-outs in Puget Sound and their current status.

Ecology's response to range of comments:

We have more than 113 publically accessible stationary pumpouts and 13 mobile pumpouts for recreational vessels, well above the NDZ guidelines. Many of the mobile pumpout companies also have applications or electronic mechanisms to request or schedule pumpouts and there are other applications in the works.

Retrofits and Operational Costs for Vessels (180 total combined comments)

RTC #24 Phase-in time

C22, C86, C87, C90

Summary of range of comments:

- Support time allowance for retrofits for commercial vessels; if necessary for specific vessel types, support the additional time to make necessary retrofits to comply with a NDZ.
- The CWA doesn't allow phase-ins; nothing in the CWA authorizes a "delayed-enforcement-pending-vessel-modification" scheme.
- Phase in time insufficient to accommodate extensive retrofits; if dry-dock before three years, won't receive benefit of three-year phase-in period with large capital in short time.
- 3 years to comply is too long.

Ecology's response to range of comments:

There have been at least two NDZs (Lake Ontario and Long Island Harbor) that have included phase-in periods for one year in their applications and those were not legally challenged. EPA has allowed some interpretation of the CWA for NDZs. The time allotment in the Draft Petition of three years was chosen upon direct conversations with certain commercial vessel industries on what would be reasonable. Further flexibility in phase-in time may be considered.

RTC #25 for recreational vessels - cost prohibitive

C45, C70, C68, C59

Summary of range of comments:

- Unnecessary cost/time to boaters; the sheer cost of converting the current fleet of recreational boats with heads of type I or type II to meet the type III standards will be very large and will present a significant hardship to many boat owners.
- Cost estimate for recreational vessel retrofit too low; a more realistic estimate is \$3000 plus other costs.
- Holding tanks too small; insufficient room on the vessels to install a holding tank of sufficient capacity to be of any real use; some boats big enough for a head, but not a holding tank.

- Restrictions on holding tanks would be cumbersome/older classic boats difficult to add holding.

Ecology's response to range of comments:

Based on Ecology's studies and boater input, about 2,000-4,000 or less than 5% of recreational boats would need to retrofit their boats to add a holding tank. Given that typical costs could be in the range of \$500 - \$3,000 for a retrofit, compared to the assessed value of the recreational boat with a head, we do not find this as cost prohibitive. Recreational boaters should have a vested interest in protecting the waters in which they transit.

RTC #26 for commercial vessels - cost prohibitive

C55, C72, C79, C114

Summary of range of comments:

- Commercial vessel retrofit and operational cost estimates low; cost impact high; not feasible to install holding tanks - not enough space in the vessels' interiors and the stability safety margin is simply insufficient for small passenger vessels; installing a holding tank is estimated to cost about \$650,000 for certain small passenger vessels plus additional costs; Certain other vessel owners would incur retrofit costs well over \$100,000 to install holding tank capacity, assuming this retrofit is even possible given the design and construction of existing vessels and if this retrofit is impossible due to vessel design and construction, the vessel would forever be excluded from operations in Puget Sound.
- Commercial retrofits might not be feasible, stability challenges etc Due to stability and tonnage issues, it is believed not feasible to install holding tanks; Creating more space by enlarging (lengthening) the vessels is also far too expensive to be a viable option.
- Consider California coastal NDZ conditions for commercial holding; should analyze data related to the California NDZ for consideration since the deep draft vessel makeup is similar to that of Puget Sound.
- NDZ would put small passenger vessels in tougher and costlier USCG subchapter; regulatory tonnage may increase, placing the vessel in a new USCG classification, with much higher regulatory compliance costs.

Ecology's response to range of comments:

For certain commercial vessels, the estimates for retrofits have been fluctuating and in a wide range. Ecology has been meeting with the industries and is conducting further analyses of costs associated with retrofits and operating costs to better understand the financial impact.

RTC #27 Not cost prohibitive

C91, C96, C101

Summary of range of comments:

- Invested money to remove poor treatment systems and put in holding.
- Commercial vessel industry shows lack of detail on cost burden for retrofits and operational financial impacts.

- Controlling one's sewage is the cost of doing business.
- Vast majority of vessels in Puget Sound have holding tanks; feasible.

Ecology's response to range of comments:

Please see Ecology's response to RTC #25 above. The vast majority of commercial vessels already has holding tanks and thus can comply with a possible NDZ.

Economy (125 total combined comments)

RTC #28 Puget Sound economic viability

C28, C34, C64, C85

Summary of range of comments:

- Local industries, tourism, life depend on clean water and a healthy Puget Sound.
- Puget Sound – resource for economy and wildlife.
- Local fisheries viability; fisheries closures impact the economy.
- Shellfish industry big employer, economic viability; shellfish areas support the livelihoods of many water dependent businesses, generating local economic impact.

Ecology's response to range of comments:

Ecology agrees that many industries depend on clean water and a healthy Puget Sound to support their business endeavors. The NDZ has been proposed, in part, to help protect the shellfish industry and other businesses as well as wildlife and aquatic resources that depend on a healthy Puget Sound.

RTC #29 NDZ economic impact

C31, C71, C105

Summary of range of comments:

- Harm boating industry, economy; need to minimize financial costs to maritime businesses; incurring the costs of retrofits; if retrofits not possible – loss of business or use.
- No economic/environmental impact study; looking for better understanding of cost and benefits; should do economic impact study even though not required.
- Expect US Dept of Commerce to challenge impacts to international commerce.

Ecology's response to range of comments:

While not required by the NDZ petition process, the costs and benefits associated with the NDZ have been evaluated and are being further evaluated for certain commercial vessels based on input from a limited group of stakeholders. The costs of retrofits, operational costs, implementation, and infrastructure as well as the benefits to the environment, fisheries, and the shellfish industry are all considered.

Recreational Usage Protection (121 total combined comments)

RTC #30 Recreational usage protection

C18

Summary of range of comments:

- Need healthy water for contact recreational activities (such as swimming, aesthetics, kayaking, kids playing, clamming, diving, and paddle boarding); tribal cultural interests.

Ecology's response to range of comments:

Ecology believes that a NDZ would afford greater protection for recreational uses.

Vessel Sizes and Types (91 total combined comments)

RTC #31 Vessel sizes and types

C26, C32, C60

Summary of range of comments:

- Military vessels –no mention of restrictions on military vessels, should be treated the same.
- Good idea for commercial or larger vessels; reasonable action with such large vessels; increased commercial traffic.
- Should apply to all size vessels; no compelling reason to allow the continuation of dumping pollutants, whether treated or not, from water vessels, large or small.

Ecology's response to range of comments:

As reported in the *Phase 2 Commercial Vessel Sewage Management and Pumpout* report, the protocol for military vessels in the Puget Sound is to not discharge and use pumpout stations at their facilities or discharge out at Sea.

Cruise Ships, Advanced Wastewater Treatment Systems and the Vessel General Permit (12 total combined comments)

RTC #32 Cruise Ships, Advanced Wastewater Treatment Systems (AWTS) and the Vessel General Permit (VGP)

C89, C119, C121, C123, C124, C125, C126, C127, C128, C129, C130

Summary of range of comments:

- AWTS dilution or mixing zone not considered; 3-4 orders of magnitude greater than municipal treatment plants.

- Cruise MOU effective and based on allowed discharges with conditions; MOU & VGP combined = addressed.
- VGP 401 certification operates under permit would not cause violation of WQ standards, should exclude AWTS.
- Cruise effluent data out of date and misrepresented, consider effect discharging underway.
- AWTS superior compared to on-land municipals in Alaska, comparison not evaluated.
- Should use CWA 312f4 option and be able to choose vessel categories and distinguish AWTS.
- AWTS combined blackwater & graywater effluent quality same as publically owned treatment works (POTWs) = AKART.
- May cause significant changes to itineraries/fuel = CO2 emissions and \$500,000.
- AWTS not differentiated from tradition MSD type II.
- Only certain vessels can be directly over sensitive environmental resources (not cruise ships); AWTS are far away from near-shore areas where people swim and harvest shellfish.
- MOU precautions to address risk of malfunction of AWTS shows outright ban unnecessary.

Ecology's response to range of comments:

Advanced wastewater treatment systems are categorized by USCG as MSD Type II treatment systems. The effluent data for AWTS systems and the holding abilities of AWTS systems were evaluated. Not all large cruise ships that call in Washington have AWTS installed or operational. The VGP does not include sewage vessel discharges, except when combined with graywater and acknowledging that a NDZ supersedes any VGP requirements. Not all large cruise ships have a combined black water and graywater AWTS. The VGP standards and the VGP 401 certification for Washington State are based on the fact that vessel sewage is not a covered discharge type. The VGP does require that in addition to the requirements set out in the permit, water quality standards must be met. The AWTS combined blackwater and graywater is not the same as shore-based POTWs. AWTS discharges are from a moving outfall potentially to or near sensitive water bodies and a shore-based POTW has a fixed outfall with a shellfish harvesting closure area around it. A comparison to Alaska land-based discharges was not done as the focus of the Puget Sound should be on the Puget Sound. Large cruise ships with AWTS do go near areas where people swim and harvest shellfish. In fact, the MOU was amended due to results from a study done on cruise ship effluent and the potential effects to shellfish to require that MOU vessels do not discharge in certain areas of the shipping lanes due to their proximity to shellfish harvesting areas in multiple locations. And the large cruise ships do come close to swimming beaches as they near Seattle and go through the narrow channels of the Puget Sound. The greater dilution of AWTS effluent is significant, however, the fact that the vessel discharges are moving, creates risk and complexity to considering dilution effects. AWTS systems can provide great quality effluent for conventional pollutants, but the moving nature of the discharges and the discharges still present a risk to water quality. For the past three cruise seasons, none of the large cruise ships have asked for the ability to discharge under an MOU. All of the large cruise ships go out to

open sea and have on average about 3 days of holding capacity for blackwater and graywater. Therefore, for large cruise ships, there is no change to current practices with a NDZ and therefore no increase in fuel or costs. Ecology will consider all options for NDZ. The MOU is a voluntary agreement that was put in place as a compliment to environmental regulations until state specific regulations for cruise ship waste management are put in place and to learn more about operational practices and technologies. As the MOU is voluntary, there is no guarantee for long-term environmental protection from large cruise ships until a regulation or NDZ is put into effect.

NDZ Process (5 total combined comments)

RTC #33 NDZ process

C88, C107, C115, C118

Summary of range of comments:

- The Certification of Need needs to be subject to Pollution Control Hearings Board (PCHB) review or rulemaking requirements.
- Petition developed in meetings not open to the public.
- Finalizing a petition not part of current PSP Action Agenda.
- Need to show where all pump out waste is treated.

Ecology's response to range of comments:

Ecology does not concur that the process laid out in the CWA for a NDZ would require a certification of need to be subject to PCHB review or rulemaking. The certification of need is one of the requirements that EPA reviews. Ecology did not violate the Open Public Meetings Act. Ecology has undertaken extensive outreach efforts which have been open to the general public, including this voluntary comment period. The Draft Petition is not required but Ecology conducted this effort to provide a great deal of transparency on Ecology's thinking on the NDZ effort to any interested party. To the best of our knowledge, Ecology is the only state to provide this level of public outreach on a NDZ petition process. Near-Term Action C1.5 of the PSP's Action Agenda does call for the finalization of a petition to EPA. Ecology acknowledged that it would confirm the final number of pumpout facilities and provide missing details before any final petition is submitted to EPA in the Draft Petition.