DEPARTMENT OF
ECOLOGY
State of Washington

Concise Explanatory Statement

Chapter 173-557 WAC

Water Resources Management Program for the Spokane River and Spokane Valley Rathdrum Prairie Aquifer & Amendment to WAC 173-555-010

Summary of rule making and response to comments

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Concise Explanatory Statement

Chapter 173-557 WAC
Water Resources Management Program for the Spokane River and Spokane Valley Rathdrum Prairie Aquifer and Amendment to WAC 173-555-010

Water Resources Program
Washington State Department of Ecology
Olympia, Washington

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Table of Contents

Introduction 1

Reasons for Adopting the Rule 1
- Purpose and Authority 3
- Key Elements of This Rule 3

Differences between the Proposed Rule and the Adopted Rule 4

Response to Comments 5
- General Comment Responses 5
  - Value of the Spokane River to the Community 5
  - Further Studies 7
  - Abandon Rulemaking 9
  - Sierra Club Members 10
- Specific Comment Responses 11
  - Fish and Wildlife 11
  - Ecosystem 21
  - Recreation 24
  - Aesthetic Concerns 32
  - Water Quality 35
  - Future Growth/Sustainability 40
  - Flow Determinations 48
  - Science 78
  - Other streams 85
  - Watershed Planning 86
  - Politics 87
  - Economic Issues 95
  - Process Issues 102
  - Implementation 121
  - Multi-facetted 138
  - Miscellaneous 144

Commenter Index 147

Appendix A: Copies of all comments 157
- (Includes comment numbers) 157

Appendix B: List of Commenters for “Sierra Club Members” Comment 4 263

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Introduction

The purpose of a Concise Explanatory Statement is to:

- Meet the Administrative Procedure Act (APA) requirements for agencies to prepare a Concise Explanatory Statement (RCW 34.05.325).
- Provide reasons for adopting the rule.
- Describe any differences between the proposed rule and the adopted rule.
- Provide Ecology's response to public comments.

This Concise Explanatory Statement provides information on The Washington State Department of Ecology's (Ecology) rule adoption for:

Title:	Water Resources Management Program for the Spokane River and Spokane Valley Rathdrum Prairie (SVRP) Aquifer; and an amendment to: WAC 173-555-010 General Provision, the applicability provision of Chapter 173-555 WAC, Water Resources Program in the Little Spokane River Basin, WRIA 55.
WAC Chapter(s):	173-557 and 173-555
Adopted date:	January 27, 2015
Effective date:	February 27, 2015

To see more information related to this rule making or other Ecology rule makings please visit our web site: www.ecy.wa.gov/lawsandrules

Reasons for Adopting the Rule

The Spokane River and Spokane Valley Rathdrum Prairie (SVRP) Aquifer are located in Spokane and Stevens Counties, and encompass portions of the cities of Spokane, Spokane Valley and Liberty Lake, and all of Millwood. Both the River and the Aquifer flow from the state of Idaho into Washington, and the state line is the eastern boundary of the area covered by this rule.

Instream resources that need protection in the mainstem Spokane River include Redband Trout, Mountain Whitefish, and all aquatic species that require water for habitat. Additional resources and beneficial uses include: water quality, riparian habitat, wildlife, recreation such as fishing, rafting, kayaking, boating and swimming, and the scenic and aesthetic value of the river.

In the early 1990s, Ecology determined that the low flows in late summer were further declining in the Spokane River. Because of this decline and what was known about the interaction between the aquifer and the river at that time, Ecology stopped issuing new groundwater rights in the Spokane Valley Rathdrum Prairie (SVRP) aquifer.

The results of 2007 "Bi-state Aquifer study," conducted jointly by Idaho, Washington, and the United States Geologic Survey, clearly indicate seasonal surface water declines are partially the result of increased ground water withdrawals. Groundwater is only available at the expense of surface water supplies, and new withdrawals will increase seasonal declines in surface water flows and levels.

The SVRP Aquifer is the source of municipal water supply for the area. The Spokane region is served by existing water suppliers with adequate senior water rights to meet future demand.

This rule will provide a baseline for making water availability determinations necessary for guiding water right permit decisions. Processing applications for new water rights from the Spokane River and SVRP Aquifer must also consider existing water rights, including the roughly 210 cubic feet per second (cfs) of existing inchoate municipal rights.

The Spokane Valley-Rathdrum Prairie Aquifer and the Spokane River are a shared resource between Idaho and Washington. While both states have tools to manage water resources in a way that benefits local communities, Idaho and Washington regulations are separate and distinct and legally cannot impact the other. Adopted instream flows in Washington cannot affect water management in Idaho, but can help provide a solid basis for future regional water supply decision making.

RCW 90.82.080 sets forth a consensus-based process for establishing instream flows through the watershed planning process, and obligates Ecology to adopt instream flows and applicable plan recommendations in a rule. This rule adopts the 500 cfs instream flow level at the Green Acres gage recommended in the Watershed Plans for Water Resource Inventory Areas 55 and 57, Lower and Middle Spokane River, and WRIA 55, Little Spokane River.

Ecology has conducted extensive public outreach while developing this rule and incorporated changes in response to public input.

Purpose and Authority

The rule helps Ecology meet statutory obligations to manage waters for public use and for the protection of instream flows. In accordance with the Watershed Planning Act, Chapter 90.82 RCW, part of this water management rule adopts applicable recommendations of the adopted watershed plans. Ecology's underlying obligations and authority for this rulemaking reside in the following statutes:

- Chapter 90.82 RCW Watershed Planning Act
- Chapter 90.54 RCW Water Resources Act of 1971
- Chapter 90.22 RCW Minimum Water Flows and Levels Act
- Chapter 90.03 RCW Water Code
- Chapter 90.44 RCW Regulation of Public Ground Waters
- Chapter 90.42 RCW Water Resource Management

Key Elements of This Rule

The key provisions include:

- Setting instream flow levels for the Spokane River at the Green Acres and Spokane gages.
- Requiring that all new uses of water be subject to interruption when instream flow levels are not met, unless the consumptive impact of the new use is mitigated. This includes permitted and permit-exempt uses.

Differences between the Proposed Rule and the Adopted Rule

RCW 34.05.325(6)(a)(ii) requires Ecology to describe the differences between the text of the proposed rule as published in the *Washington State Register* and the text of the rule as adopted, other than editing changes, stating the reasons for the differences.

WAC 173-557-020(2) - The word "direct" was deleted from the phrase "direct hydraulic continuity." The phrase "direct hydraulic continuity" is not defined in the rule and the distinction between direct vs. indirect hydraulic continuity is imprecise. This change was made in response to a comment.

WAC 173-557-020(2)(a) and amendment to WAC 173-555-010 – Language was added to clarify the application of the new rule and the existing rule, WAC 173-555, in the area where the new and existing rules overlap. The phrase "that is not part of the SVRP aquifer" was added to both the new rule and the amendment to clarify new uses regulated under the existing rule for the Little Spokane River, WAC 173-555. This clarifying language was added in response to a comment.

WAC 173-557-060(3) - The phrase "in a timely and reasonable manner" was added to clarify availability of water from a municipal water supplier. This clarifying language was added in response to a comment.

Response to Comments

Ecology accepted comments between September 17 and November 7, 2014. This section provides both summary general responses, and responses to individual comments that we received during the public comment period. (RCW 34.05.325(6)(a)(iii)). Most individual comments are included verbatim. Some have been edited to provide clarity and context.

During the comment period on the rule, Ecology also received two compact disks as attachments to the combined comment letter from the Center for Environmental Law and Policy (CELP) and Sierra Club:

- One disk contains 43 electronic documents about a range of topics including: the return of anadromous fish to the Columbia River; scenic and aesthetic flows in the Spokane river; climate change; fish studies; interstate water issues; recreational use of the Spokane river; general information about the Spokane River, and the error message received by individuals when Ecology's electronic comment form malfunctioned.

- The second disk contains a photographic inventory of 37 key observational points (KOPs) located on the Downriver Reach of the Spokane River, obtained at five different flows:
    - 2700-2800 cfs (cubic feet per second) on July 11, 2014;
    - 2500 cfs, July 15;
    - 2000 cfs, July 21;
    - 1400-1500 cfs, July 29; and
    - 1000 cfs, August 12.

  CELP's study contains: (1) an atlas of the 37 KOPs at the five different flows, and (2) selected KOPs providing comparison images at 2500 cfs and 1000 cfs.

The information on these disks is included in the rule file and available upon request.

Ecology carefully considered all comments and materials received.

General Comment Responses

Value of the Spokane River to the Community

Comment 1
Many comments discussed and presented personal information illustrating the value of the Spokane River to the community as a whole and to individuals.

Response
This general comment illustrates the role played by the Spokane River in this region and amplifies the need for establishing an instream flow by rule in this basin. Since the commencement of

Watershed Planning in this region in 1998, it has been quite clear to those of us with regulatory responsibilities in the region that the Spokane River is central to both the area's economy and its sense of community.

This community wide concern resulted in widespread support for the recent huge public and private investments in water quality and water quantity as well as substantial investments in public access. Today, the River serves both in- and near-stream businesses, and is a key element of recreational activities, such as floating, fishing, wading, sightseeing, or simply enjoying the riparian corridor. Many surveys indicate it is a central feature of the identity of this region. The river has come to represent and reflect the community, and the aquifer that feeds it is central to the well being and future of the river and the economy of the inland northwest.

RCW 90.54.020 of the Water Resources Act states that preserving base flows in rivers and streams is fundamental to managing Washington's waters and prohibits new consumptive uses of water that would interfere with those base flows. Maintaining base flows advances the public interest. Toward that, it is the responsibility of a regulatory agency, when faced with a need to develop standards for a water body, to ensure that not only are they protective of all users, but that they are based upon the best available information.

There is a strong public interest and law weighing in favor of protecting fish habitat. Ecology is authorized to refuse or condition a water right permit if issuing the permit might result in lowering the streamflows below that needed to adequately support food fish and game fish populations in the stream. (Richert v. Ecology, PCHB No. 90-158). The "gold standard" for determining these values is to use Instream Flow Incremental Methodology.

Ecology believes this flow rule, based as it is on four independent fish studies, is science-based. It has been vetted by top scientists, staff, and management of all concerned state agencies. It has been reviewed and analyzed by all local Water Resource Inventory Area watershed planning groups. It is our opinion these flows are the best flows available to protect instream resources of the Spokane River. They represent minimum flows necessary for stream health and ecological function.

They are not standards to which the state intends to "manage down." They are minimum standards the community can use from which to "manage up." Henceforth, the community has a yardstick with which to measure proposals for water management: proposed new uses of water, conservation actions, etc. Increased flows are not prohibited by this rule.

Commenter(s)

Aagaard, Ann 3, 7, 8; American Whitewater 3; Avista 1, 4; Banks, Aaron 5; Blaeloch, Janine 1;[1] Bates, Melissa & Jim Briggs 1; Bertsch, Roger 1, 5; CELP/Sierra Club 25, 36, 39; Darilek, Marilyn 1; DeLateur, Marc 3; Dunphy, David 4; Garvey, Lydia 5; Gold, Raelene 1; Kistler, Claude 2; Laegreid, Peter 1, 2, 10; Lands Council (Parrish, Amanda) 2; Lawrence, Christopher 1; League of Women Voters, Spokane 2, 4, 5, 6, 15, 16, 18, 29; Mace, Samantha 1, 7; Mackrow, Paula 10; McKay, Mariah 4; Moore, Kari 3; Nelson, Dan 2; Osborn, Cal 1, 2, 10; Out There Monthly 1; Parker, Steve 2; Parks, Leonard 3, 4; Pascal Osborn, Rachael 1; Paxson, M C 1, 2, 10; Peterson, Kerry 4; Pringle, Bruce 1, 2, 10; Reed, Jake 1; Reynolds, Carol 1, 2, 7; Sierra Club (Roberts, Lynda) 1, 2, 10; Rutherford, Jim 1, 2; Salem Lutheran Church 1, 2; Schultz, Jule 1; Seifert, Lorelei

[1] CES amended on 2/2/2015 to include comment from Janine Blaeloch, referenced here and included in Appendix A.

1, 2, 10; Sharar, Jan 1; Sierra Club (Andrew Martin) 1, 2, 10; Sierra Club (Coleman, Timothy) 1, 7; Sierra Club (Donaldson, Jamie) 1, 2, 10; Sierra Club (Effler, Dean) 1, 2, 10; Sierra Club (Glover, Julia) 1, 2, 10; Sierra Club (Lanz, James) 1, 2, 10; Sierra Club (Lombard, Marny) 3, 7; Sierra Club (Lukos, Stravo) 1, 2, 10; Sierra Club (Milne, Linda) 1, 2, 10; Sierra Club (Nixon, Shirley) 4; Sierra Club (Osborn, John) 1, 10, 15, 16, 25;Sierra Club (Peterson, Terrance) 1, 2, 10; Sierra Club (Sendrey, Robert) 1, 3, 10; Sierra Club (Titon, Julie) 1, 7; Silver Bow Fly Shop 1; Smith, Bruce & Denise 1; Soeldner, W Thomas 1; Spickler, Dawn 2; Spokane Falls Trout Unlimited 2, 4; Steward, Mark 1, 6; WaterWatch of Oregon 1, 2; White, Jerry 2; Wilder, Stewart 1, 2, 3, 12; Zovanyi, Louise 4;

Further Studies

Comment 2
Many comments called for additional studies prior to adopting the rule. Additional studies on fish, recreation, aesthetics, navigation, water quality, temperature, broader ecosystem values, climate change, and interstate implications were requested.

Response
Ecology does not agree that additional studies are necessary to adopt instream flow levels to protect instream resources in the Spokane River. Ecology believes this flow rule, based as it is on four independent fish habitat studies, is science based. It has been vetted by top scientists, staff, and management of all concerned state government agencies. It has been reviewed and analyzed by all local Water Resource Inventory Area Watershed planning groups. It is our opinion these flows are the best flows available to protect the instream resources of the Spokane River. Ecology cannot enhance or restore flows in the river through adoption of an instream flow rule.

Ecology has been working with watershed planning groups since 1998 to develop instream flow protection for the Spokane River. Ecology is particularly concerned that postponing rule adoption to conduct additional studies will significantly delay, or even permanently preclude adoption of an instream flow rule for the Spokane River.

RCW 90.03.247 grants the Department of Ecology exclusive authority to establish minimum flows. Minimum flows are established *"for the purposes of protecting fish, game, birds or other wildlife resources**, or** recreational or aesthetic values"* (RCW 90.22.010, emphasis added). Under 90.22 Ecology is not required to establish minimum flows for fish **and** recreational values or aesthetic values. The department has some discretion and leeway in the process.

RCW 90.54.020(3)(a) says "*streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values…. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served."* This doesn't mandate that minimum flows must be set for navigational flows or aesthetic values, it states that base flows necessary for preservation of these values be retained. In addition, new withdrawals shouldn't conflict with these values unless there is some clear overriding public interest at stake. If the department issues any new, junior water rights after the adoption of the rule, they will be conditioned to be interruptible (or fully mitigated) to comply with RCW 90.54.

Flows that serve the recreational community occur every year in the Spokane River. What varies from year-to-year is the timing and duration of those recreational flows. The instream flow rule does not control the hydrograph of the river. It does not require or control the release of water from storage. It is simply a tool used to notify junior water users when they have to turn off their use to protect the senior, instream flow. To change the actual flow in the river to better suit a particular recreational use, one would need to seek changes in Avista's FERC license, which does have control over water storage and ramping rates and the shape of the hydrograph (for parts of the year at least). The FERC licenses for Avista's dams were last re-issued in 2009.

Ecology considered the recreational, aesthetic, and navigational values arguments for protecting the Spokane River at multiple stages throughout the process which culminates in establishing these instream flows for the river. The subject was addressed in detail during Avista's FERC relicensing process for their Spokane hydroelectric facilities. The subject was addressed during the Watershed Planning process in all Spokane WRIAs. The subject was addressed during the comment period on the preliminary draft of this rule. And again, the subject came up during this comment period before final rule adoption. The department has read the Whitewater Paddling Study conducted under the FERC process, and listened to many river users. Ecology has reviewed the anecdotal observations, opinions, and photos submitted by whitewater enthusiasts and others.

The department has chosen not to establish instream flow values based on those recreational needs expressed during the FERC process or any other process including this comment period. The department regards the minimum permissible flow consistent with legislative intent as the lowest flow capable of protecting and preserving instream values, in this case native fish populations. Four independent scientific instream flow studies were conducted on the Spokane River to develop habitat curves that Ecology and the State Caucus used to derive its recommended instream flows. The method employed by Ecology and the Department of Fish and Wildlife to establish instream flows was affirmed by the State Supreme Court in: Supreme Court of Washington, En Banc.; State of Washington, Department of Ecology, Department of Fisheries and Department of Wildlife, Respondents, v. PUD No. 1 of Jefferson County and City of Tacoma, Department of Public Utilities, Appellants. No. 58272-6. April 1, 1993.

Choosing to not use sole recreational flow criteria to establish flows in an instream flow rule is different than not considering them. They were considered by the department and rejected as the primary basis for establishing instream flows. Ecology chose to use science-based fish studies to develop the instream flow values for the rule when the Watershed Planning unit failed to reach consensus about instream flow values during their process (RCW 90.82.080(5)). While they are based on fish habitat studies, the instream flow levels established in this rule will preserve wildlife, scenic, aesthetic, and other environmental values in the Spokane River, in accordance with RCW 90.54.020. Since the Legislature first adopted RCW 90.22 in 1969, Ecology has adopted numerous instream flow rules throughout the state. Fish based studies serve as the backbone of minimum instream flow rule values that have been adopted in the respective rules. Methodologies have changed over the decades and exceptions undoubtedly exist, but Ecology has confidence in its approach and has case law to validate its direction.

Commenter(s)

Aagaard, Ann 2, 3, 4, 5; American Whitewater 1, 2, 4, 15; Aqua Permanenté 3, 5; CELP/Sierra Club 2, 3, 4, 6, 16, 28, 33, 37, 40; Center for Environmental Law & Policy 4, H6, H13; Citizens' Alliance for Property Rights 1, 9; Dunphy, David 2, 3; Egesdal, Vicki 5; Enviroscience Group 1; Garvey, Lydia 2, 3; Gold, Raelene 7, 11; Goodner, Tom 3; Grider, Chuck 7; Ibbetson, Timothy 19, 21, 22, 23, 24, 26, 42, 43, 44, 45,

46, 47, 54, 55, 56, 57, 64, 70, 72, 73, 74, 78, 81; Idaho Conservation League 4; International Union for Conservation H2, H3; Laegreid, Peter 5; Lands Council (Peterson, Mike) 4; Law Offices of Andrea K Rodgers Harris 3, 11; League of Women Voters, Spokane 3, 7, 14, 20, 31; Mackrow, Paula 2, 5, 8, 9; MacLeod, Norman 8; May, Kimbo 11, 12, 13; McRoberts, James 3; Monthie, David 5; Morrison, Harvey H2; Nelson, Dan 5; NW Whitewater Association 6; Osborn, Cal 5; Out There Monthly 3, 4, 6; Paxson, M C 5; Peterson, Kerry 1, 6, 8; Pringle, Bruce 5; Sierra Club (Roberts, Lynda) 5; ROW Adventures 3, 9, 10, 11, 14, 16; Rust, Nancy 1; Schafer, Daniel 1; Scholtz, Allan T 1; Seifert, Lorelei 5; Sharar, Jan 2; Sierra Club (Andrew Martin) 5; Sierra Club (Coleman, Timothy) 2; Sierra Club (Donaldson, Jamie) 5; Sierra Club (Effler, Dean) 5; Sierra Club (Glover, Julia) 5; Sierra Club (Lanz, James) 5; Sierra Club (Lukos, Stravo) 5; Sierra Club (Milne, Linda) 5; Sierra Club (Osborn, John) 3, 4, 5, 7, H2, H3, H5; Sierra Club (Peterson, Terrance) 5; Sierra Club (Sendrey, Robert) 6; Sierra Club (Titon, Julie) 4; Silver Bow Fly Shop 4; Spokane Falls Chapter of Trout Unlimited 3, 7, 13, 14; Spokane Fly Fishers 2, 4; Spokane Riverkeeper 27, 28, 29, 30; Spokane Tribe 5; Systems Coaching LLC 11, 12, 15, 16; Townsell, John 1, 2, 6; WaterWatch of Oregon 5; Wilder, Stewart 1, 6;

Abandon Rulemaking

Comment 3
Many comments urged the agency to abandon rulemaking due to uncertainty about process, study adequacy, timing, or that it provides inadequate protection of various uses.

Response
Ecology disagrees. In 1969, the Legislature enacted a statute authorizing the establishment of minimum flows and levels for streams and lakes by a rule-making process. Under RCW 90.22.010 the law provides for such flows or levels to be set for the purposes of protecting fish, game, birds or other wildlife resources, or recreational or aesthetic values ... whenever it appears to be in the public interest to establish the same. Additional explicit authority is provided to establish minimum flows or levels to preserve water quality. The minimum flow setting process is also to be used to retain water in streams, lakes, or other public waters for stockwatering on riparian grazing lands “where such retention shall not result in unconscionable waste of public waters.” RCW 90.22.040.

Additional instream flow provisions were included in the Water Resources Act of 1971(WRA), Chapter 90.54 RCW. Among the fundamentals of water use and management declared in RCW 90.54.020 is a statement that: “Perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values. Lakes and ponds shall be retained substantially in their natural condition.” Ecology has implemented this fundamental policy through administrative rule-making, in chapter 173-500 WAC and those following.

Ecology believes it is in the public interest to establish a rule for the Spokane River, at the instream flow levels established in this rule. Without the rule, no legally binding level of instream flow protection will exist for the Spokane River. The instream flows were developed during watershed planning and presented to planning units in WRIA 55-57, 56, and 54 during and after deliberations of the planning unit over instream flows. All those planning unit meetings were widely advertised and attended by a broad interest group. This process has taken years. Ecology believes the rule development process meets any ethical criteria, and includes all studies needed to determine instream flow protection under RCW 90.22, or 90.54, or other applicable statutes or codes.

Abandonment of the work done to date is needlessly expensive, and would render the river unprotected for a significant time.

Commenter(s)
Peterson, Kerry 11; Reynolds, Carol 5; Sierra Club (Coleman, Timothy) 4, 6; Sierra Club (Roberts, Lynda) 8; Pringle, Bruce 8; Sierra Club (Donaldson, Jamie) 8; Sierra Club (Lanz, James) 8; Sierra Club (Sendrey, Robert) 8; Seifert, Lorelei 8; Paxson, M C 8; Sierra Club (Effler, Dean) 8; Sierra Club (Peterson, Terrance) 8; Sierra Club (Lukos, Stravo) 8; Sierra Club (Andrew Martin) 8; Sierra Club (Milne, Linda) 8; Spokane Fly Fishers 1; Townsell, John 1; Nelson, Dan 7; Sierra Club (Glover, Julia) 8; Laegreid, Peter 8; Clark, Jerry 1, 2, 7, 8; Wilder, Stewart 10; WaterWatch of Oregon 8, 9; Sharar, Jan 5; Sierra Club (Nixon, Shirley) 3; Kop Construction Co Inc 5; McRoberts, James 1; Aagaard, Ann 10; Center for Environmental Law & Policy 1, H4, H5, H16, H17; Sierra Club (Osborn, John) 22, 23, 24, H1, H10; Stevens County 3, 4; Spokane Falls Chapter of Trout Unlimited 16; Spokane Canoe & Kayak Club 9; Builder & Realtor Associations 11; Osborn, Cal 8; NW Whitewater Association 1, 7; American Whitewater 2; Aqua Permanenté 7; CELP/Sierra Club 1; Monthie, David 3, 4, 5, 6, 7, 8;

Sierra Club Members

Comment 4
Over 1,700 members of the Sierra Club submitted the following comment:

The Spokane River is one of Washington's most important rivers. During hot summer months, thousands of people turn to the river for relief and recreation. Fish and wildlife depend on this river: water is life.

Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers statewide. The Department of Ecology failed to analyze flows needed for recreational use of the river. The proposed flow does not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.

By low-balling the flow, Washington State is effectively giving away the river to Idaho the upstream state that will claim all water not protected by Washington's flow rule.

For the Spokane River, no flow rule is better than a bad rule. I ask that you either set the summertime low flow at the protective level of
2,500 cfs, or withdraw the rule altogether.

As goes the Spokane Rivers, so goes the other rivers of Washington State. Please take steps to protect this important river.

Commenter(s)
Sierra Club; See Appendix B on page 263 for the list of individuals that submitted this comment.

Response
Thank you for your comments. Ecology appreciates the interest shown in this rulemaking by concerned citizens across the state. Please see the responses to the following Comment 1, Comment 2, Comment 3, Comment 6, Comment 61, Comment 63, Comment 100, and Comment 108.

Specific Comment Responses

Fish and Wildlife

Comment 5
I have lived on the shore of the Spokane River for 20 years, just a few hundred feet downstream from the Monroe Street dam and Avista power station in downtown Spokane. I walk the river's edge nearly every day of the year. There are osprey in the Spring and Summer and bald eagles in the Fall and Winter, there are herons, kingfishers and many other species of birds, there are otters all year, and many other mammals that now use the river corridor as their primary habitat and food source, and there are the thousands of species of fish, reptiles, amphibians, insects, macroinvertebrates, plants, fungi, and algae that totally rely on the health of this riparian ecosystem, all of which is dependent on the quantity of water flow and the natural timing of that flow. Now you are faced with determining the fate of this ecosystem, which will be more unstable as climate temperatures continue to increase for decades to come.

The summer proposed flow will stress an already embattled wild, distinctive, trout population and force them to retreat into vulnerable concentrations in aquifer recharge areas.

It is also hard to believe that it would not harm the fish and wildlife that depend on the River for survival. I hope you will give serious consideration to my recommendation that the proposed rule be dramatically changed to save the River and address the interests of those who depend on it, including fish & wildlife.

Fish habitat and wildlife depend on this river and with low flows increased temperature and impacts on biological and ecological sustainability for life in the waters would be in jeopardy: water is life.

Fish, creatures of many shapes and sizes and wildlife depend on this river not only for their lives but the lives of their offspring.

Fish and wildlife depend on this river: water is life.

The river is a lifeline for wildlife in our region. I walk daily, year-round, by the Spokane River east of Minnehaha Rocks. I see deer along Upriver Drive - they depend on the river for their water. I also see deer swim the river early in the summer, headed for an alfalfa field nearly Felts Field Airport. It's not widely known, but beaver also use the river there. Every year, the resident bald eagles in that area raise young ones. In summer, they are ready to begin hunting. We often see them perched in the Ponderosas overlooking the river. You don't see trout in that stretch, but upstream you do.

Beyond the human constructs, there are matters of stewardship responsibilities for fish and wildlife who are voiceless in human decisions over their habitats.

Commenter(s)
Holmquist, Gunnar 1; Reynolds, Carol 3; Sierra Club (Roberts, Lynda) 3; Pringle, Bruce 3; Sierra Club (Donaldson, Jamie) 3; Sierra Club (Lanz, James) 3; Sierra Club (Sendrey, Robert) 2; Seifert,

Lorelei 3; May, Kimbo 2; Paxson, M C 3; Sierra Club (Effler, Dean) 3; Sierra Club (Peterson, Terrance) 3; Sierra Club (Lukos, Stravo) 3; Sierra Club (Andrew Martin) 3; Sierra Club (Milne, Linda) 3; Sierra Club (Glover, Julia) 3; Clark, Jerry 4, 7; Laegreid, Peter 3; Wilder, Stewart 4; WaterWatch of Oregon 3; Sierra Club (Lombard, Marny) 2, 4; Osborn, Cal 3; Sierra Club (Osborn, John) 11, 12, 17;

Response
RCW 90.54.020 of the Water Resources Act states that preserving base flows in rivers and streams is fundamental to managing Washington's waters and prohibits new consumptive uses of water that would interfere with those base flows. Maintaining base flows advances the public interest, and preserves habitat for many game and non-game species, thus increasing our quality of life and positively contributing to every facet of our community.

But information is not available for all species. At this time, for biota, there is a strong public interest and case law weighing in favor of protecting fish habitat. Ecology is authorized to refuse or condition a water permit if issuing the permit might result in lowering the flow of water in a stream below the flow necessary to adequately support food fish and game fish populations in the stream. (Richert v. Ecology, PCHB No. 90-158).

Ecology believes this flow rule, based as it is on four independent fish studies, is science-based. It has been vetted by top scientists, staff, and management of all concerned state agencies. It has been reviewed and analyzed by all local Water Resource Inventory Area Watershed planning groups. It is our opinion these flows are the best flows available to protect the instream resources of the Spokane River. They represent minimum flows necessary for stream health and ecological function. Please also see Response to Comment 1 for more information on the veracity of the flows set in this rule.

Comment 6
A summer flow of 850 cfs below Monroe Street is not sufficient for the redband trout which use the river for spawning - excuses to the contrary by Ecology are scientifically bogus.

Proposed summer season flows do not have a sound biological basis to protect redband trout, the Spokane River’s signature wild fish.

I recommend that fish studies be done and a flow selected that enhances the fisheries in the Spokane River especially the red band trout.

From a cultural resource standpoint, the Tribe is worried that the rule will not adequately protect redband trout habitat. The Tribe must try and protect all the resources necessary for the Tribe’s culture to continue. Redband trout are unique genetically and may very well be critical for the reintroduction of steelhead into the Upper Columbia Region. The continued protection and enhancement of any suitable redband trout habitat is critically important to the Tribe. To be blunt, more water left in the River will be better for the redband’s continued survival.

The fish studies are not tailored to the unique habitat of this river, nor to the needs of the red band trout species dependent on this special habitat.

The proposed minimum flow of 1000 cfs is below the minimums to sustain a healthy population of Native Red Band Trout.

Redband trout have a critical number, if you go above that, those trout populations will no longer exist there very much longer, especially in those low value temperatures.

The native Redband trout is a resource and contributor to biological diversity in this area.

I absolutely love fishing for trout and value the Redband trout as an indicator species in our river. But while it may seem counterintuitive, I believe the river is a large system, and we have to look at all of the pieces of that system, including the large scale suckers, vertebrates, and we may ultimately undo the food web that supports the Redband trout, I believe that to be true. The only other recommendation that I will make is that the springtime flow protecting Redband should be up around 8,000 cfs, which represents a 50 percent exceeds in the later end of June and that critical June 15th point. It's essential, of course as you know, that the flows don't go below 6,500 cfs any earlier than June 15 to protect those trout.

My concern is that the proposed instream flow of 850cfs is too low for our wild Redband fishery amongst other issues that it will create. When a river the size of the Spokane shrinks down to a dangerously low volume like 850cfs my biggest concern is that it will put added strain on the Redband trout. With low flows the amount of quality habitat is diminished substantially and the trout will be very confined. When the trout are confined into a smaller habitat they are more susceptible to angling pressure, poaching pressure, and natural predators such as osprey, eagles, and heron. "Like shooting fish in a barrel" would be a very appropriate idiom in this situation. Besides added strain from loss of habitat combined with higher angling pressure I feel that the fish would suffer from warmer water temps and less oxygen content in the water.

Lower flows would make the river even warmer which would be harmful to the fish including the redband trout.

It is necessary to direct fish studies to better address the unique habitat needs of the redband trout which is imperative to recovery of fish runs in the Upper Columbia River system.

The Dept of Ecology does not have sound biological basis to protect whats left of our wild fish run. We have already decimated the salmon runs from the river without much thought or caring. Dont allow this to happen yet again.

I am very concerned that the minimum flows will not be enough to sustain the Spokane River's fish population. The Spokane River is home to its own native Redband trout, which is already struggling due to the pressures of nonnative fish, pollution and development. Please alter the minimum flows. Even 1,000 cfs is too low. Protect our fish!

Nor does 850 cfs support biological criteria to protect and enhance habitat for redband trout, the Spokane River's signature wild fish.

As an avid fisherman and floater on the Spokane River, I am strongly against the decreased minimum flow on the Spokane River. As it stands, the flows already lead to fairly high summertime temperatures, which has an adverse effect on the native resident Redband trout populations.

There is not sound biological basis or study to protect the redband trout. It is a very special wild fish native to this water shed. We have for years tried our best to destroy their habitat and we have the ability to reverse this trend. They need more water!!!

I believe that the Department of Ecology is proposing summer season flows that do not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish and other resident fish.

Allowing the river level to drop as low as 850 cfs will definitely have an impact on the fish population. It will be very detrimental to the native redband trout along with all of the other fish species.

The summer and fall flows are justified based on several studies that were mentioned, so there are a couple of points I would like to make about that. First, I find this is an imperfect tool for determining appropriate flows in a river the size of the Spokane, especially through smaller labeled streams. The only data I hear is based on theoretical curves with some habitat data that was collected, and both curves don't reflect the actual habitat requirements for Redband trout in the river. Redband are very important species to protect the flows.

Spring Flows (April 1 – June 15) for ecological/recreational values: Spokane Riverkeeper recommends 8000cfs to protect redband trout spawning habitat. This is an exceedance between 70-80% at peak flows but ensures a 50% exceedance at the latter end (June 15th). It is essential that flows do not drop below 6500cfs any earlier than June 15th.

We also believe that the spring flow should be ramped up starting March 1st and extended until July 1st. This will benefit the Redband trout as they stage and spawn and assure that the fry have an opportunity to find refuge after they emerge from the spawning gravel.

The proposed flow does not have a sound biological basis to protect red-band trout, the Spokane River's signature wild fish.

I'm extremely concerned about the low flows proposed for summer; it's not nearly enough flows to support recreational boating's, healthy conditions for native redband trout.

The Department of Ecology is proposing summer season flows that will not clearly protect Redband Trout, the Spokane River's signature wild fish. The Spokane River must fully protect Redband Trout which would, in turn, prepare the river for returning anadromous salmon.

The proposed instream flows are based on a fisheries study method which is not particularly well-adapted for the Spokane River. To improve this method, the fisheries study should have utilized more site-specific data including "focal point data" for native species of interest, such as redband trout.

Commenter(s)

Peterson, Kerry 5; Soeldner, W Thomas 4; Systems Coaching LLC 4; Sierra Club (Roberts, Lynda) 6; Pringle, Bruce 6; Sierra Club (Donaldson, Jamie) 6; Sierra Club (Lanz, James) 6; Sierra Club (Sendrey, Robert) 5; Seifert, Lorelei 6; Paxson, M C 6; Sierra Club (Effler, Dean) 6; Sierra Club (Peterson, Terrance) 6; Sierra Club (Lukos, Stravo) 6; Sierra Club (Andrew Martin) 6; Sierra

Club (Milne, Linda) 6; Spokane Fly Fishers 3; Townsell, John 5; Nelson, Dan 3; Sierra Club (Glover, Julia) 6; Solberg, Steve 1, 2; Parks, Leonard 2; Cannata, Amy 1; Laegreid, Peter 6; Ostby, Bjorn 1, 2; Goodner, Tom 1; Wilder, Stewart 7; WaterWatch of Oregon 6; Enviroscience Group 2; Sharar, Jan 3; Bertsch, Roger 2; McRoberts, James 2; Aagaard, Ann 4, 5; Roast House (Bernardo, Deborah Di) 2; Grider, Chuck 6; Sierra Club (Titon, Julie) 5; Center for Environmental Law & Policy H6; Silver Bow Fly Shop 3; Croskey, Taylor H3; Spokane Riverkeeper 36; Spokane Falls Chapter of Trout Unlimited 11; Osborn, Cal 6; Mackrow, Paula 4; Mace, Samantha 2; Aqua Permanenté 1, 2; CELP/Sierra Club 28; Spokane Tribe 8;

Response
Ecology does not agree that the instream flow levels in this rule will harm Redband trout or other fish species in the Spokane River. Four instream flow studies have been conducted and made available on the Spokane River since 2003. These scientific studies were conducted specifically to evaluate the instream needs of the fisheries resources present in the river at all life states. These studies focused on resident Redband trout and whitefish. The instream flow numbers in the rule were derived from these studies and were chosen to optimize the weighted useable area of habitat to protect the instream resources.

The methodology used, which relates fish preferences for depth, velocity, and bed type at different life stages to how fast and deep the river is at different places at different flow levels, was described in detail and affirmed by the Washington Supreme Court in their 1993 Elkhorn decision (State of Washington, Department of Ecology, Department of Fisheries and Department of Wildlife, Respondents, v. PUD No. 1 of Jefferson County and City of Tacoma, Department of Public Utilities, Appellants. No. 58272-6. April 1, 1993). Additional, more detailed analysis of spawning and incubation habitat for Redband trout in relation to flow was conducted and incorporated into the instream flow, building on the methodology affirmed by the court.

The Addley and Peterson, 2011 study indicates that incubation in the Spokane River runs from late April thru early June (page 12, 19, 20). The June 16 cutoff for the spawning period is sufficient to protect fry emergence.

Please also see Response to Comment 1 for more information on the veracity of the flows set in this rule.

Comment 7
I'm dumbfounded that a river that once could support thousands of fish per mile and the return of salmon and steelhead is now a crippled fraction of what it used to be.

Commenter(s)
Banks, Aaron 7;

Response
Fish occurrence in the Spokane today is the result of many actions taken by many agents throughout the entire watershed through time. One of the purposes of this rule is to establish base flows necessary for the protection of fish in the river

Comment 8
These flows are too low and will not sustain a healthy habitat for native species of fish and wildlife.

I don't believe it meets the habitat needs for wildlife, not even the only two fish species that were considered.

The proposed rule fails to protect flows that are needed for fish.

It is also hard to believe that it would not harm the fish and wildlife that depend on the River for survival.

The state Caucus recommends a base flow of 1700cfs [winter flows] to prevent compromising whitefish spawning productivity. The Spokane Riverkeeper appreciates the attention to whitefish the historic flows tended to be much higher than this. There are 18 other native species of fish in the river and we have not calculated the WUA for any but O. Mykiss.

As drafted, the instream flow rule fails to protect instream flows deemed biologically necessary to support a thriving wild fish population.

The proposed flows do not adequately protect fish, and in particular, do not provide flows that will ensure healthy populations of listed species under the federal Endangered Species Act (ESA).

Commenter(s)
Spokane Riverkeeper 35; Law Offices of Andrea K Rodgers Harris 2; Monthie, David 4; Banks, Aaron 3; Center for Environmental Law & Policy 2; Egesdal, Vicki 3; Clark, Jerry 4;

Response
Ecology does not agree that the instream flow levels in this rule are too low to protect fish in the Spokane River. Four instream flow studies have been completed on the Spokane River since 2003. These scientific studies were conducted specifically to evaluate the instream needs at all life stages of the fisheries resources present in the river. The instream flow numbers in the rule were derived from these studies and were chosen to optimize the weighted useable area of habitat to protect the instream resources. This methodology was described in detail and affirmed by the Washington Supreme Court in their 1993 Elkhorn decision (State of Washington, Department of Ecology, Department of Fisheries and Department of Wildlife, Respondents, v. PUD No. 1 of Jefferson County and City of Tacoma, Department of Public Utilities, Appellants. No. 58272-6. April 1, 1993). There are no listed species in the Spokane River.

Please also see Response to Comment 1 for more information on the veracity of the flows set in this rule.

Comment 9
The Upper Columbia United Tribes (UCUT), comprised of the Coeur d'Alene Tribe, Colville Confederated Tribes, Kalispel Tribe, Kootenai Tribe of Idaho and the Spokane Tribe, are concerned about the proposed instream flow rules for a portion of the Spokane River proposed by the Washington State Department of Ecology (Ecology).

The UCUT and the Columbia Basin tribes, along with the Canadian First Nations are leading the effort to reintroduce anadromous fish and restore fish passage to all historical locations above Chief Joseph and Grand Coulee dams, including the Spokane River. There is broad support throughout the Columbia Basin for this action. The Columbia River Treaty U.S. Entity Regional Recommendation for the Future of the Columbia River Treaty after 2024 (pgs. 5-6, December 13, 2013; ATTACHMENT A) includes investigation of the feasibility of reintroduction. The Northwest Power and Conservation Council's 2014 Columbia River Basin Fish and Wildlife Program (pgs. 84-85, October 8, 2014; ATTACHMENT B) describes a science-based, phased approach to investigating the reintroduction of anadromous fish above Chief Joseph and Grand Coulee dams. Also, the City of Spokane unanimously passed Resolution 2014-0070 (ATTACHMENT C) expressing support for anadromous fish passage above Grand Coulee Dam that may result in reintroduction into their historical habitats that lie within the City of Spokane and throughout the Upper Columbia Region.

The UCUT is very concerned that Ecology's proposed rule for instream flows in the Spokane River does not include analysis of flow required for anadromous fish. The UCUT respectfully requests that the Ecology re-considers its proposed instream flow with respect to impacts to anadromous fish reintroduction. Ecology has pre-dam (before anadromous fish blockage) flow data that can be used to help determine anadromous fish needs.

The UCUT requests that Ecology include future instream flows for anadromous fish reintroduction - based on broad regional support for reintroduction contained in the Columbia River Treaty Regional Recommendation (12/13, 2013); the Northwest Power and Conservation Council 2014 Columbia River Basin Fish and Wildlife Program (10/8/14); and the City of Spokane Resolution #2014-0070 (7/7/14).

Furthermore, nothing in the flow analysis considered responding to the river flows needed to augment potential return of anadromous fish in the Spokane watershed.

I just left the conference on the Columbia River, and Ecology staff were there, including Randy Piper and Jim Maloti, so they are representing the agency talking – and discussions about the restoring of anadromous fish to the upper basins, but the protection of the Spokane River, it is not reflected in this rule. So we have the agency in one venue participating in those sorts of conversations, but it's not reflective in what the agency is doing as it relates to one of the most important tributary rivers to the Columbia, which is the Spokane.

The return of anadromous salmon and steelhead trout to the upper Columbia and Spokane River watersheds is a topic of much interest to SFTU and many other NGOs, agencies and tribes. Consideration of the spawning and rearing habitat suitable for the return of those fish should be included in the analysis to determine the protected minimum flows.

The Department of Ecology is proposing summer season flows that will not clearly protect Redband Trout, the Spokane River's signature wild fish. This is especially important as the Columbia River Treaty is renegotiated with the intention of many entities to return salmonids to all historic rivers. The Spokane River must fully protect Redband Trout which would, in turn, prepare the river for returning anadromous salmon.

The Spokane River once harbored important Chinook and steelhead runs. Professor Allan Scholz of the Biology Department at Eastern Washington University has estimated historic salmon harvest

and consumption from the Spokane River. Columbia Basin Tribes and First Nations have begun to study the potential for fish passage. The two federal agencies with the greatest control over the U.S. portion of the Columbia River have recommended that fish passage be studied as part of the Columbia River Treaty re-negotiation. The Northwest Power & Conservation Council's Fish & Wildlife Program is also calling for study of fish passage and restoration of salmon to major tributaries above Grand Coulee Dam. The Spokane City Council has issued a resolution supporting re-introduction of salmon into the Spokane River.

The current flow study also says nothing about the inanimate species that will being returning to the Spokane at some point in the future. It won't be in our lifetime, but we should be thinking about our children and grandchildren when we adopt this rule.

STFU is also concerned that at 850 cfs, the native fish will be forced into smaller refuges where they will be overly concentrated in competing for food and shelter. Also, during those times of stressful concentration, due to low water, high temperatures and limited food, they are more apt to be vulnerable to predation and over fishing.

Lower flows would stress fish, force them into smaller pool areas and be detrimental to their health.

As the flows drop below 2500 cfs, the rocks emerge, pools are created and isolated. Fishing, however, doesn't change much, presumably because the fish become easier to catch as they are crowded into smaller spaces – something I worry about.

Commenter(s)
Upper Columbia United Tribes 1, 2; Morrison, Harvey H7; Sierra Club (Osborn, John) H6, H7; Spokane Falls Chapter of Trout Unlimited 5, 6; Aqua Permanenté 1, 2; CELP/Sierra Club 32; Center for Environmental Law & Policy H7; Pascal Osborn, Rachael 5; ROW Adventures 13;

Response
Ecology believes the flows proposed in this rule, based as they are on four independent fish studies, are science-based. The proposed flows have been vetted by top scientists, staff, and management of all concerned state government agencies. It has been reviewed and analyzed by all local Water Resource Inventory Area Watershed planning groups. Since these flows were first proposed to the planning unit, no entity has emerged with scientific information to indicate these flows are not appropriate. It is our opinion these flows are the best flows available to protect the minimum instream resources of the Spokane River. They are flows necessary for stream health and ecological function.

Ecology appreciates the growing support for reintroduction of anadromous species in the Spokane River. We recognize studies and negotiations to achieve this goal will take some time. Ecology met with staff of the Spokane Tribal Natural Resources Department on two occasions. Specific language was added to the rule to address the Tribe's concerns regarding re-opening and re-evaluating the instream flows in the rule in the event that conditions change within the watershed to allow anadromous species to be reintroduced in the Spokane River. Until that time, these flows are protective of the public resource and set consistent with science and the law.

Please also see Response to Comment 1 for more information on the veracity of the flows set in this rule.

Comment 10
We also support the WA. State Dept. of Fish and Game that the minimum flows meet the fisheries and habitat needs.

Commenter(s)
Backcountry Hunters and Anglers 3;

Response
Thank you for your comment.

Comment 11
Documents from your own department (Spokane River Geographic Response Plan) refer to an August/September base flow of approximately 1,750 cfs.

Commenter(s)
Sierra Club (Lombard, Marny) 6;

Response
The 1,750 cfs number in the Geographic Response Plan refers to the 60 day average flow for the Spokane River for the August through September time period. It is not an instream flow recommendation.

Comment 12
River flows of 850 cfs will lead to increased water temperatures that in all probability could lead to the death of cold water fish and environmental damage to other aquatic species (bugs, amphibians, etc.).

Please increase the summertime flow to 2500 feet per second not only for the aesthetic value but also for fish & other aquatic life that depend on adequate amounts of cool water.

The flow proposed will cause water in much of the river to experience a drastically warmer temperature than nature intended. Fish without access to recharge areas will be threatened and invasive, warm water species will get an unintended benefit. I have personally experienced this trend with the current flows and it is alarming.

As it stands, the flows already lead to fairly high summertime temperatures, which has an adverse effect on the native resident Redband trout populations. Hey minimum flow of 850 CFS would lead to even higher temperatures, a greater concentration of fish in less holding water, and a waterway that becomes very difficult to navigate. For the benefit of the fish in the river and for the users of the river I am urging you to think twice about decreasing the minimum flow of the Spokane River.

I'm a guide for the Silver Bow Fly Shop, as well a graduate student in fisheries at Eastern Washington University. I think one thing that someone hasn't touched on is the temperature, temperature being a very dependent thing on trout populations and other things. That 850 flow

value you're proposing, if that temperature increases, the population in the last five years in the upper section of the river has dropped drastically.

I think with climate change and everything else, that temperature value is going to be the biggest deterrent factor in the trout populations, and you proposed an 850 flow value, that temperature will increase substantially, and those populations in the upper river, especially much of the aquifer, will have a large an impact on that. And Redband trout have a critical number, if you go above that, those trout populations will no longer exist there very much longer, especially in those low value temperatures.

In the face of climate change, which is also not addressed in this rule, the importance of this cold water and the health of the system is critically important as we look at rising temperatures and the threat of fish populations in the basin.

Commenter(s)
Sierra Club (Coleman, Timothy) 3; Darilek, Marilyn 2; May, Kimbo 3; Ostby, Bjorn 2, 3; Sierra Club (Osborn, John) H8; Croskey, Taylor H1, H2, H3;

Response
Temperature in the river is a complex issue, and at this time there is not sufficient data to permit any specific conclusions about habitat. Several studies and ambient measurements permit the following discussion of observations.

In the upper, perched reach of the river, data gathered as a requirement of the FERC license indicate maximum summer temperatures approach that of Lake Coeur d'Alene at discharge from Post Falls, and then are further warmed by the sun and ambient air temperature. Once these discharged flows reach the point where the aquifer begins discharging to the river near Sullivan Bridge, temperature effects moderate and cool due to that contribution of cool groundwater.

In the lower river, data is scarce. The observed conditions show increased temperatures in the summer relative to the winter. Over a year's time, it seems to vary between a minimum of 3° and a maximum of 20° C. In this reach which gains roughly 300 cfs from the aquifer, logically, lower flows should actually result in a cooler river, as a larger proportion of the total flow will be cool groundwater. Actual conditions will be highly variable both diurnally and by specific reach.

Thus, while there is limited lower river data specific to the question, there is enough knowledge and measurements in the upper river to alleviate major temperature concerns.

Comment 13
I will submit to you that higher flows that are necessary for boating, particularly in that ridge below the Upriver Dam, will not hurt fish. The fish are doing fine out there with the higher flows that exist now.

More water left in the River will be better for the redband's continued survival. This is supported by the WDFW's observation that the IFIM study is important, but more water in the River will certainly not have a negative impact on fish within the portion of the River regulated by this rule.

Summer flow of 850 cfs as proposed is a compromise of the lowest suitable flow for whitefish and trout. We believe that it is broadly held in the scientific community that higher flows would not be detrimental, and likely beneficial, to those 2 species.

Further, the WDFW biologist has acknowledged that higher flow regimes would not pose a detriment to fisheries. This makes sense given that summer season flows are now approximately 1,000 cfs less than they were historically.

Commenter(s)
Center for Environmental Law & Policy H10; Spokane Tribe 9; Spokane Falls Chapter of Trout Unlimited 4; CELP/Sierra Club 31;

Response
The instream flow rule does not require or control the release of water from storage. Instream flow numbers are set to condition new, junior water rights to make them interruptible to the senior, instream flow right established in the rule. They do not change the hydrograph of the river nor do they give anything away to over-consumption. They represent minimum instream flows. Higher flows, if desirable, may be achieved by local interests, and are not prohibited by this rule.

Ecosystem

Comment 14
We can, however, identify several key elements that surely affect the Spokane River and create a degree of uncertainty as to its future health and safety.

- The amount of water flowing in the river is an essential component of river health.
- Making adequate flow recommendations is essential to the future maintenance of healthy ecosystems and the future of community connection to the river through recreation.

Commenter(s)
Spokane Riverkeeper 5;

Response
Thank you for your comment. Please also see Response to Comment 1 for more information on the veracity of the flows set in this rule.

Comment 15
I know the Spokane River is a critical ecological resource. Sandra Postel and Brian Richter have said it well in their book “Rivers for Life – Managing Water for People and Nature”:

“We need and value rivers for a host of reasons – some spiritual, some aesthetic, some practical. Yet only recently has scientific understanding of what constitutes a healthy river enabled us to grasp just how critical intact rivers are to the functioning of the natural world around us. Rivers are more than conduits for water. They are complex systems that do complicated work. They include not just the water flowing in their channels, but the food webs and nutrient cycles that operate within their beds and banks, the pools and wetlands that form on their floodplains, the sediment

loads they carry, the rich deltas they form near their terminus, and even parts of the coastal or inland seas into which they empty. Along with their physical structures, river systems include countless plant and animal species that together keep them healthy and functioning."

Commenter(s)
Pascal Osborn, Rachael 9;

Response
Thank you for your comment.

Comment 16
Please adopt an in-stream flow rule that ensures healthy fish (particularly redband trout) populations.

The flow level should be greatly increased to make sure that habitat for various species, especially fish, is sufficient for a healthy population.

It will also allow more water borne invertebrate habitat.

Thank you for in advance for reconsidering your flow proposal in light of recent developments on reintroduction of anadromous fish into the Spokane River. The UCUT extends our support for establishing a healthy instream flow that protects ecosystem-function, including anadromous fish reintroduction in the Spokane River. We look forward to collaboratively working with Ecology towards our mutually beneficial goals and objectives.

In setting the proposed optimal minimum flows, Redband trout and white fish were the narrow focus of attention. I appreciate this focus, as these are the only two species of fish native to the river. However, there are 300 species of fish, and beyond those, species of invertebrates that make the Spokane River eco system. Any science-based flow policy needs to consider the impacts of all of these aquatic species, as well as the land-based wildlife dependent on a healthy river environment.

I think we need to regulate flows for the entire eco system, rather than simply mountain white fish and Redband trout, which is -- I never thought I would hear myself say that. I absolutely love fishing for trout and value the Redband trout as an indicator species in our river. But while it may seem counterintuitive, I believe the river is a large system, and we have to look at all of the pieces of that system, including the large scale suckers, vertebrates, and we may ultimately undo the food web that supports the Redband trout, I believe that to be true.

Insects and plants need more river habitat to survive and stabilize their populations, not less.

Regulate flows for the entire ecosystem: The fisheries science that suggests that a low flow of 850cfs is a good compromise between optimal mountain whitefish and redband trout habitat quality and quantity (WUA - Weighted Usable Area) is suspect. Washington Caucus/WDFW have reported that flows that are optimal for redbands reach their maximum at 1900cfs (Beecher, 2009). That higher summer flows are not optimal for mountain whitefish may be a red hearing that detracts from setting flows which are more protective of the entire system including the other 18 species of native fish reported to live in the Spokane River. To make low flow recommendations

on the basis of seasonal whitefish WUA is reductionist, compromises the principal of “do no harm” by allowing the baseline low flows become dangerously low and potentially compromising a larger ecosystem in the long term. It also contributes to the continued tilt towards prioritizing Spokane River Aquifer water to over-consumption rather than conserving ground water for the sustainable stewardship of the Spokane River, ecosystem health and future generations of recreationists.

Commenter(s)
Rush, Richard 1; Struck, Fred 2; May, Kimbo 9; Morrison, Harvey H6; Spokane Riverkeeper 19, H9; Upper Columbia United Tribes 3; McKay, Mariah 3;

Response
Ecology and WDFW considered broader ecological values and the full range of species in the Spokane River before choosing to focus on redband trout and whitefish for developing instream flow levels. Four instream flow studies have been published on the Spokane River since 2003. These scientific studies were conducted specifically to evaluate the instream needs at all life states of the fisheries resources present in the river. The instream flow numbers in the rule were derived from these studies and were chosen to optimize the weighted useable area of habitat to protect the instream resources. This methodology was described in detail and affirmed by the Washington Supreme Court in their 1993 Elkhorn decision (State of Washington, Department of Ecology, Department of Fisheries and Department of Wildlife, Respondents, v. PUD No. 1 of Jefferson County and City of Tacoma, Department of Public Utilities, Appellants. No. 58272-6. April 1, 1993).

The instream flow numbers in the rule were set specifically to protect the instream resources that are present in the Spokane River. There is a specific section in the rule (WAC 173-557-100) to facilitate the review of the instream flow numbers at any point in the future if anadromous fish return to the Spokane River.

Please also see Response to Comment 1 for more information on the veracity of the flows set in this rule.

Comment 17
The Department of Fish & Wildlife has participated in both the watershed planning process for the Upper and Lower Spokane River and the federal re-licensing of Avista's Spokane River hydroelectric project. The leaders and coordinators of the state and federal processes are to be commended for sharing resources resulting in efficient and a detailed analysis of the full effects on Spokane river fish. Thus, we have more information than most watersheds have had as a basis for a proposed instream flow. In developing flow recommendations that have been incorporated in the proposed rule, the Department of Fish & Wildlife sought to protect habitat for the most sensitive fishes in the river, considering all life stages, their seasonality and variability, and how the past century of flows has affected fish habitat.

Commenter(s)
WDFW H2;

Response
Thank you for your comment.

Comment 18
In addition to instream flow studies by Northwest Hydraulic Consultants and Hardin-Davis, EES Consulting, Natalie M. Peterson, and Parametrix, evaluation of options included important insight from Spokane County, Avista, Idaho Fish & Game, Ecology staff, and the Department of Fish & Wildlife Spokane -- Spokane office.

Commenter(s)
WDFW H3;

Response
Thank you for your comment.

Recreation

Comment 19
I have learned a great deal in the past several months since this issue was brought to our attention. Among those lessons is a basic understanding of Washington State law, specifically, the Minimum Flow Act and Water Resources Act, which require protection of recreational and navigational use of Washington's rivers.

Commenter(s)
NW Whitewater Association 9;

Response
The act you cite works together with other authorities. RCW 90.03.247 grants the Department of Ecology exclusive authority to establish minimum flows. Minimum flows are established *"for the purposes of protecting fish, game, birds or other wildlife resources**, or** recreational or aesthetic values"* (RCW 90.22.010, emphasis added). Under 90.22 Ecology is not required to establish minimum flows for fish **and** recreational values or aesthetic values. The department has some discretion and leeway in the process.

RCW 90.54.020(3)(a) says "*streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values…. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served."* This doesn't mandate that minimum flows must be set for navigational flows or aesthetic values, it states that base flows necessary for preservation of these values be retained. In addition, new withdrawals shouldn't conflict with these values unless there is some clear overriding public interest at stake. If the department issues any new, junior water rights after the adoption of the rule, they will be conditioned to be interruptible (or fully mitigated) to comply with RCW 90.54.

Comment 20
My company, ROW Adventures, has a downtown Spokane location that we established in order to offer float trips on the Spokane River. For the past seven years we have been taking

between 1200-2000 people on the river each season. We are one of roughly five businesses that depend on good flows in the Spokane River.

In the years that we have been running trips and tours on the Spokane River, we have enjoyed the spring run off with flows as high as 25,000 cfs. We have had a few years when flows did not drop below 3000 cfs until mid-July or even later. These years in particular have been great for business as they allow us to continue taking our guests through Riverside State Park and the thrilling rapids of the Bowl and Pitcher and the Devil's Toenail.

Commenter(s)
ROW Adventures 1;

Response
Thank you for your comment. The proposed instream flow will not control the operation of the river. Flows that serve the recreational community occur every year in the Spokane River. What varies from year-to-year is the timing and duration of those recreational flows. The instream flow rule is simply a tool used to notify junior water users when they have to turn off their use, or to determine the amount of mitigation needed, to protect the senior, instream flow. See also the responses to Comment 1 and Comment 75.

Comment 21
Instream flow needs for recreation and navigation have been evaluated for the Spokane River in the past. In 2003, American Whitewater worked with Avista to evaluate the impacts of its hydropower project operations on instream flows in the Spokane River. As part of that process, we conducted a recreational flow study using standard methodology. This study found that whitewater boating opportunities on the Spokane River occur year round and that river running opportunities exist at flows of approximately 1,500 cfs and greater.

Of 21 participants in this study, 11 considered 1,500 the minimum flow, and the majority preferred higher flows (median 4,000 cfs). Study participants estimated the lowest navigable flow at approximately 1,350 cfs. While some hard-shell kayakers indicated that they could navigate the reach at lower flows, they also indicated that these flows were less than optimal for recreation.

Study participants generally preferred the 2,500 cfs study flow for play paddling and safety, but indicated that boatable flows extend well above the study flows. In light of this, it is clear that an instream flow of 850 cfs for the period of June 16th to September 30th, as proposed for WAC 173-557-050, is inadequate.

In November of 2014, American Whitewater conducted an online survey of boaters who kayak, canoe, and raft the Spokane River. In the 5 days that we collected data for this survey, 70 individuals responded. Of those, 59% recreate more than 20 days a year on the Spokane River and 56% have more than 10 years of experience paddling on the Spokane River. The preliminary results show that acceptable flows ranged from 1,500 cfs to 15,000 cfs, with 5,000 cfs as the optimal flow. Note, however, that these are averages for all water

craft and we expect that a more detailed analysis by the DOE would reveal that rafts require additional flow.

Avista Corp. undertook a whitewater flow study in 2004 that Ecology could have used to evaluate flows.

American Whitewater recently conducted a Spokane River recreational flow survey and received more than 70 responses.

The Centennial Trail runs for 37 miles adjacent to the Spokane River, from Deep Creek to the state line. Even limited car counter data at parking lots shows that the trail facilitates an enormous amount of non- motorized enjoyment of the Spokane River. The Spokane River also runs through Riverside State Park, one of Washington's largest parks.

Commenter(s)
American Whitewater 5, 6, 7, 8, 9; CELP/Sierra Club 34, 35;

Response
See response to Comment 1. The department considered the recreational, aesthetic, and navigational values arguments for protecting the Spokane River at multiple stages throughout the process which concludes in establishing these instream flows for the river. The subject, as you indicate, was addressed in detail during Avista's FERC relicensing process for their Spokane hydroelectric facilities. (Berger, 2004) Ecology has read the Whitewater Paddling Study conducted under the FERC process, listened to many river users, and reviewed the anecdotal observations, opinions, and photos submitted by whitewater enthusiasts and others.

The department has chosen not to establish instream flow values based solely on those recreational needs expressed during the FERC process and other processes. Choosing to not to solely use recreational flow criteria to establish flows in an instream flow rule is different than not considering them. They were considered by the department and rejected as the primary basis for establishing instream flows. Ecology chose to use science-based fish studies to develop the instream flow values for the rule when the Watershed Planning unit failed to reach consensus about instream flow values during their process (RCW 90.82.080(5)). The department regards the minimum permissible flow consistent with legislative intent as the lowest flow capable of protecting and preserving instream values, in this case native fish populations.

Comment 22
I disagree with the proposed minimum instream flow for the Spokane River. It is not acceptable for recreational use

850 cfs during the summertime is not enough water for the future of a fishable, swimmable, boatable Spokane River.

I do not believe 850 cfs in the Spokane River during the summer is sufficient for river health, recreation, or fishing. In the summer I often float the Spokane River in my spare time, and do not believe 850 cfs is adequate for this either.

The proposed minimum flow of 1000 cfs is insufficient to permit recreational water sports.

I've run the river somewhere in the neighborhood of 400 times, I think, far less than my friend Pat Harbine, but he's just a tad bit older than I am. I've run the river from as high as 40,000 cubic feet per second down to probably about what the suggested 850 flow is, and knowing that 850 flow, I can speak for myself, and I know the members of our white water club will be -- are definitely opposed to the implementation of that minimal flow that you're talking right now, and it just doesn't -- it doesn't work.

Many river-based recreation activities that are exploding, like SUP river surfing, guided rafting and floating trips, and SUP river running, require higher flows that need to be taken into consideration. 850 cfs is a non-starter for outdoor recreation and the businesses this growing segment of our local economy supports.

I am writing about the proposed minimum river flows for the Spokane River. My cousin fishes and plays on the Spokane regularly but says that this proposal would eliminate his ability to navigate the river in his boat. I too have floated the Spokane and found flows under 2000cfs to be hazardous to my equipment and simply no fun. 2500cfs is the minimum fun level where my equipment and safe navigability make the trip relaxed and enjoyable. The proposed flow of 850cfs is dysfunctional for boating and unacceptable. I would like my children to enjoy the beauty of the Spokane River when they are old enough to do so safely. Warm summertime flows at 2500 cfs make boating the Spokane River a family friendly recreational activity.

I feel like the proposed plan would be very detrimental to the entire whitewater community, and could potentially ruin one of the greatest assets we have in this region which is right in our back yard.

Nor does such a low flow allow for the river's popular recreational use by boaters, paddlers, and floaters.

Additionally my wife, Diane, and I have canoed on the Spokane River a number of times. We have canoed in June at 10,000 cfs and had a wonderful and challenging experience. Now I see by early June the minimum flow will 1,000 cfs or less for the remainder of the season. June and July are the prime months for enjoying the Spokane River in canoes, rafts and kayaks. ;

I ask you not to degrade the recreational value of the Spokane River; let the river flow freely at its historical levels.

I have enjoyed kayaking the Spokane river for the past 3 years. In fact a group of my kayaking friends and I run it 4 -5 times a week during the summer! We also make a point to pick up garbage and do other things like cover graffiti to help keep our river beautiful. If there's no water in the river, there's no kayaking to be had, which will make us VERY sad little paddlers!

Those flows are too low to boat in the Spokane River.

Particularly in the summer, the River is an important recreational attraction not only to people of the area, but also many visitors who contribute to the economy. Such a low flow level would interfere with the enjoyment of those who find it a source of relief and recreation.

I am the rafting coordinator for Peak 7 Adventures. Our goal is to provide experiences for youth labeled 'at-risk' that will challenge them to realize their greater potential. Our main rafting season is April through the first week of June, but we also provide float trips and canoe trips on the Little Spokane River through August. As you plan for the future, please consider our programs: if the water level of the Spokane River drops below 2,000 cfs in the summer months, we will not be able to serve the youth of Spokane via our water activities.

So excellent fishing, interesting scenery and rapids for fine boating and deep holes and public access for swimming -- please provide more than a trickle of water in the summer to support this recreation.

The proposed instream flow minimums are too low to support river recreation during the summer months.

The low flow can actually be more dangerous than a higher flow. This is because the rock structure along much of the river includes basalt and well worn boulders. This river is one of the most slippery anywhere I have been and I have stood in many. Most casual, recreational floating is done in flimsy water craft and inner tubes. Many of these people do not wear appropriate footwear to deal with the slippery rock or sharp basalt. The low flow exposes more large rocks (which I have observed wrapping canoes and rafts and popping flimsy craft) and shallow, un-floatable sections. This leaves people slipping and falling in the rocks.

These flows are too low for the many uses of the river in summer months. Boaters and floaters use this river a lot in the summer.

The flow level that the Department of Ecology has chosen does not permit adequate water for safe recreational use through the Bowl & Pitcher and Devil's Toenail rapids in Riverside state park.

The proposals also do not protect recreational and navigational use of the rivers, as required by law, RCW 9.54.020, Section 3 is pretty clear, that we've got to look at those uses.

I'm a kayaker. I've been boating the Upper Spokane River since 1965, so I know the river well, and I'm representing the Spokane Canoe and Kayak Club. Two of the issues that we've fought for the hardest over the past two years is access to the river, which shrinks each time someone puts up a private property sign, and the other is instream flow. And I understand that the instream flow is set at 1,100 cfs.

The section I'm most concerned about is the most popular section from Arthur Road to Sullivan Road, and in that particular section, 650 cfs is most of the aquifer, so it's an area where you need at least 1,200 cfs of water to successfully run the river between the two bridges.

We did a study with Avista several years ago with a number of kayakers and rafters, and they pretty well gave the idea to Avista that the instream flow should be 1,500 cfs. We know that August and -- July and August are low months and probably can't be met. They compromised with 750 cfs through those summer months, which means somebody in a boat can go out and play on the beach and on the river, but you can't boat through the rapids, and this excludes kayakers, rafters, inner tubers, and if you drop lower than the 500 cfs, there's no river at all.

I'm particularly concerned about not only the instream flow of which would be around 500 cfs, but also the length of time, because as I read the information put out, it says that this will be from June until September, four months out of the year, and the four most popular summer months. And I would like to see the instream flow starting point be higher than 500 cfs because they think it's not enough, not enough for kayakers.

I'm a whitewater kayaker and have been a board member of the Spokane Canoe & Kayak Club since 2006. SCKC consists of 160 families who enjoy self propelled water sports. We educate, mentor paddlers of all kinds. Having experienced boaters on the water show others how to dress and behave on the water. Many people get on the Spokane River to enjoy themselves and cool off from hot temperatures. Lower flow levels are more technical and dangerous for people who don't know any better.

I'm attaching some fun photos of people enjoying the Lower Spokane River at around 1200 cfs. This flow is extremely technical and only experienced hardshell kayakers can enjoy this level, which leaves out lots of people who cannot enjoy the river unless flows are more like 2500 - 3000 cfs.

850 cfs flow from June15 to September 30 is an unacceptable flow and extremely dangerous one for some. By reducing flows to 850 cvs DOE is taking the recreation aspect out of the equation. Safe boating flows for everyone is around 2500 cfs.

A flow of 850 cfs is completely laughable, for boating. Our organization spends upwards to 300 or more river user days each year as we conduct regular weekly floats involving multiple boats from May through July each year. This restrictive flow will certainly curtail this activity.

Specified cfs are too low to support recreational use of the river to canoes, kayaks, paddle boards and inflatable watercraft. 1200 cfs would open approximately 12 river miles between State Line on the east to Plante's Ferry Park to the west to paddlecraft during the prime summertime river running season, an addition of 107 days. Tens of thousands of "on-water" recreational hours would be gained as a result "opening" the river in the time of the year when temperatures are at their hottest and daylight hours their longest.

The Spokane Canoe & Kayak Club supports the concept of establishing instream flow levels necessary to protect wildlife, fish, scenic, aesthetic, recreational values, etc. as stated in the proposal.

Commenter(s)
Egesdal, Vicki 1; FLOW Adventures 1; Lawrence, Christopher 2; Soeldner, W Thomas 5; Systems Coaching LLC 5; Schultz, Jule 3; May, Kimbo 4, 7; Fair, John 1; White, Jerry 3; Peak 7 Adventures 1; Clark, Jerry 3; Moore, Kari 2; Bertsch, Roger 3; Reed, Jake 4; Cornelius, Scotty 2; Grider, Chuck 1, 2, 3; Out There Monthly 4, 7; Lands Council (Parrish, Amanda) 1, 3; Center for Environmental Law & Policy H9; Spokane Canoe & Kayak Club 1, 3, 4, 6, 7, 8, 10, H1; NW Whitewater Association 4, 8, H1;

Response
Flows that serve the recreational community occur every year in the Spokane River. What varies from year-to-year is the timing and duration of those recreational flows. The instream flow rule does not control the hydrograph of the river. Recreational flows were studied in the Avista FERC

relicensing process. Ecology does not agree that the instream flow levels adopted are too low to protect instream resources in the Spokane River or to preclude recreational uses. Also see the responses to Comment 1 and Comment 61.

Comment 23
The fishing and boating is a special quality of life asset for our town that is generating economic and civic benefits by making our city an attractive and special place to live. I urge Dept. of Ecology to change direction and advocate for flows much, much higher, based on enhancing our native fish populations and benefiting recreation activities.

Commenter(s)
Mace, Samantha 7, 8;

Response
Ecology only has the authority to enhance the natural environment, including the values you list, “where possible” (RCW 90.54.020(3)). In adopting this rule, Ecology did not deem it possible to set flows at enhancement levels and instead set flows necessary to preserve and protect environmental values consistent with its authority and case law.

Comment 24
The state should consider the thousands of pristine river miles available to us yet we offer residents one "blue ribbon" fishing experience.

Commenter(s)
Banks, Aaron 8;

Response
Thank you for your comment.

Comment 25
I am a rafter and help organize the Upriver Scrub held on the last Saturday of September. Vollunteers take their rafts on the river picking up garbage and other debris. See attached photo. At the proposed flows we wouldn't be able to put boats on the water.

Commenter(s)
Egesdal, Vicki 4;

Response
Typically, flows are raised during that time of year by Avista, through release from Coeur d’Alene Lake in compliance with their FERC license governing river operations. Nothing in this rule will change that.

Comment 26
WA. State chapter of Backcountry Hunters and Anglers(BHA) work across the state of WA. to pass on opportunities for solitude, physical challenge and healthy populations of fish and wildlife. We focus on responsible access to public lands and waters.

Commenter(s)
Backcountry Hunters and Anglers 1;

Response
Providing access to public lands and waters is beyond Ecology's authority and the scope of this rule. Other laws, agencies, and organizations have responsibility for addressing access to public lands and waters.

Comment 27
I had the pleasure of rafting the Spokane River twice this summer for the first time in years. The first trip was at the end of June. With water levels dropping, ours was to be the last trip on that stretch of the river for the summer. This despite the fact that there were two more months of hot summer weather ahead of us.

The second was with my entire family just two weeks later. We rafted a stretch closer to town but even then the river was so low the outfitters were not sure how much longer they would be able to safely float the river.

I was happy to hear that the Department of Ecology is working on Instream Flow Rules to ensure enough water to keep the Spokane River a raftable, swimmable, fishable river year round. Unfortunately, the recommended summer level will be below where it was when I was on the river this year, meaning that it will not keep the Spokane River raftable.

Please reconsider the flow rates to protect the future of our river.

Use seems to be ever increasing too. More river users are utilizing the river outside of the summer months. Part of the draw has been the realization that this recreational resource is not a long drive away and is beautiful in the river corridor! This has both positive and negative impacts. Lots of users means more people begin to appreciate and share concern for keeping it clean and useful. It also means people who do not always share those feelings may create more trash.

Either way the low flow can actually be more dangerous than a higher flow. This is because the rock structure along much of the river includes basalt and well worn boulders. This river is one of the most slippery anywhere I have been and I have stood in many. Most casual, recreational floating is done in flimsy water craft and inner tubes. Many of these people do not wear appropriate footwear to deal with the slippery rock or sharp basalt. The low flow exposes more large rocks (which I have observed wrapping canoes and rafts and popping flimsy craft) and shallow, un-floatable sections. This leaves people slipping and falling in the rocks.

Abandoned and damaged craft litter the shoreline and depths as flows change. Beverage, containers and coolers are also abandoned as survival takes precedence. Footwear and beer cans are the top items found littered in the river way. While this is a human problem it is not going away. Some of it can be mitigated by a higher flow which will leave more obvious routes.

Commenter(s)
May, Kimbo 5, 6, 7, 8; Gallaher, Pam 1;

Response
Thank you for your comment, please see Comment 22. The instream flow rule cannot change river operations.

Comment 28
Please adopt an in-stream flow rule that provides year-round recreational opportunities.

As a regular user of the Spokane River it is imperative that river flows are determined by fisheries requirements and recreational users.

Commenter(s)
Backcountry Hunters and Anglers 4; Rush, Richard 2;

Response
Flows that serve the recreational community occur every year in the Spokane River. What varies from year-to-year is the timing and duration of those recreational flows. The instream flow rule cannot change the hydrograph or control river operations. The proposed instream flows are protective of fisheries uses. While the instream flow levels are based on fish studies, they also ensure flow in the river for preservation of other instream values, including scenic, aesthetic and navigational values.

Aesthetic Concerns

Comment 29
It also does not supply enough water for the aesthetic views of those using one of our largest state parks and Spokane's water jewel.

I feel the absolute lowest flow would be 1,000 CFS, I would like to see 2,500 CFS. I feel that lower flow levels would have an impact on residences and visitor’s perception of Spokane.

The proposed flows do not offer acceptable aesthetics.

The scenic beauty of the River is degraded when flows are lower than 2000 cfs.

Aesthetically, the river looks healthier when flows are higher than 2500cfs and we routinely refer people traveling through to go and check out the river and it's magnificent falls as one of the cities main attractions. Not something you can or want to recommend at 850cfs.

There appears to have been little or no consideration of the scenic and aesthetic values of the river flowing through an urban area. I walk along the river regularly and now that flows as low as 100

cfs dramatically and negatively affect the natural beauty of the river, exposing boulders, rocky shores, and sand banks.

We had several groups of out-of-state visitors this summer - all of them commented on the intrinsic value of the river to our city and surrounding communities.

The flows also do not protect the aesthetics of the river.

I am disturbed by the proposal for such low minimum flows for the Spokane River. When I am in Spokane, viewing the Spokane River is always exciting and fascinating. With the proposed minimum flows, the visual appeal of such a wonderful feature of eastern Washington will be significantly diminished.

I do not live in Eastern Washington, but I have family and friends who do. The Spokane River is part of what makes the area an attractive place to want to spend a vacation and visit relatives.

It has been a long standing issue and one that people in the area felt strong enough about to enact policy to have water spilling over the falls in downtown Spokane to enhance the beautiful image and tourism of the area for an economic benefit. It is a marquis signature of Spokane.

The Spokane is an exquisitely beautiful river as it runs through the Spokane Gorge and through the state park. It is geologically unique, and much of this reach is free flowing.

My primary use and appreciation of the Spokane River is of its scenic qualities. Those qualities very much include how much water is flowing in the river. The river in the reach between Monroe dam and Nine Mile pool is exceptionally beautiful when it runs between 2,500 and 3,500 cfs. At these flows, riparian vegetation emerges at the edges and on the willow-strewn sandbars, and at the confluence of Hangman Creek. The river looks full, but not overflowing or flooding. I've included a photo of the river that I took during my walk this evening, during sunset. The flow is approximately 2100 cfs. You can see the outline of rocks along the shoreline. You can also see the wild beauty of the river, just one mile from downtown Spokane.

CELP and Sierra Club conducted a photographic study in July-August of 2014. We selected 37 "key observation points" (KOPs) between Monroe dam and Nine Mile reservoir and photographed at those points on five different occasions, at the flows of 2800/2500/2000/1500/1000 cubic feet per second (cfs).

Photos of the river at flows of 1000cfs and below clearly show a diminished and less scenic river.

Commenter(s)
Egesdal, Vicki 2; FLOW Adventures 2; Schnell, Dan 1; Darilek, Marilyn 3; May, Kimbo 10; Systems Coaching LLC 18; Clark, Jerry 6; Enviroscience Group 3; Cornelius, Scotty 1; Silver Bow Fly Shop 6; Center for Environmental Law & Policy H11; Pascal Osborn, Rachael 1, 2, 8; 28; CELP/Sierra Club 38;

Response
Ecology agrees the river is valuable. See response to Comment 1. Aesthetic appeal is among the most subjective of criteria, and a wide range of flows are seen as scenic to various people.

Ecology believes this flow rule, based as it is on four independent fish habitat studies is science based, and preserves and protects the aesthetic values of the river.

Comment 30
In the PCHB's decision regarding the Enloe Dam 401 Certification, the Board agreed that use of trails adjacent to a river is "recreational use" of river that Ecology must consider when evaluating aesthetic flows.

Commenter(s)
CELP/Sierra Club 17;

Response
Thank you for your comment. Please also see Response to Comment 1 for more information on the veracity of the flows set in this rule. Ecology has set the flows consistent with its statutory authority and case law on the issue.

Comment 31
Ecology should adopt an instream flow for the Spokane Falls reach of the river as set forth in the Avista 401 Cert Certification requirements as modified by the CELP-Sierra Club-Avista settlement agreement.

The Spokane River rule should adopt instream flows for the Spokane Falls reach of the Spokane River. The Spokane Falls are located in Riverfront Park, which receives 2.2 million visitors per year and is the #1 tourist attraction in the region. On November 4, 2014, Spokane voters overwhelmingly approved Spokane Prop 2, a $64.3 million bond program to renovate the Park pursuant to the June 2014 Riverfront Park Masterplan.

In 2009, the Federal Energy Regulatory Commission (FERC) approved a new license for the Avista dams on the Spokane River. The license includes 401 Certification-based conditions requiring Avista to maintain flows in the Upper Falls of 325 cfs during the day and 100 cfs at night, and in the Lower Falls of 200 cfs during the day and 100 cfs at night. These conditions were derived from a settlement agreement between Avista, the Center for Environmental Law & Policy, and Sierra Club. Subsequent renovations to the bed of the Falls resulted in amendment of the 401 Certification flows. These flows are managed via control gates on Upper Falls Dam.

Commenter(s)
CELP/Sierra Club 7, 41, 42;

Response
The flow levels reached in those settlements are properly the subject of river operations and addressed in the FERC license as you note.

Water Quality

Comment 32
"There has been concern raised about possible conflict between implementation of this rule, if adopted, and implementation of requirements under the State Water Pollution Control Act, Chapter 90.48 RCW. And the federal Clean Water Act. The need to ensure compliance with water quality standards or discharge permit requirements may compel removal of waste water or storm water discharges to the Spokane River, potentially reducing stream flow in the river."

Any activity related to the above quote would most certainly have a significant impact on the environment, people, and economics of the WRIA.

Commenter(s)
Citizens' Alliance for Property Rights 13;

Response
See responses to Comment 33 and Comment 38. While the instream flows in the rule are not established solely for the purpose of addressing water quality those concerns are addressed through other authorities. Ecology has a responsibility to protect water quantity and water quality under statute.

Comment 33
The 2011 NPDES permit issued to IEP, Waste Discharge Permit WA0000825, Attachment 1, contains very stringent final effluent limits for total phosphorus, ammonia and CBOD. IEP has been in the process for many years to identify all known and available treatment technologies to meet these limits. It has been understood by Ecology and IEP that there are no currently available treatment technologies to meet the final mass loading limits in the permit.

The reduction of flows through conservation and reclamation of wastewater is specifically addressed in the 2010 Spokane River and Lake Spokane Dissolved Oxygen Total Maximum Daily Load (TMDL). The Managed Implementation Plan from the TMDL is attached as Attachment 2. IEP has accordingly planned on water conservation and significant reuse and reclamation of wastewater to reduce its discharge to a level that will meet the final mass loading limits in its permit.

The Spokane River is also under scrutiny to reduce PCB loadings to the river. The NPDES permit requires IEP to develop PCB best management practices and to participate in the Spokane River Regional Toxics Task Force (SRRTTF), Attachment 1, Special Conditions S6 and S7. The SRRTTF must make measurable progress toward meeting applicable water quality criteria for PCBs. If reasonable progress is not made by the SRRTTF, Ecology must evaluate the need to prepare a TMDL for PCBs. Attachment 1, Condition S7. Ecology stated in the Spokane River PCB Source Assessment 2003-2007, Attachment 3, that IEP and other NPDES permit holders on the river would have to remove between 97% and 99% of the PCB concentrations in their effluent to meet the Spokane Tribe of Indians Human Health Criteria, Attachment 3, at 100. It is entirely possible that IEP may eventually have to cease all surface water discharges of its treated wastewater and noncontact cooling water in order to meet the Spokane Tribe criterion for PCB.

Under the draft rule, WAC 173-557-070, IEP could be severely penalized or even prohibited from discontinuing its current surface water discharges leaving it with no ability to meet potential water quality obligations. This is likely the situation where the instream flow for the Spokane River at Spokane from July 16 through September 30 is set at 850 cfs, a flow that reflects the 50th percentile of historic flows. At least half of the time any change or transfer of the IEP water right that would reduce flows is likely to cause an impairment of the proposed instream flows. IEP raised these concerns to Ecology in its comment letter on the preliminary draft instream flow rule. Ecology has not responded to that letter or addressed these concerns in the draft rule or in the accompanying rule making materials.

Commenter(s)
Inland Empire Paper 1, 2, 3;

Response
We understand that treated wastewater discharged under permit requires reductions in contaminants, including nutrients and toxics, to meet water quality-based limits. These limits are becoming more difficult and expensive to achieve technically, thus wastewater dischargers look for alternatives to traditional river discharge. This often involves moving a discharge on a river, or removing that discharge from the river altogether for at least a portion of the year.

On the Spokane River, under this rule, employing some alternative method of discharge is unlikely to cause impairment to any consumptive user, and has an only theoretical effect on non-consumptive uses like hydropower rights. The instream flow may be impacted, but until specifics are available, there is no way to assess actual legal impairment.

Concern within a permit with water quality, not quantity, makes an artificial distinction, since a sufficient lowering of quantity could destroy all of a river's designated uses, and since the Clean Water Act recognizes that reduced stream flow can constitute water pollution. The Federal Act does not limit the scope of water pollution controls that may be imposed on users who have obtained, pursuant to state law, a water allocation. Those provisions preserve each State's authority to allocate water quantity between users. See Department of Ecology v. PUD 1, 121 Wn. 2d 179, 849 P. 646 (1993) and PUD No. 1 of Jefferson County et al. v. Washington Department Of Ecology et al., U.S. Supr. Ct. 511 U. S. 700 (1994).

Ecology recognizes there is a potential for competing interests between meeting water quality discharge limits and maintaining river flow. In the event a discharger is required to reduce or remove a discharge Ecology is committed to coordinating internally between water quality and water resources programs and working with dischargers to ensure compliance with both the water quality and quantity components of the Clean Water Act and the State Water Code. Keeping clean, flowing water in the river is a priority for all of us. Since there are uncertainties we do not want to preclude any options for keeping the river clean and flowing into the future.

Comment 34
The consideration of public welfare under RCW 90.03.290(3), as well as the public interest under RCW 90.22.010, requires Ecology to consider the unique water quality challenges in the Spokane River. Providing IEP this protection under the rule will further the public welfare and public interest by supporting the highest water quality possible in the Spokane River while having no real impact on the proposed instream flows. IEP currently discharges approximately seven million

gallons of water per day. If completely removed from the river this would amount to slightly more than one percent of the proposed summer flow of 850 cfs. This is an insignificant impact that should be addressed in the final rule.

Commenter(s)
Inland Empire Paper 11, 13;

Response
Ecology disagrees this is an issue relevant to rulemaking, and believes it is more properly addressed in individual permit decisions. Regulatory instream flows are not established through the water right permitting process, and, thus, the criteria in RCW 90.03.290 are not applicable in the context of instream flow rulemaking.

Comment 35
IEP suggests the following language be added to the rule to support the need to reduce and potential need to eliminate discharges for water quality purposes. The Spokane River Instream Flow Rule should also be clear that a change or transfer of an existing right to meet water quality standards will not be considered an impairment of the instream flows established by the chapter.[4]

IEP requests that a separate section in the rule provide a clear exclusion from the instream flows for water quality permit discharges together with a clear exemption for the reduction or elimination of such flows to limitations on changes and transfers of existing water rights as provided in the draft rule:

"WAC 173-557-XXX Reduction and Elimination of Certain Discharges to Surface Water. Discharges to the Spokane River authorized under a water quality permit are not subject to the instream flows established in this chapter and any reduction or elimination of such discharges shall not constitute an impairment of the instream flows established under this chapter and are not subject to the provisions of WAC 173-557-070 regarding changes and transfers of existing rights."

Ecology should include specific terms in the rule that fully accommodate and support the water quality objectives for the Spokane River. This can be accomplished by establishing a clear exclusion of water permit discharge flows from the rule and an exclusion from the change and transfer of use provisions in the rule for any reduction or elimination of the water quality permit discharges necessary to meet water quality standards.

Commenter(s)
Inland Empire Paper 4, 5, 12;

Response
Thank you for your comment. We decline to add the suggested language as we believe that your language goes beyond the scope and intent of the rule, which is simply to establish minimum instream flows for the river.

Comment 36
Spokane County remains concerned over the effect this proposed rule may have with respect to potential water right impairment claims in the event Spokane County determines that the

Spokane County Regional Water Reclamation Facility is unable to meet water quality standards and elects to limit or eliminate discharges to the Spokane River. It is understood this issue is of statewide significance and is not exclusive to this rule.

Commenter(s)
Spokane County 11, 17;

Response
See the response to Comment 33. Ecology will work with Spokane County to select alternatives which comply fully with the quality and quantity provisions of the Clean Water Act and the State Water Code.

Comment 37
The objective of the Clean Water Act ("CWA") "is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). Congress declared that "it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983 . . . ." 33 U.S.C. § 1251(a)(2). To facilitate the objectives of the CWA, Section 303 provides that states are to adopt site-specific water quality standards, subject to the review and approval of the Environmental Protection Agency ("EPA").

The State of Washington developed its own water quality standards, as permitted under the Clean Water Act, 33 U.S.C. §1313, and in so doing the Washington State Legislature stated that "[i]t is declared to be the public policy of the state of Washington to maintain the highest possible standards to insure the purity of all waters of the state consistent with public health and enjoyment thereof, …" In furtherance of state policy and to implement the Clean Water Act, Ecology promulgated water quality standards for surface water that consist of designated beneficial uses of state water, narrative and numeric criteria for conventional pollutants and toxics, and an anti-degradation policy. Ecology is the state agency charged with protecting and enforcing state water quality standards.

The state water quality standards consist of three independent parts: (1) designated uses of each water body; (2) water quality criteria for the waters based upon the designated use, 33 U.S.C. § 1313(c)(2)(A); and (3) an anti-degradation policy. 33 U.S.C. § 1313(4)(B). The anti-degradation policy requires "that state [water quality] standards be sufficient to maintain existing beneficial uses of navigable waters, preventing their further degradation." PUD No. 1 of Jefferson County v. WA Dep't of Ecology, 511 U.S. 700, 705 (1994). At a minimum, a state's anti-degradation policy must ensure that "existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." 40 C.F.R. § 131.12. Pursuant to these three independent sources of authority under the CWA,, Ecology adopted water quality standards applicable to all waters of the state, as discussed below, including the Spokane River. Chapter WAC. 173-201A; WAC 173-201A-602(1).

Ecology is required to protect aesthetic values when drafting its instream flow rule for the Spokane River. The Pollution Control Hearings Board has specified that "aesthetic enjoyment can be through sight, smell, touch, and taste and is also a form of recreation." CELP et al v. Ecology et al., PCHB No. 12-082 (Findings of Fact, Conclusions of Law & Final Order) (As Amended Upon

Reconsideration) (Aug. 30, 2013) at 25. Under the Washington state water quality standards, aesthetic uses of state waters including the Spokane River are protected in several ways. Aesthetic uses are certainly protected by the narrative criterion that requires that "aesthetic values shall not be impaired by the presence of materials or their effects, excluding those of natural origin, which offend the senses of sight, smell, touch or taste." WAC 173-201A-260(2)(b). However, this is by no means the only provision within state law that protects aesthetic uses of water.

As a concerned citizen I am writing to note that that from simple photo comparison of recent flows in the Spokane River, it is clear this is a potential degradation of water quality. Such degradation is incompatible with the current laws of the State of Washington.

DOE is concerned that the conflict that will arise should this rule making process become law. The proposed law will conflict with the State Water Polution Control Act and the Federal Clean Water Act. The fear is that the compliance with water quality standards, and/or discharge permit requirements may compel removal of waste and/or stormwater discharges to the Spokane River, which is part of what the DOE is relying on for in stream flow.

Commenter(s)
Law Offices of Andrea K Rodgers Harris 5, 6; Mackrow, Paula 1; Ibbetson, Timothy 80;

Response
Thank you for your comment. Ecology disagrees. Ecology believes the instream flows in this rule, along with recent NPDES permits, the "401 certification" embedded within the FERC license and associated documents, and the existing activities underway establishing total maximum daily loads for various contaminants under section 303 of the Clean Water Act, are consistent. The instream flows established in this rule are designed to preserve and protect environmental values and Ecology does not believe that the flows are inconsistent with state and federal water quality standards. Quality and quantity of river flows to protect beneficial uses must be protected [PUD No. 1 of Jefferson County v. WA Dep't of Ecology, 511 U.S. 700 (1994)].

Comment 38
Ecology should evaluate the impact of a 2.5 month 850 cfs flow on water quality in the Spokane River, including Long Lake.

The agency has failed to study flows needed [f]or . . . water quality.

Commenter(s)
CELP/Sierra Club 6; Center for Environmental Law & Policy 4;

Response
RCW 90.22 allows Ecology discretion on whether to establish minimum flows specifically for protection of water quality. Fish habitat studies form the basis for the instream flow levels established in this rule. Flow in the River is controlled largely by discharges from Avista Hydroelectric developments, regulated under the FERC license. Ecology issued a water quality certification for that license including flows, most notably equal to the summer low flow established in this rule.

Future Growth/Sustainability

Comment 39
I have lived in Spokane for sixty-six years, and have seen these water flows diminish every year. I live right on Latah Creek, which flows into the Spokane River on the West side of Spokane. The demand for water usage from Latah has practically dried up the water flow in summer months, so it is virtually a trickle of Spring water. Historically, this is a far cry from just ninety years ago when Chinook salmon used to spawn in both the Spokane River and Latah Creek. I know the future demand for water is only going to increase, but for the planets sake, we are going the wrong direction!!

Commenter(s)
Kop Construction Co Inc 2;

Response
The purpose of the instream flow rule is to prevent flow diminishment, just as you suggest.

Comment 40
It's always a concern when codifying an instream flow that the flow amount is seen as the maximum flow necessary to sustain fisheries and other beneficial uses, when, in fact, it is the minimum flow necessary. Across the West, water users commonly use codified instream flows as justification to consistently drop the river to that flow as opposed to recognizing that the minimum flow is actually a worst case scenario.

Commenter(s)
Idaho Conservation League 3;

Response
Instream flows are established to protect and preserve instream resources. RCW 90.22 is the statute that authorizes the Department of Ecology to establish instream flows in an administrative rule. It is labeled the "Minimum water flows and levels" statute. The flows established are instream flows that are set in a manner consistent with Ecology's statutory authorities.

Comment 41
Your stated intent to "use the rule as a regulatory flow threshold to determine whether there is water to withdraw for new uses while still protecting fish and other instream resources" makes it imperative to choose a flow level that will maintain the integrity of the river. Unfortunately, we believe the proposed minimum flows will not meet your stated objectives.

Commenter(s)
Smith, Bruce & Denise 3;

Response
The instream flow levels established in this rule are protective of the instream resources of the Spokane River and are set in a manner consistent with Ecology's statutory authorities.

Comment 42
I live near the Spokane River in the City of Spokane Valley, at the height of summer, the stream flow is already so low that large portions of the river bed within the city of Spokane become above water level. We cannot permit a statutory reduction in what is already a latent water supply problem for the second largest urban conurbation in the State of Washington.

We are writing to express our grave disappointment with Ecology's decision to put profits over people and wildlife in its proposed insream flow rule for the Spokane River.

As a long term participant in water allocation schemes and strategies, I have seen the lack of Ecology's concern for best available science and adequate consideration of of the value of water in the stream vs withdrawal for private development purposes.

Your aim appears to be to divert more water from the river enabling you to give out new water rights to new development interests.

What is appalling about your proposal, is in the guise of taking a positive action towards achieving your stated goals, you are actually using it as a subterfuge to help new development at the expense of all the other interests.

I'm also retired from forestry with the Nez Perce and spent a few years with the Forest Service. I managed the rivers, so I'm pretty familiar with the processes agencies go through to adjudicate resources, but mostly what it boils down to is environmental quality versus economic growth and development.

Commenter(s)
Stracchino, Keith V 2; Law Offices of Andrea K Rodgers Harris 1; Mackrow, Paula 11; League of Women Voters, Spokane 32; Gold, Raelene 9; Burnhart, Bruce H1;

Response
Flow in the River can get very low during the summer months, particularly in the reach upstream from Sullivan Road. For this reach, the summer low flow at the Barker Road USGS gage will be 500 cfs. This value was established through the Watershed Planning process and so is required to be in the rule (RCW 90.82.080).

Best available science was used in establishing these minimum instream flows. Four, scientific, instream flow studies were used to develop the instream flow numbers in this rule.

Comment 43
This recommended summer flow of 850cfs gives away the future of our river to the forces of rampant over-consumption.

Ideally this rule would help shift our water use from a paradigm of over-consumption to one of conservation and storage in nature or aesthetic, recreational and biological values. Communities might then begin to pursue conservation through incentive based pricing, conservation technologies, education and regulatory statutes that ultimately protects their water and the Spokane River. The

instream flows rules need to provide robust frameworks that act as a backstop to over-consumption and poor water stewardship by the communities in our region.

As our population increases, learning how to share resources is essential. There are many ways businesses and citizens can be educated on how to conserve water use so that the river can continue to support plants, fish and sustain a healthy environment. With all the social media available nowadays communicating the urgency of protecting the environment is easier than in the days of paper mailings.

Commenter(s)
Lawrence, Christopher 3; Spokane Riverkeeper 38; Spickler, Dawn 3;

Response
Instream flow numbers are set to condition new, junior water rights to ensure protection of the senior, instream flow right established in the rule. They do not change the hydrograph of the river nor do they give anything away to over-consumption.

Comment 44
Our community in Spokane needs the Department of Ecology's help in holding ourselves to a higher standard.

Spokane has some of the highest water consumption rates per person in the state and we can do much better to preserve higher flows in our river. In Spokane people waste thousands of gallons over-watering lawns in the summer, washing vehicles and filling and emptying personal pools on a regular basis.

Our water is artificially cheap and our population has been given no real financial incentive to preserve water resources. Pressures on water use will only increase as our population grows, weather gets hotter, and commercial interests are invited to take further and further advantage of our artificially "cheap and available" water supply.

Commenter(s)
McKay, Mariah 2;

Response
This rule does not address nor control water costs charged by water purveyors to their customers. Water conservation is an important topic. The Spokane area does have high per capita water consumption rates relative to other jurisdictions. To maintain their water rights in good standing, municipal purveyors are required to pursue conservation measures [RCW 90.03.386(3)].

Comment 45
The concerns I want to express tonight are primarily related to instream flows, the proposed flows for summer and late fall in the proposed rule. The purpose of an instream flow rule is to allocate water between the river and future water rights, and already, there's more than a 1,000 cfs of water rights that have been issued for the Spokane River in Idaho and Washington, including inchoate rights that have not yet been exercised in the future for the flow for the river.

It has also been stated that the aquifer and Spokane River have been over appropriated and if all of the water allocated were put to beneficial use, the river would be dry.

The City of Spokane and other Washington municipalities are likely to expand their use of inchoate water rights in the future, with further impacts on existing instream flows.

Commenter(s)
Center for Environmental Law & Policy H1, H2; Stevens County 3; CELP/Sierra Club 22;

Response
Thank you for your comment. Adopting instream flow levels cannot affect existing senior water rights. Ecology believes developing an instream flow rule for the Spokane River is in the public interest for these and other reasons.

Comment 46
How are existing water rights determined? Are these based on rights that are still valid? Water rights are lost if not used in 5 years. Where is the documentation verifying all of the water rights are actually active? Does this include surface water and ground water and are all rights for both actually active (is the proof that the water rights are being used to their maximum allotments? Are all of the water rights being used each year? Are any water rights (volume) not being used every year for the last 5 years? Where is the data on the senior water rights and the data that shows that these water rights have been used in the last 5 years. For large water rights, are these rights being completely used each year for the last 5 years? What are the senior water rights? How many of these rights are actually valid?

Commenter(s)
Ibbetson, Timothy 9, 28, 32, 61;

Response
Existing water rights are kept on file by the department. Ecology has not confirmed the validity and extent of all water rights on file, but must in the case of any of those rights requiring administrative action. Most senior water rights are for municipal supply, and they are generally protected from relinquishment by statute [RCW 14.140(2)(d)]

Comment 47
"WAC 173-557-070 - Changes and transfers of existing water rights
No changes to, or transfers of, existing surface and groundwater rights in the area covered under this rule shall hereafter be granted if they conflict with the protection of the instream flow levels established in this chapter. Any change or transfer proposal can be approved only if there is a finding that existing rights, including the instream flows established in this chapter, will not be impaired."

Comments: Why? These are existing rights that are used to determine "how much water" is available. How would an exchange or transfer of a water right change the amount of water Ecology has "calculated" is available? There would be impacts if the transfer was from an existing water right that is being used, however, if this right has not been used for five years, it no longer exists and Ecology should not count this "senior" water right. Also, a change could include a

reduction in a water right for mitigation purposes, such as reducing an agricultural water right to allow a manufacturing facility to have access to water. How is this determined? Considering there is no science to determine how ground water withdrawals affect the instream flow.

Commenter(s)
Ibbetson, Timothy 76;

Response
This regulation is worded to comply with the change statutes, RCW 90.03.380, and RCW 90.44.100. Changes and transfers of existing water rights may not impair other rights following transfer.

Comment 48
The concerns I want to express tonight are primarily related to instream flows, the proposed flows for summer and late fall in the proposed rule. The purpose of an instream flow rule is to allocate water between the river and future water rights.

River flows that are not protected by rule are available for allocation and out-stream for many uses, so it's very important that we protect flows to the level that are really necessary for all uses, particularly as set forth in the statute, the government instream flow rule making process.

If you look at the curves that we saw tonight, even 50 percent exceeds flows, versus the proposed rule, a very large amount of water is available -- appears to be available for out-of-stream water rights.

Once this rule is adopted, Ecology will begin to issue water rights that will drive down flows to the mountains.

Commenter(s)
Center for Environmental Law & Policy H1, H3, H4, H16;

Response
If new water rights are issued out of the river or the SVRP aquifer, they will be interruptible to the instream flow numbers in the rule. If a new proposed water right is not compatible with being interruptible and does not provide mitigation, the application will be denied to protect the senior instream flow right. If a new right is compatible with being interruptible, it would be conditioned to be interrupted whenever the flows in the river decline below the instream flow values, thereby helping to protect the instream flow.

Comment 49
Ecology’s failure to consider all instream uses protected by Washington’s statutes has consequences. The water that the instream flow does not protect is water that becomes available for out-of-stream allocation. This is occurring now, and could expand in the future.

The proposed Spokane flow rule does not protect existing flows in the river, and instead will make water available for new water allocations, even though half the river is gone due to out-of-stream consumption.

Commenter(s)
CELP/Sierra Club 18; Bates, Melissa & Jim Briggs 3;

Response
It is true that flows in the river that are higher than the instream flow levels established in this rule could be available for out-of-stream allocation, depending on the proposed use and compliance with all applicable provisions of state water law. This is the central tenant of western water law.

Comment 50
SFTU supports setting the minimum instream flows as high as can be supported by science to prevent the issuance of additional water rights that drop the River to unsustainable flows and levels. We sincerely doubt that enforcement to" turn off" junior water rights will be implemented without long legal battles.

The Department of Ecology could find that water is available for interruptible uses, or uninterruptible uses that are mitigated or for which storage is provided. Also, Ecology could deny new permits and the applicants could appeal and win a PCHB/court decision finding that water is available and must be allocated.

Commenter(s)
Spokane Falls Chapter of Trout Unlimited 15; CELP/Sierra Club 20, 21;

Response
Four, science-based, instream flow studies were used to derive the instream flow numbers. New interruptible rights could be issued, if for uses that are compatible with being interrupted. These rights would be interrupted to protect the senior, instream flow right during those times when the flow in the river is below the instream flows. Ecology successfully enforces interruptible water rights in several watersheds across the state. Using science-based instream flow numbers is important in order to have a solid foundation that could withstand potential legal challenges by those water users who do not want to be interrupted.

Comment 51
It is folly to issue more water rights based on the 'available water' assumption with setting such low flows (taking all water not claimed in Washington's proposed flow rule). This is outrageous for many reasons; the alarming interstate allocation implications of the flow rule, poor and incomplete scientific reasoning for setting the proposed flows under the river's current conditions, and, most importantly, the lack of consideration for the impacts of climate change on the future of the river.

Commenter(s)
Aqua Permanenté 3, 4, 5, 6;

Response
The rule does not "issue more water rights," it merely sets minimum flows, which are considered the equivalent of water rights. Moreover, an instream flow rule will strengthen the state's standing

in an interstate water conflict. Four, scientific, instream flow studies were used to determine the instream flow numbers.

The rule can be amended at any time in the future if conditions in the watershed warrant a re-evaluation of the rule. See also the response to Comment 48.

Comment 52
I'm opposed to any reduction of instream flows in the Spokane river below the existing rate. The over allocation of rivers through out the west, and the resultant negative impacts on those rivers, is well documented. Future growth and development in this region isn't worth the negative impacts it has on the river and aquifer. Save our river!

Again, and as always, supporting unsustainable growth to support limited individuals earnings is trumping our diminishing natural resource - in this case - our non replaceable water.

Commenter(s)
Parks, Leonard 1, 5, 6; Roast House (Bernardo, Deborah Di) 1;

Response
Thank you for your comments.

Comment 53
We need to conserve
As well we all know growth is likely and use of water may out strip supply. Further this is a bi-state river and industrial as well as residential use is pulling from the water supply upstream. Everyone seems to think we have a limitless supply but it is becoming more evident that is not the case. We might do well to start changing our water guzzling habits now. Leaving more flow now may help us change our behavior and leave a little room for adjusting later.

As our population increases, learning how to share resources is essential. There are many ways businesses and citizens can be educated on how to conserve water use so that the river can continue to support plants, fish and sustain a healthy environment. With all the social media available nowadays communicating the urgency of protecting the environment is easier than in the days of paper mailings.

Large factors that are threatening the flows to the Spokane River, things we do know even without the science, we know we have an overconsumption of water problem in this area that is taxing our aquifer which is intimately linked with the river.

Commenter(s)
May, Kimbo 12; Spickler, Dawn 3; Spokane Riverkeeper H3;

Response
Thank you for your comments. Ecology agrees education about water consumption and conservation is an important water management tool.

Comment 54
As well we all know growth is likely and use of water may out strip supply. Further this is a bi-state river and industrial as well as residential use is pulling from the water supply upstream. Everyone seems to think we have a limitless supply but it is becoming more evident that is not the case. We might do well to start changing our water guzzling habits now. Leaving more flow now may help us change our behavior and leave a little room for adjusting later.

There is an opportunity at this time to establish minimum flows that are more realistic for a whole gamut of reasons, including recreation. And we live in a huge metropolitan area, and it's only going to get bigger. Soon it will be developed from here to Coeur d'Alene. That needs to be taken into consideration. Because growth and development will occur, it will mean more demands on ground water and wells and private property rights. Those will never be able to be adjudicated using this scale and satisfy all the demands. We will be back at this again in ten years fighting over the exact same issues.

Commenter(s)
May, Kimbo 12; Burnhart, Bruce H5;

Response
Thank you for your comments. Water is a finite resource. As growth occurs it will put more pressure on our water resources. This is why it is imperative now to establish an instream flow rule for the river, to make sure any new uses do not impair flows needed for fish and other instream values.

Comment 55
As a Washington State citizen, I care deeply about what happens to our waters in the state, especially flowing streams and water allocations.

Commenter(s)
Townsell, John 4;

Response
Thank you for your comments.

Comment 56
173-557-060 (3) WAC states: "Within the area regulated under this rule, municipal water suppliers are the primary sources of water for new uses. If water is not available from a municipal water supplier, the consumptive use impacts to surface water from new permit-exempt groundwater withdrawals must be interrupted when stream flow is below the ins/ream flows established in this rule, unless those impacts are mitigated. Mitigation must be achieved through an ecology-approved mitigation plan."

Spokane County administers the Spokane County Coordinated Water System Plan (CWSP). The CWSP encourages connection to public water systems, though does not require it. In situations where a building permit applicant and the public water supplier cannot agree on the terms of connection to the water system, the building permit applicant may use an individual well. The section above utilizes the phrase, "If water is not available from a municipal water supplier... "

which is ambiguous and could be construed to mean a building permit applicant is required to connect to a municipal water supplier.

This section is potentially in conflict with the Spokane County CWSP. Spokane County suggests deleting the following portion of the above-referenced section:

"Within the area regulated under this rule, municipal water suppliers are the primary sources of water for new uses. If water is not available from a municipal water supplier,"

Alternatively, if deleting the text as described above is not acceptable, the text could be modified as presented below (the proposed change is shown as underline):

"Within the area regulated under this rule, municipal water suppliers are the primary sources of water for new uses. If water is not available in a timely and reasonable manner from a municipal water supplier,"

Commenter(s)
Spokane County 4;

Response
Thank you for your comment. Ecology agrees and has changed the rule language.

Comment 57
I urge a moratorium on all new water right permits until a statewide inventory of our water resources is completed. You cannot continue to give out water rights without knowledge of the available water.

Commenter(s)
Gold, Raelene 12;

Response
Thank you for your comments.

Flow Determinations

Comment 58
How is this correlated to water use in an area, especially ground water? How do stream gages provide information on ground water? How does this differentiate between ground water base flow and unsaturated zone flow?

Commenter(s)
Ibbetson, Timothy 38, 40, 41;

Response
Instream flow rules are not established with a correlation to water use. They are established to protect and preserve instream resources. Stream gages can help provide information on

groundwater interactions with the stream by comparing the flow at multiple points along the same stream and using the changes in flow to gain insight into groundwater discharge between the gaging stations (or loss of stream water to the aquifer if flows decline). Instream flow rules do not differentiate between groundwater flow and unsaturated zone flow.

Comment 59
How are the is stream flow cfs calculated? How can it be ignored the cfs will never be the same every year? How was this determined? What science is involved?

I don't find here any explanation of how you arrived at these low levels, especially the abysmal summertime level of 850 cfs in the downriver reach and the 500 cfs at Greenacres. You need to explain how you arrived at your figures.

Commenter(s)
Ibbetson, Timothy 50, 51; Gold, Raelene 5;

Response
Instream flows were developed by conducting four scientific studies on the Spokane River between 2003 and 2011. See also the Response to Comment 1.

Actual flows in the River do vary from day to day and year by year. Please see http://www.ecy.wa.gov/programs/wr/rules/557-res.html for links to the studies, and Beecher, 2012 (http://www.spokaneriver.net/wp-content/uploads/2012/09/Instream-Flow-Recommendations-for-Spokane-River-5-31-12.WDFW_.pdf) for a detailed analysis. Flow data for the River is available on-line from the United States Geological Survey.

Comment 60
What are the levels set in WAC 173-557-050?

Commenter(s)
Ibbetson, Timothy 33;

Response
The instream flow levels for the Spokane gage are based on studies conducted by Avista and others both for development of the watershed plans and the FERC license, and later as a requirement of the FERC license. The instream flow value for October 1st through March 31st is 1700 cfs. For April 1st through June 15th the instream flow value is 6500 cfs. For June 16th through September 30th the instream flow value is 850 cfs.

Comment 61
Sierra Club makes note that a very low volume of inflow has been slated for the Spokane River under this proposal, to the tune of 850 cfs.

I agree with the Sierra Club that setting summertime flows at 850 cfs would be a debacle for the Spokane River.

Setting summertime flows at 850 cfs would be a debacle for the Spokane River.

I believe that Ecology recommendations from 850 cfs is too low and it doesn't go far enough of setting the boundary that will protect aquatic species and the eco system of the Spokane River.

I do not believe 850 cfs in the Spokane River during the summer is sufficient for river health, recreation, or fishing. In the summer I often float the Spokane River in my spare time, and do not believe 850 cfs is adequate for this either. That 850 flow value you're proposing, if that temperature increases, the population in the last five years in the upper section of the river has dropped drastically.

I think with climate change and everything else, that temperature value is going to be the biggest deterrent factor in the trout populations, and you proposed an 850 flow value, that temperature will increase substantially, and those populations in the upper river, especially much of the aquifer, will have a large an impact on that.

The proposed flows are unacceptable.

The proposed flows are way too low.

I do not feel it's appropriate to use the 100 percent exceeding curve for instream flows. It's neither conservative nor protective nor does it meet the authority and purpose of the rule making to protect and preserve fish, wildlife, scenic aesthetics and recreational water quality values.

I've run the river somewhere in the neighborhood of 400 times, I think, far less than my friend Pat Harbine, but he's just a tad bit older than I am. I've run the river from as high as 40,000 cubic feet per second down to probably about what the suggested 850 flow is, and knowing that 850 flow, I can speak for myself, and I know the members of our white water club will be -- are definitely opposed to the implementation of that minimal flow that you're talking right now, and it just doesn't -- it doesn't work.

In setting this rule, the guiding principle should be first to do no harm. Rather than setting flow rules at the lowest minimal levels, they should be set at the highest and the most conservative minimal levels.

As far as the flows on the lower Spokane I feel that the proposed flow of 850 cfs is much to low.

The proposed flow of 850cfs is dysfunctional for boating and unacceptable.

I am writing in protest of the proposed “in stream flow rule” base flows for the Spokane River. The proposed flows for June 16th to September 30th of 850cfs are far, far too low. The proposed low flow of 850cfs for summer months in the Spokane River is the opposite of where we, as a planet, should be heading.

The proposed flow rule of only 850 cubic feet per second (cfs) is dangerous in many ways.

850 cfs is a non-starter for outdoor recreation and the businesses this growing segment of our local economy supports.

The flow regime in the proposed rule is a shocking dereliction of Ecology's duty to protect the public's water resources.

Even lower flow than 2500 cfs? In the summer? 850 cfs? Wow- it's interesting that we want to encourage people to use and take care of the river, yet if there's no water flowing, how can that happen?

The department of ecology is setting the river flows way to low. I don’t understand where or how you chose 850 CFS?

I am very concerned about the Department of Ecology instream summer flow recommendations (850 fcs) for the Spokane River. This flow level is insufficient for a fishing, swimming and boating in the river.

Please, please do not strangle our Spokane River with a summertime flow of 850 cfs. This is unconscionable. I understand that the river must satisfy multiple uses - but 850 cfs is shameful.

I would encourage the Dept. of Ecology to consider a higher minimum instream flow for the Spokane River. A flow of 850 cfs does not provide for a very scenic river, adequate fish and wildlife habitat, or a minimum flow for rafters and other river users. It in essence barely keeps the river wet!

Allowing the river level to drop as low as 850 cfs will definitely have an impact on the fish population.

I'm also concerned that dissolved oxygen levels may be far too low at 850cfs for a vigorous and healthy fishery, like the Spokane River.

The Department of Ecology has done a disservice both to Spokane and to the State of Washingto with its proposal for minimum instream flow of 850 cfs for the Spokane River. Please reconsider the low flow instream flow of 850 cfs. It is not only an insult to Spokane, but a failure of Ecology's duty to the State of Washington.

Flows of 850 cfs would be lower than the natural flow regime in many years, and under Ecology's proposal would be started much earlier than natural flows currently occur, resulting in serious stress to fish in the river.

While I realise that negotiating this type of inter-state agreement is always a very contentious business I wish to comment that the minimum specified flow at 850 cubic feet per second is extremely low for the Spokane river. I believe that the analysis of needs has proposed a very inadequate number and that the analysis needs to be revisited in order to provide for a larger and more realistic minimum flow.

I am concerned about the proposed river flow recommendations for the summer months. 850 cfs seems very low to me and could impact the use and quality of the river.

After review of the draft rule and supporting materials, the Tribe requests that Ecology closely review and reconsider the adoption a flat 850/500cfs from June 16-September 30. The Tribe supports the 850/500cfs as the minimum flow for the later portions of August and September

because this represents a normal hydrograph for the Spokane River, and it acknowledges the requirements within Avista's FERC license. However, after review of the data, the flows that currently exist in the Spokane River, the average flows in June and July are much higher than 850/500 cfs. (See exhibit 1 Rule in black). Additionally, the flows are much higher in portions of October through April. See id. These flows must be better protected. As Ecology is well aware this rule does not affect senior water rights holders within the area of the rules regulation, and it defies logic to not protect as much water in the River as possible.

The proposed flows for the Spokane River appears to be set drastically low and well below what is historically recognized even since dams were placed on the river. The flows the EPA is recommending are too low for several reasons.

The proposed summer river flow for of 850cfs appears to be too low.

I understand you are proposing a minimum flow of 850cfs for the Spokane River. I believe this flow is way too low for the Spokane River.[2] Anything below 1000cfs is difficult to navigate in anything but a kayak. In fact, at 850cfs I'd probably stay away from the river because it's too low to enjoy.

Your proposed Spokane River flow is rediculous.

I believe the proposed levels are irresponsibly low.

The proposed June 16th-September 30th flow of 850 cfs is too low to support the needs of the Spokane River.

I think the minimum instream flow level of 850/cfs for the Spokane River is ridiculously low!

I cannot understand why Ecology has proposed such a low instream flow (850 cfs) for flows below the Monroe St. dam during the summer months.

I have a concern and wish to comment on the instream minimum flow of 850 cfs.

I am writing to let you know that the Spokane River needs more than 850 cfs water in the summer.

The Spokane Riverkeeper feels that Ecology's recommendation for 850cfs is too low and does not go far enough in setting a boundary that will protect the aquatic ecosystems of the Spokane River. Base flows of 850cfs flows do not mimic the more ample flows of the early 20th century that predate the placement of numerous wells in and around the Spokane River.

We believe that the flows proposed are too low, particularly, the proposed summer flow of 850 cfs.

One can observe that 850 cfs is an extremely low flow for the river, and does not look healthy.

The idea of a minimum flow of only 850 cfs is absurd.

A flow of 850 cfs is completely laughable, for boating and I presume fish would laugh — or cry if they do — at this ridiculous and purely arbitrary number at which DOE has apparently arrived.

Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers statewide.

Your proposed summer minimum flows of 850 cfs in the Spokane River and 500cfs at Greenacres are at the summer historic lows in hydrograph USGS 12422500 Spokane River 2009 to 2014. This low level of summer flow would negatively impact the aesthetic draw of the river. Recreational uses such as whitewater boating and hiking near the river, and fish and wildlife would be negatively affected.

As currently proposed, our primary concern is that the proposed minimum summer flows are too low. We do not believe 850 cfs is sufficient to protect redband trout and other fisheries, or the interests of summer recreationists and the numerous recreation based businesses that provide services to them.

While additional analysis of our data would be required along with some field work and focus group discussions we can unequivocally state that 850 cfs is well below an acceptable flow for recreation and navigation and does not adequately protect these beneficial uses.

It is clear that an instream flow of 850 cfs for the period of June 16th to September 30th, as proposed for WAC 173-557-050, is inadequate. Many of our local members are owners or employees of businesses that provide commercial outfitting services for those who recreate on the Spokane River. An instream flow of 850 cfs would have a devastating impact on these small businesses. In summary, we request that you revisit the proposal for 850 cfs instream flows in summer and 6,500 cfs in spring.

The WDFW biologist involved in this flow study has acknowledged that the 850 cfs flow is a floor, i.e., a minimum flow. Minimum flows are disfavored in the scientific community.

The Dept. of Ecology staff need realize the proposed flows are unacceptable to the citizens of the State. Once again this proposal is indecent, ill considered and not in the interests of the people of the State of Washington.

Commenter(s)
Banks, Aaron 2; Cervenka, Aimee 2; Crafton, Laura 2; DeLateur, Marc 1; Dunphy, David 1; Garvey, Lydia 1; McKay, Mariah 1; Spokane Falls Trout Unlimited 1; Struck, Fred 1; Systems Coaching LLC 2, 10, 17, 19; Zovanyi, Louise 1; Schnell, Dan 2; Sierra Club (Roberts, Lynda) 4; Pringle, Bruce 4; Sierra Club (Donaldson, Jamie) 4; Sierra Club (Lanz, James) 4; Sierra Club (Sendrey, Robert) 4; Seifert, Lorelei 4; May, Kimbo 1; Paxson, M C 4; Sierra Club (Effler, Dean) 4; Sierra Club (Peterson, Terrance) 4; Sierra Club (Lukos, Stravo) 4; Sierra Club (Andrew Martin) 4; Sierra Club (Milne, Linda) 4; Spickler, Dawn 1; Stracchino, Keith V 1; Roehl, Renee 1; White, Jerry 1; Sierra Club (Glover, Julia) 4; Solberg, Steve 1; Steward, Mark 2, 3, 4; Wagstaff, William 1; Laegreid, Peter 4; Clark, Jerry 1; Wilder, Stewart 5; WaterWatch of Oregon 4; Sierra Club (Lombard, Marny) 1, 5; Kistler, Claude 1; Sierra Club (Nixon, Shirley) 2; FLOW Adventures 7; Moore, Kari 1; Reed, Jake 2; Kop Construction Co Inc 1, 3; Aagaard, Ann 1; Out There Monthly 7; Lands Council (Parrish, Amanda) 1, 3; Morrison, Harvey H3; NW Whitewater Association 4, 5, H1; Spokane Riverkeeper 24, H6, H12; Croskey, Taylor H2; Spokane Tribe 4; Spokane Falls Chapter of Trout Unlimited 2; Pascal Osborn, Rachael 7; ROW Adventures 17; Osborn, Cal 4; League of Women Voters, Spokane 13, 27; Idaho Conservation League 2; American Whitewater

7, 10, 12, 13, 14; CELP/Sierra Club 29; Sierra Club (Osborn, John) 19, 20; Mackrow, Paula 7, 12; Schultz, Jule 2;

Response
Ecology does not agree that the instream flow levels adopted in this rule are too low to protect instream resources in the Spokane River. Ecology believes the instream flows in this rule, based as they are on four independent fish studies, are science-based. The flows have been vetted by top scientists, staff, and management of all concerned state agencies. The instream flows have been reviewed and analyzed by all local Water Resource Inventory Area Watershed planning groups. Since these flows were first proposed to the planning unit, no entity has emerged with scientific information to indicate these flows are not appropriate. It is our opinion these flows are the best flows available to protect the instream resources of the Spokane River. They are flows necessary for stream health, ecological function, and preservation of other instream resources including scenic, aesthetic, and navigational values.

No data or studies support flows protective of all uses as in this rule. Flows for whitewater boating, as proposed in the FERC license process, are only protective of one use, and those flows are not precluded by this rule. Whitewater boating was evaluated in Berger, 2004. That study was designed to do six things:

(1) Collect qualitative and quantitative information from existing users and sources about boating flow suitability and Project influence on the Spokane River between Post Falls Dam and Lake Spokane. The Work Group developed preliminary information about whitewater boating reaches, whitewater features, and river flows based upon local knowledge and existing guidebooks. This information is presented in Section 2.1 of the study.

(2) Conduct controlled flow studies and on-site evaluations of the flow suitability for those reaches of the Spokane River used for whitewater boating. This information is presented in Section 3.0 of the study.

(3) Identify minimum boatable and optimum summer and fall flows for the major whitewater features, including river runs and park and play sites on the Spokane River that can be affected by Project operations. This information is presented in Section 4.0 of the study.

(4) Conduct controlled flow studies and on-site evaluations of the flow suitability for the major destination whitewater features on the Spokane River, such as park and play sites, which can be affected by Project operations. This information is presented in Section 3.0 of the study.

(5) Identify minimum boatable and summer optimum flows for these features. This information is presented in Section 4.0 of the study.

(6) Provide site assessments of public access to whitewater reaches of the Spokane River and provide evaluations of public safety concerns associated with whitewater flow releases. Both access adequacy and safety are addressed in Section 4.0 of the study alongside the other results for each river reach and play feature.

The study noted (section 2.1):

> "Whitewater boating opportunities on the Spokane River occur year round. When flows measured at the Spokane gage exceed approximately 1,500 cfs, river running opportunities exist in both the Upper and Lower reaches. Park-and-play boating opportunities generally exist when flows exceed 2,500 cfs. During dry water years, boating opportunities are often limited during the late summer and early fall months when flows can drop below 1,000 cfs at the Spokane gage."

The study used opinion surveys of whitewater boaters and analysis of the datasets to evaluate flows for whitewater boating. All flows were reported as at the Spokane gage.

For the Lower Reach, participants were asked to indicate the minimum flow they could boat the lower Spokane. Values ranged from 0 to 4,000 cfs. When asked to indicate their preferred flow the responses ranged from 1,500 to 12,000 cfs.

For the Upper River Reach, the study concludes:

> "Study participants considered the Upper Spokane run to be Class II at all flows. At the lowest study flows of around 1,350 cfs, participants noted that the run is generally difficult to navigate, with few deep channels for downriver boating and few play opportunities. If we define the minimum flow for downriver paddling as the lowest navigable flow, then 1,350 seems to be a reasonable minimum for the Upper Spokane."

For the lower river reach, Section 5.2 concludes:

> "The Lower Spokane was considered to be a Class II reach with two Class III rapids, Bowl & Pitcher and Devil's Toenail. Study participants estimated the lowest navigable flow at around the 1,350 study flow, but some hard-shell kayakers indicated that they paddled the reach at flows as low as 600 cfs. At the 1,350 cfs study flow, all of the boats, including kayaks, open canoes and rafts, were able to navigate all drops, but most boaters hit rocks on the shallower rapids. Based on the information gathered from the surveys, 1,350 cfs appears to be a reasonable minimum flow for the Lower Spokane. "

Reach evaluations and conclusions were based upon the response of 30 individuals surveyed (Appendix D5).

Overall, the report concludes for both reaches and play spots (Section 6.0):

> "The Spokane River provides excellent whitewater boating opportunities with both river runs and park-and-play areas. With the exception of Trailer Park Wave, access to each play area or river reach can be achieved with relative ease and, in most cases, is possible just minutes from downtown Spokane. In addition, paddlers can enjoy the whitewater resources for the vast majority of the year. Additional whitewater opportunities could be provided by publishing release data from near the Post Falls HED, by improving access at some sites, by adjusting releases within the 2,000 to 5,000 cfs range to meet the preferred flows described above, or by providing additional recreational releases during summer months. Given the availability of whitewater on the Spokane River, the Work Group will need to consider the relative benefit of providing such releases of water versus the effects on water levels and water availability."

This study analyzed the opinions of approximately 30 individuals. The 30 individuals queried produced a range of opinions regarding flows. In all cases, the report acknowledges the dependence of flows for whitewater use on releases from Post Falls Dam, regulated under the FERC license.

The whitewater community is one of many uses of the Spokane River. Among its members, a significant range of needs and desires are expressed. For other uses and for aesthetics, we anticipate a range of flows in the river to be representative of the needs and desires of those sampled and the entire population. No primacy among these uses exists in statute.

In contrast, the instream flows are flows protective of fish resources. They are thorough and science based. They firmly describe the needs of this public resource. Those needs are more tied to water use at all life stages than are those for the range and magnitude of opinions on recreational needs. While the instream flow levels are based on fish studies, they also ensure flow in the river for preservation of other instream values. See response to Comment 2.

Comment 62
We therefore urge you to revise your proposed rule for instream flows for the Spokane River, especially the June 16-September 30 summer flows to higher cfs.

I therefore urge you to revise your proposed rule for instream flows for the Spokane River; especially the June 16-September 30th summer flows to higher than 1000cfs.

While additional analysis of our data would be required along with some field work and focus group discussions we can unequivocally state that 850 cfs is well below an acceptable flow for recreation and navigation and does not adequately protect these beneficial uses. In addition, the proposed instream flow of 6,500 cfs for the period April 1st to June 15 does not adequately protect high-flow opportunities that are enjoyed by our community. We request that you revisit the proposal for 850 cfs instream flows in summer and 6,500 cfs in spring.

Higher flow numbers are needed to protect the river for the future generations.

Commenter(s)
League of Women Voters, Spokane 19, 33; Gold, Raelene 10; American Whitewater 10, 11, 14; Bates, Melissa & Jim Briggs 6;

Response
Thank you for your comments. No data or studies are presented in these comments to support the suggested flows, nor to support statements of damage.

Comment 63
I would like to see the instream flow starting point be higher than 500 cfs because they think it's not enough, not enough for kayakers, not enough for fish. I'm most concerned about is the most popular section from Arthur Road to Sullivan Road, and in that particular section, 650 cfs is most of the aquifer, so it's an area where you need at least 1,200 cfs of water to successfully run the river between the two bridges.

I feel the absolute lowest flow would be 1,000 CFS, I would like to see 2,500 CFS. I feel that lower flow levels would have an impact on residences and visitor’s perception of Spokane.

Please keep the flow levels above 1000csfs during low flow to ensure that wildlife and recreation alike are not hindered on our beloved river.

Please consider reevaluating this rule. For fish health, recreational use, and to help mitigate Idaho upriver water use, I favor keeping the minimum April, May ,June flow higher than 10,000 cfs and the July, Aug, Sept minimum flow between 900 and 1200 cfs as possible depending on the various controlling factors.

Allowing the river level to drop as low as 850 cfs will definitely have an impact on the fish population. It will be very detrimental to the native redband trout along with all of the other fish species. That level is just too low, 1000 cfs should be the minimum.

As one of the Spokane River's "user groups" we would recommend an increase in the instream flow rate as measured at the Greenacres (Barker Road) USGS gauge #12420500 from the proposed 500 cfs between June 16 to September 30 to 1200 cfs.

In a small kayak I feel 1200 cfs is about as little volume of water needed to get through certain spots of the river. As far as larger vessels like rafts and catamarans probably need closer to 2000-2500 cfs to safely navigate the river. The spring time brings us some great whitewater when the river is 20,000-30,000 cfs as well!

Allowing flows below 1500 cfs would negatively affect our whitewater and fishing economy, the recreationalists that depend on the river, and the aesthetic values that the community depends on. Please consider raising the June 16th-September 30th flows to 1500-1800 cfs.

I agree with the Sierra Club that setting summertime flows at 850 cfs would be a debacle for the Spokane River. Twice that number might be adequate.

So I believe that a summertime flow of 1,800 to 2,000 is much more realistic.

I am the rafting coordinator for Peak 7 Adventures. Our goal is to provide experiences for youth labeled 'at-risk' that will challenge them to realize their greater potential. Our main rafting season is April through the first week of June, but we also provide float trips and canoe trips on the Little Spokane River through August. As you plan for the future, please consider our programs: if the water level of the Spokane River drops below 2,000 cfs in the summer months, we will not be able to serve the youth of Spokane via our water activities.

The scenic beauty of the River is degraded when flows are lower than 2000 cfs.

I suggest a minimum flow of 2000cfs. With proper management, coordination with the dams and Idaho, as well as water utility conservation, property and business conservation and progressive water rates, this goal can be met.

Please consider maintaining a minimum flow of 2000-2500 for this river throughout as much of the year as possible.

I would recommend a minimum flow of 2,000-2,500 cfs as good number supported by scientific evidence to sustain the fishery and permit recreational use of the river.

I too have floated the Spokane and found flows under 2000cfs to be hazardous to my equipment and simply no fun. 2500cfs is the minimum fun level where my equipment and safe navigability make the trip relaxed and enjoyable. Warm summertime flows at 2500 cfs make boating the Spokane River a family friendly recreational activity. From a minimum standpoint, I have to concur with Bruce in talking in terms of about 2,000 or 2,500. You know, you get a -- you can get a, you know, sportsman's special raft down the river at, you know, 1,000, but if you're going to have true recreation, you know, as we, you know, recreate on the river with rafting, which, by the way, has grown tremendously in the last ten years, with a huge influx of private and commercial uses of this river.

And Pat touched on the prime months of the year, June, July, and August as being, you know, the time when people get on the water here, and, you know, we've got to have a minimum of 2,000, or 2,500, or as Bruce said, 3,000 would be the minimum we would be looking at to really safely and -- to enjoy the river.

The counter-proposal in many of these public comments of a 2,500 cfs minimum flow is a much better target to keep river recreation feasible throughout the year.

I feel that a flow of 2500cfs during the summer will protect the wild Redbands while being a safe level for fisherman boating the river, whitewater users, and other Spokane River boat enthusiast. Below 2500cfs substantially more rocks and obstructions are exposed and become hazards to the boaters and their craft. While we are not a whitewater outfit, I can speak from many personal trips through the Bowl & Pitcher and Devils Toenail that 2500cfs is the absolute minimum to safely navigate the rocky rapids. Aesthetically, the river looks healthier when flows are higher than 2500cfs and we routinely refer people traveling through to go and check out the river and it's magnificent falls as one of the cities main attractions. Not something you can or want to recommend at 850cfs.

A minimum flow of 2500 cfs would do a much better job of addressing these considerations and providing for the health of this community asset.

The Spokane River should be protected with a state flow rule that will prevent summertime flows from dipping below 2500 cfs.

Experts with independent organizations such as Sierra Club are recommending a flow of 2,500 cubic feet per second during summer months as a flow that will protect fish, boaters, and businesses that depend on the river.

Please work to keep the minimum over 2500 cfps. It's a river, not an irrigation ditch.

I concur with other community recommendations that there be a 2,500 cfs flow during the summer months to protect the health of the river and its normal and natural uses.

Please increase the summertime flow to 2500 feet per second not only for the aesthetic value but also for fish & other aquatic life that depend on adequate amounts of cool water.

Scientists have determined that 2,500 is the minimum flow necessary for the Spokane River to sustain viable aquatic life and recreational opportunities for Eastern Washington residents. Please enforce the 2,500 minimum flow as recommended by our scientific advisers.

My proposal would be for flows at 2500 cfs.

Please protect the Spokane River, and do what the Department of Ecology failed to do. Please set the summertime low flow at the 2,500 cfs.

Please consider all the different people who enjoy this river on a daily basis, not to mention the native redband trout population and keep at least 2500/cfs of instream flow in our river!

Why when we now KNOW the importance of keeping water flow at a level of 2,500 cfs to protect this river and all of the life that depends on it, would we set it at 850 cfs in the summer? Have we not learned these lessons yet? Surely, we know and can do better.

A flow of 2,500 cubic feet per second is recommended during summer months as a flow that will protect fish, boaters, and businesses that depend on the river (the state is proposing only 850 cfs).

Do the right thing for your grandchildren and choose the highest possible flows, 2-3,000 cfs, not the lowest and most suitable for Avista Power and future "users".

What we are talking about is the Spokane River, after all the water has been squeezed off where a trickle is let down a major urban waterway that is used for recreation by thousands of people during the summer months that you're proposing the 840 cfs, which is based solely on fish, not the recreational needs of other people. 800 cfs is kind of laughably low. It's okay if you really want to hit your butt up on the rocks as you're going down the river if you're floating it or boating it. Down in the lower stretch between Devil's Toenail and the Bowl & Pitcher, the rocks are in evidence everywhere. I have been down 1,200, and I won't go any lower than that. Now they're lowering it to under 3,000, which I think should be the minimum for the Spokane, but that's me. So for what it's worth, I think 2,500 should be the absolute minimum flow in the Spokane River, and I'd even push for 3,000, I think is much better for all.

The more acceptable low flow level would be between 3000 to 3500 CFS as most regular users and outfitters would say.

A more realistic level would be around 3500.

I'm here representing Peak 7 Adventures. We've been rafting on the Spokane River since 2006, and we serve inner city youth through rafting tours and outdoor adventures, and just wanted to throw in my two cents, but it's kind of been said already.

The only other recommendation that I will make is that the springtime flow protecting Redband should be up around 8,000 cfs, which represents a 50 percent exceeds in the later end of June and that critical June 15th point. It's essential, of course as you know, that the flows don't go below 6,500 cfs any earlier than June 15 to protect those trout.

Our ideal rafting water flow is 10,000 cfs to 18,000, and normally we raft between April and May because that's the only time when the river is high enough. Our lowest minimum that we will raft at is between five and six thousand and we normally aren't able to use it when the weather is nice enough out. So we're normally rafting when it's cold and snowing.

We therefore urge you to revise your proposed rule for instream flows for the Spokane River; especially the June 16-September 30th summer flows to higher than 1000cfs.

This study found that whitewater boating opportunities on the Spokane River occur year round and that river running opportunities exist at flows of approximately 1,500 cfs and greater. Of 21 participants in this study, 11 considered 1,500 the minimum flow, and the majority preferred higher flows (median 4,000 cfs). Study participants estimated the lowest navigable flow at approximately 1,350 cfs. While some hard-shell kayakers indicated that they could navigate the reach at lower flows, they also indicated that these flows were less than optimal for recreation.[5] Study participants generally preferred the 2,500 cfs study flow for play paddling and safety, but indicated that boatable flows extend well above the study flows.

An online survey of boaters who kayak, canoe, and raft the Spokane River, of those that responded, 59% recreate more than 20 days a year on the Spokane River and 56% have more than 10 years of experience paddling on the Spokane River. The preliminary results show that acceptable flows ranged from 1,500 cfs to 15,000 cfs, with 5,000 cfs as the optimal flow.

Until such time as the agency is able to make ethically sound decisions for Spokane River flows I ask that you set the summertime low flow at the protective level of at least 2,500 cfs pursuant to the precautionary principle.

The river in the reach between Monroe dam and Nine Mile pool is exceptionally beautiful when it runs between 2,500 and 3,500 cfs. At these flows, riparian vegetation emerges at the edges and on the willow-strewn sandbars, and at the confluence of Hangman Creek. The river looks full, but not overflowing or flooding.

Some would say that any flow below 3000 cfs is too low for safe navigation. Consideration for public safety should be a factor in the study.

NWA wants Ecology to protect high flows in the river of 3,000 cfs, to allow us and others to safely navigate the river in areas such at the Devil's Toenail.

The Spokane Canoe & Kayak Club wants Ecology to protect high flows in the river – Safe boating flows for everyone is around 2500 cfs. Lots of people cannot enjoy the river unless flows are more like 2500 - 3000 cfs.

Ecology recommends 1,700cfs (cubic feet per second) between October 1 and March 31. Spokane Riverkeeper recommends 4000cfs. The Riverkeeper recommends an instream flow no lower than 4000cfs during the winter. This is a default to very near the 20th century 50% exceedance to control for slightly higher historic flows. This means 5 out of ten years, winter flows will be above 4000cfs.

Ecology recommends 6,500cfs between April 1 and June 15. Spokane Riverkeeper recommends 8000cfs. Spokane Riverkeeper recommends 8000cfs to protect redband trout spawning habitat. This is an exceedance between 70-80% at peak flows but ensures a 50% exceedance at the latter end (June 15th). It is essential that flows do not drop below 6500cfs any earlier than June 15th.

Ecology recommends 850cfs between June 16 and September 30. Spokane Riverkeeper recommends a flow rule of between 1500cfs and 1800cfs. The Spokane Riverkeeper

recommends a summer time flow of 1500-1800cfs (higher than 1986+50%exceedence) to protect ecological integrity of the Spokane River. A flow of 1500cfs to 1800cfs would be between 96% and 100% of WDFW's calculated Weighted Usable Area (WUA) for redband trout and it would provide the flow to wet much of the streambed and safeguard aquatic ecosystems in the lower Spokane River. Spokane Riverkeeper recommends 1500 to 1800cfs (higher than 50% exceedance) for a low summer flow to ensure proper functioning recreation and community values. Community recreation and access to the river is very important. When the river drops below a flow of 12 – 1300cfs it becomes difficult to navigate certain stretches and several runs become inaccessible to larger inflatables, dories and drift boats. Additionally, some rapids are dewatered and impassable at 1500cfs and thus deprive boaters of a community public resource at the very time of year when water temperatures make this kind of recreation feasible.

Commenter(s)
Banks, Aaron 4; Cervenka, Aimee 3; Crafton, Laura 3; FLOW Adventures 3; Holmquist, Gunnar 3; Reynolds, Carol 4; Soeldner, W Thomas 9; Spokane Falls Trout Unlimited 3; Systems Coaching LLC 9; Sierra Club (Tardiff, Tracy) 1; Zovanyi, Louise 2; Schultz, Jule 4, 5; Fair, John 2; Markwardt, D D 1, 3; Rutherford, Jim 3; Roehl, Renee 2; Scherer, Arthur 1, 2; Solberg, Steve 1, 2, 3; Burford, Heather 1; Steward, Mark 5; Peak 7 Adventures 1, H1; Wagstaff, William 2; Enviroscience Group 3; Parker, Steve 1; Sierra Club (Nixon, Shirley) 1; Bertsch, Roger 4; Reed, Jake 3; Grider, Chuck 2, 5; Sierra Club (Titon, Julie) 2, 3; Silver Bow Fly Shop 5, 6; Spokane Canoe & Kayak Club 6, 10, H1, H2; Burnhart, Bruce H2, H6; NW Whitewater Association 3, 5, 6, 8, 9, H2; Spokane Riverkeeper 3, 23, 31, 32, 33, 36, H11, H13; Pascal Osborn, Rachael 2; ROW Adventures 10; Sierra Club (Osborn, John) 23;

Response
Thank you for your comments. Ecology does not agree the requested instream flow levels are better than those set in this rule. No data or studies are presented in these comments to support the suggested flows. The instream flow numbers established in this rule are supported by four scientific studies conducted specifically to evaluate the instream needs of the fisheries resources present in the river at all of their various life stages. Flows suitable for rafting in the River occur every year and the timing of these suitable flows is dependent on each year's hydrograph. An instream flow rule does not change the hydrograph, it simply functions to condition new, junior, water uses to be interruptible to protect the instream flow. To physically manipulate and modify the flow in the river to satisfy any particular use, it would take a modification of the FERC licenses issued for Avista's dams on the Spokane River. Those licenses were most recently re-issued in 2009. See also the response to Comment 1.

Comment 64
We believe the proposed instream flows are at the low end of historic flows, and at best 50% exceedance of modern flows, and that this proposal does a tremendous disservice to the river and the community.

Commenter(s)
CELP/Sierra Club 27;

Response
The instream flows in this rule are at the low end of flows measured in the 1890s when the river was not impounded by the Post Falls dam. Exceedance curves were not used to establish instream flow numbers in this rule. The numbers were derived from four scientific studies conducted to evaluate the instream needs of the fish species present in the river. Streamflow data from 1986 onwards (and exceedance curves based on these flow numbers) were used to show how the instream flow numbers compare to actual flows that have recorded in the river under the most recent flow management schemes. Still, the numbers adopted in the rule did not come from USGS flow data collected at their gages nor an exceedance analysis of that data.

Comment 65
Barber and others have shown that the hydrograph the Washington Caucus is using as a model for recommendations is clearly affected by the perception that summer low flows since 1986 are "normal" rather than the resulting crisis of ground water "mining" in the Spokane Valley and Rathdrum Prairie. In a 2011 report the author's state:

> "As illustrated… summer low flows at the USGS gage near downtown Spokane …. are often less than 1,000 ft3/s, particularly in the last 40 years. It is this disturbing trend in low flows that raises concerns among water resource agencies. A regression analysis of the minimum annual daily flow data indicates a statistically significant … decrease in low flow between 1900 and 2007. While the rate of decline was steepest from 1900 through 1950…..the downward trends has still continued since that time…..The combined effects of changes in reservoir operations associated with the Post Falls Dam, changes in water use patterns from irrigation of orchards and row crops to suburban residential uses, increases in municipal pumping as the regions' populations has grown and changes in runoff patterns due to climate change… are creating severe low flow conditions that threaten water users and the environment" (Barber et al, 2011).

Commenter(s)
Spokane Riverkeeper 12;

Response
Instream flows were not established by relying exclusively on flows since 1986 or any other time frame. They were established by evaluating fisheries habitat studies conducted to evaluate the needs of the instream resources. Ecology scientists are co-authors of the Barber et al 2011 study you cite. We were the first scientists to identify this long-term downward trend in the summer low flows back in the early 1990s.

Comment 66
Do not use a post-1986, 100% exceedance curve: The Spokane Riverkeeper believes that following a base flow regime rule set at 100% exceedance flows (for years after 1986) is flawed as it is neither "conservative" nor "protective" of aquatic habitats and ecosystems. These recommendations threaten to codify a "new normal" in which the Spokane River is degraded by insufficient summer base flows and much of its biological and recreational integrity is allowed to disappear.

Use a post-1986, 50% exceedance curve or higher: The Riverkeeper recommendations will follow a more "conservative and protective" post-1986 50% exceedance curve (or higher) which is more protective of water than the Caucus recommendations. The Riverkeeper believes that using the

higher exceedance corrects for a river that is depleted by anthropogenic causes. Defaulting to modern flows at the 50% exceedance is inherently protective of ecological values regardless of science that may look at optimal protection of one or two species in a matrix of hundreds or thousands. Further this curve protects recreational and aesthetic values more effectively.

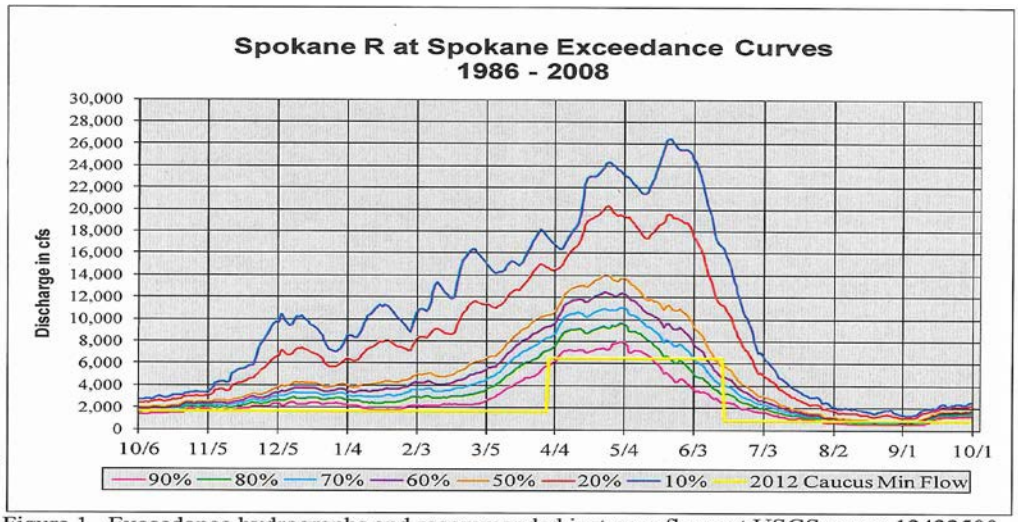


Figure 1. Exceedance hydrographs and recommended instream flows at USGS gauge 12422500 (Spokane River at Spokane).

Commenter(s)
Spokane Riverkeeper 16, 18, 20;

Response
Exceedance curves were not used to establish instream flow numbers in this rule. The numbers were derived from four, scientific studies conducted to evaluate the instream needs of the fish species present in the river. Streamflow data from 1986 onwards (and exceedance curves based on these flow numbers) were used to show how the instream flow numbers compare to actual flows that have recently been recorded in the river. Still, the numbers adopted in the rule did not come from USGS flow data collected at their gages nor an exceedance analysis of that data.

Comment 67
The flow should be based on science rather than user (water drawer's) wants.

This proposal fails to give the Spokane River the real protections that it needs. The proposed instream flow rule for the Spokane River lacks basic scientific analysis and is completely inadequate to protect this much loved river.

They need to base any decision on sound studies as what flows are needed to maintain and improve fish habitat.

BHA supports the science in the determining the minimum river flows.

If measures need to be instated, let them be based on the most current research and data driven outcomes.

Right now, we have the chance to apply sound scientific principles to the water situation regarding the Spokane River. Lets do it!

The Department of Ecology proposed summer season flows do not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish. For this reason alone, the proposal needs to be scrapped and started anew with a focus on SCIENCE. Dump this plan and start fresh to develop a proposal based on sound science and rational thought.

Scientists that have been educated in marine biology and fisheries are more knowledgeable than politicians in determining the necessities of aquatic life.

Commenter(s)
Backcountry Hunters and Anglers 2; Center for Environmental Law & Policy 6; Struck, Fred 3; Townsell, John 9; Nelson, Dan 4, 7; Markwardt, D D 2; Goodner, Tom 2; Peterson, Kerry 10;

Response
Four instream flow studies have been completed on the Spokane River since 2003. These scientific studies were conducted specifically to evaluate the instream needs of the fisheries resources present in the river at all life stages. The instream flow numbers in the rule were derived from these studies and were chosen to optimize the weighted useable area of habitat to protect the instream resources. This methodology was described in detail and affirmed by the Washington Supreme Court in their 1993 Elkhorn decision (State of Washington, Department of Ecology, Department of Fisheries and Department of Wildlife, Respondents, v. PUD No. 1 of Jefferson County and City of Tacoma, Department of Public Utilities, Appellants. No. 58272-6. April 1, 1993).

Comment 68
I urge you to do more research and consider higher instream flow values that mimic the more natural flows of nature for the protection of the fish, the recreational users, and the businesses relying on a healthy Spokane River.

I believe we should modify the seasonal control points for instream flow regulations, specifically the mitigating control point I think should be changed from March 31st back to March 1st. Naturally, the Spokane river hydrograph begins to rise at this earlier date. In addition, we expect that trend to happen even earlier as our local climate change accelerates. I would also like to see those dog legs at either side of the flows that they recommended fall at a more natural hydrograph.

After review of the draft rule and supporting materials, the Tribe requests that Ecology closely review and reconsider the adoption a flat 850/500cfs from June 16-September 30. The Tribe supports the 850/500cfs as the minimum flow for the later portions of August and September because this represents a normal hydrograph for the Spokane River, and it acknowledges the requirements within Avista's FERC license. However, after review of the data, the flows that currently exist in the Spokane River, the average flows in June and July are much higher than 850/500 cfs. (See exhibit 1 Rule in black). Additionally, the flows are much higher in portions of October through April. See id. These flows must be better protected. As Ecology is well aware this rule does not affect senior water rights holders within the area of the rules regulation, and it defies logic to not protect as much water in the River as possible.

Given that the Spokane River likely is or will be over appropriated in the near future based on the municipalities activities in Idaho and Washington, adopting a stepped down approach to protect a more natural hydrograph is very appropriate and supported by the data.

Commenter(s)
Silver Bow Fly Shop 9; Spokane Riverkeeper H10; Spokane Tribe 4, 14;

Response
The instream flow values adopted in this rule come from weighted usable area habitat studies conducted on various life stages for indicator species in the river. The time periods applied to each life stage (and flow value or 'bench') come from the four scientific fish studies conducted to evaluate fish habitat in the river.

The lack of 'sloped steps' between life stage values comes from our desire to develop instream flow values that are clearly defendable with rigorous science. We picked the peaks of optimum habitat when we could and maximized habitat for multiple species when their individual species curves were at odds with each other. If we had applied ramping rates to 'step' from one instream flow value to the next we would have had no science-based studies to defend the slopes of those ramping rates and would have left ourselves vulnerable to challenge from those who would seek to discredit the science behind our instream rule numbers.

The goal of an instream flow rule is to protect and preserve the instream resources, not to mimic the hydrograph. We can defend the 'benches' we set in the rule with rigorous science conducted specifically for the Spokane River.

Comment 69
Low flows (below 1000cfs at the Spokane USGS Gauge) experienced in the latter half of the 20th are not necessarily normal or natural summer flows. If one looks at the compiled hydrographic data for the Spokane River between 1899 and 1950 summer time low flows discharges were consistently above 1000cfs and actually, very often above 1500cfs. It is not until 1950 that we begin to see the discharges in the lower river dip under 1000cfs and not until the 1960s that we see summer discharges periodically as low as 850cfs.

Commenter(s)
Spokane Riverkeeper 25;

Response
Your observations about the long-term decline in summer flows are correct. The summer low flows in the Spokane River have been declining for a long time. Ecology scientists were the first scientists to identify this long-term downward trend in the summer low flows back in the early 1990s.

Instream flow numbers were not established by using flows from any time period or comparing the actual flows in the river to any time period to the exclusion of any other period. They were established by evaluating fisheries habitat studies conducted to evaluate the habitat needs of the instream resources. Normal or natural summer flow is considered, but is not the basis for development of these instream flows.

Comment 70
Setting flows as low as 850cfs as a matter of policy does not meet the “authority and purpose” of the instream flow rule-making process. These base flows may well represent a persistent crisis rather than a norm to be relied on for healthy ecosystem function and codified as public policy. At 850cfs much of the stream bed of the lower SR is dewatered and dried out. A growing base of ecological science is revealing that dewatering a river below 75% of its capacity is detrimental to the benthic community. Such dewatering may have profound effects on the composition of species, the diversity and relative abundance of benthic organisms.

Commenter(s)
Spokane Riverkeeper 26

Response
These flows are not being set as a matter of policy. They are being set on the basis of thorough study of the Spokane River and the sediments and fish within. Ecology and WDFW believe these represent streamflows protective of the ecological health and instream resources of the Spokane River See Beecher, 2012.

Comment 71
Use a natural hydrograph: The flow recommendations should more clearly follow the natural hydrograph. Ecology recommendations allow hydro-operators to drop flows 5650cfs in a 24 hour period between June 15th and June 16th of the year. This is clearly inappropriate in that if this were actually executed, such a massive drop of river flow volume would have a debilitating effect on the entire ecosystem, stranding aquatic organisms and dewatering large areas of the riverbed. It would be a better design to have the control points in the recommended hydrograph roughly coincide with the rise and fall of the natural hydrograph.

Although we support higher flows throughout the annual cycle, we especially believe that the transitions between seasons needs to be gradually stepped rather than the sharp vertical decrease/increase represented on the Appendix B graph. We believe that the stepped transition will be better for all of the native species in adapting to the change in flows.

Flows of 850 cfs would be lower flows than the natural flow regime would be on many years, and under your proposal, would be started much earlier than natural flows currently occur. Following a natural flow regime is important: The proposal shows a very unnatural flow process where on a certain day in the spring it's all of a sudden acceptable to drop the river's flow to 850 cfs. This isn't good for riparian zones, wildlife, nor recreationists. If the river flow is going to be diverted it should follow the pattern of nature. As is said "It's not nice to mess with Mother Nature!" Currently the proposal shows a minimum required flow 6500 cfs from April 1 to June 15 while historically the river would typically reach flows of 20,000-30,000 during this time, and often peak higher than this. Then capriciously, on June 16th the flow could drop to 850 cfs. In one day! Surely this makes no sense and needs to be modified.

As your own report shows, prior to 1940 the river didn't drop below 1200 cfs. Since that time there have still been many years when a minimum flow of 850 cfs is never reached, so to set this flow artificially is not sound science, nor logical.

The League's comments on the Columbia River Treaty Review supported the inclusion of an ecosystem functioning to reestablish a more natural flow that would benefit fish and wildlife. In our view, instream flows should replicate the natural shape of the hydrograph to sustain the natural functioning of the river.

Commenter(s)
Spokane Riverkeeper 22; Spokane Falls Chapter of Trout Unlimited 10; ROW Adventures 12, 15, 18; League of Women Voters, Spokane 8, 17, 22, 30;

Response
An instream flow rule does not control the hydrograph of its river. Day-to-day river operations for the Spokane River are spelled out in Avista's FERC licenses for their Spokane River dams. The FERC licenses regulate when gates on the dams can be manipulated and what are acceptable ramping rates for changing the flow in the river on a real-time basis. The instream flow rule is only used to condition new interruptible water rights to indicate when they are interruptible.

Comment 72
Modify the seasonal control points: Further, I recommend that the Ecology framework of adjusting flows between control points of March 31st and April 1st is flawed as the hydrograph clearly begins to sharply increase by March 1st. I think winter flows should be bracketed between October 1st and March 1st and spring flows between March 2nd and June 15th.

We also believe that the spring flow should be ramped up starting March 1st and extended until July 1st. This will benefit the Redband trout as they stage and spawn and assure that the fry have an opportunity to find refuge after they emerge from the spawning gravel.

Commenter(s)
Spokane Riverkeeper 21, 34; Spokane Falls Chapter of Trout Unlimited 11;

Response
The Addley and Peterson, 2011 report indicates that incubation after spawning runs from late April through early June in the Spokane River. The April 1st to June 15th time period for the instream flow of 6500 cfs is more than sufficient to protect fry emergence. All of the time periods established by the rule are based on scientific studies of fish habitat conducted specifically for the Spokane River.

Comment 73
The Tribe is uneasy about the methodology used to develop the rule, and the way it has been structured. After two meetings with Ecology staff and internal deliberations within the Department of Natural Resources, the Tribe strongly encourages Ecology to revisit and revise the minimum instream flow rule to protect higher flows in early to mid-summer and higher flows in the fall through the winter period. Ecology should revise the rule to contain monthly or fifteen-day minimum instream flow requirements instead of the overly generalized blocks of time.

The RCWs and WACs that govern instream flow development are clear in that Ecology needs to protect scenic, recreational, navigational and aesthetic values in addition to fish and wildlife.

Upon review of the many other comments submitted during this process it is clear that the navigational, recreational, and aesthetic concerns are not properly protected. These would be protected if Ecology would simply adopt a stepped down rule to protect the current hydrograph instead of the arbitrary blocks of time based solely on Ecology's interpretation of the IFIM study.

The Tribe strongly urges Ecology to adopt a stepped down instream flow rule based on the appropriate data for June 16-September 30 and a stepped up rule for October 1 to March 31, including protections for flows above 6500cfs. The rule could be organized in fifteen-(15) or thirty-(30) day blocks to protect the current flows in the Spokane River.

Commenter(s)
Spokane Tribe 2, 6, 7, 12;

Response
RCW 90.03.247 grants the Department of Ecology exclusive authority to establish minimum flows. Minimum flows are established *"for the purposes of protecting fish, game, birds or other wildlife resources**, or** recreational or aesthetic values"* (RCW 90.22.010, emphasis added). Under 90.22 Ecology is not required to establish minimum flows for fish **and** recreational values or aesthetic values. The department has some discretion and leeway in the process.

RCW 90.54.020(3)(a) says *"streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values…. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served."* This doesn't mandate that minimum flows must be set for navigational flows or aesthetic values, it states that base flows necessary for preservation of these values be retained. In addition, new withdrawals shouldn't conflict with these values unless there is some clear overriding public interest at stake. If the department issues any new, junior water rights after the adoption of the rule, they will be conditioned to be interruptible (or fully mitigated) to comply with RCW 90.54.

Ecology considered the recreational, aesthetic, and navigational values arguments for protecting the Spokane River at multiple stages throughout the process of establishing instream flows for the river. The subject came up during the FERC license process for Avista's dams. The subject came up during the Watershed Planning process; the subject came up during the draft comment period for the rule, and the subject came up during the comment period before final rule adoption.

The department regards the minimum permissible flow consistent with legislative intent as the lowest flow capable of protecting and preserving instream values, in this case native fish populations. Four scientific, instream flow studies were conducted on the Spokane River to develop habitat curves that Ecology used to derive its recommended instream flows. The method employed by Ecology and the Department of Fish and Wildlife to establish instream flows was affirmed by the State Supreme Court in: Supreme Court of Washington, En Banc.; State of Washington, Department of Ecology, Department of Fisheries and Department of Wildlife, Respondents, v. PUD No. 1 of Jefferson County and City of Tacoma, Department of Public Utilities, Appellants. No. 58272-6. April 1, 1993.

Comment 74

There may be a simple solution, which is based on the average flows that come into Lake Coeur d'Alene. Add the average daily flows into Lake Coeur d'Alene, which are almost all the North and South Fork Coeur d'Alene and St Joe Rivers. This would put the flows at Barker Road at 3500 in late June, around 2000 in mid July, and nearly 1000 cfs in mid August and about 900 at the end of August. Another 350 cfs or so flows into the river from the aquifer by the time it hits downtown, depending on month. However, that additional water from the aquifer could change if more water is withdrawn from the aquifer by either Idaho or Washington, so it is reasonable to build in a safety margin. We recommend that the base (minimum) instream flows should be the average USGS measured combined flows of the St. Joe (Fig 1) and Coeur d'Alene (Fig 2) combined, plus an additional 10% as a safety margin, throughout the year.

Figure 1

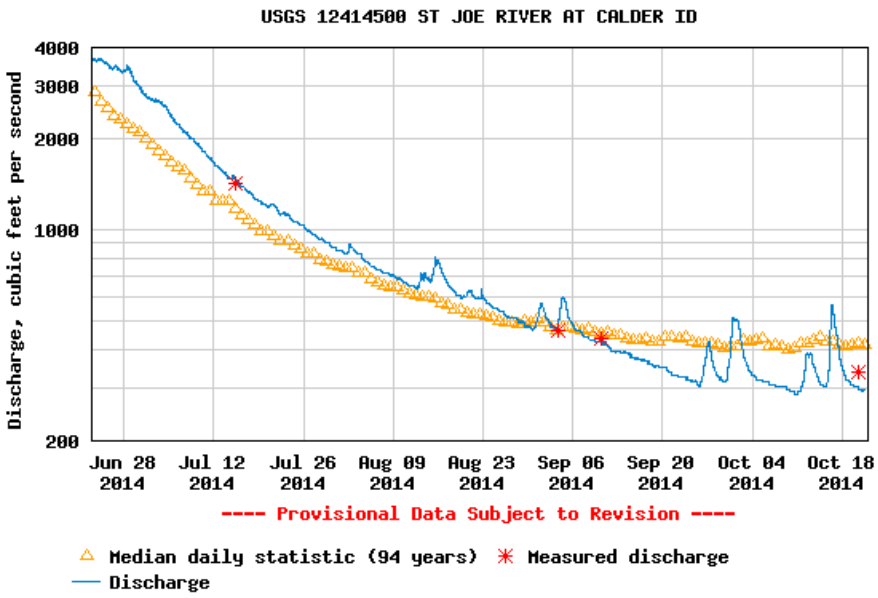


Figure 2

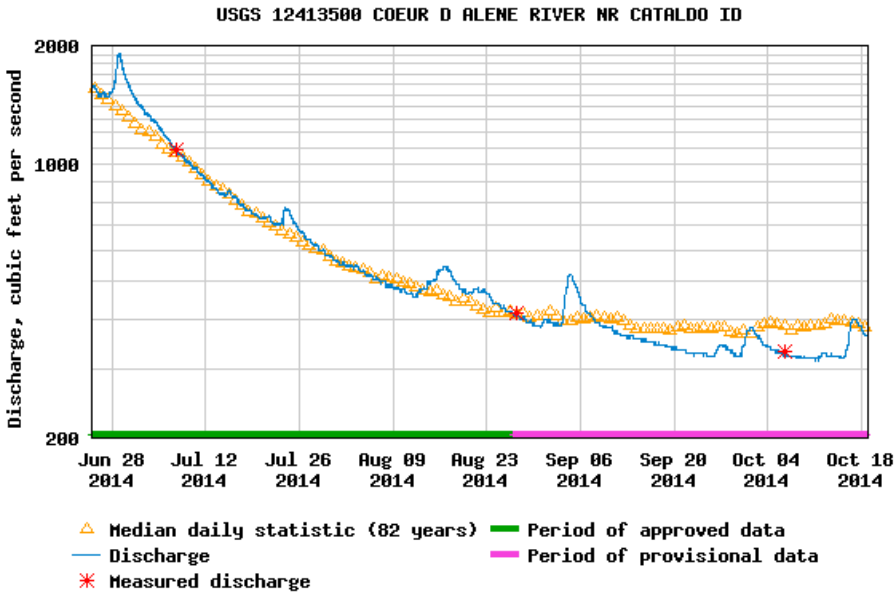
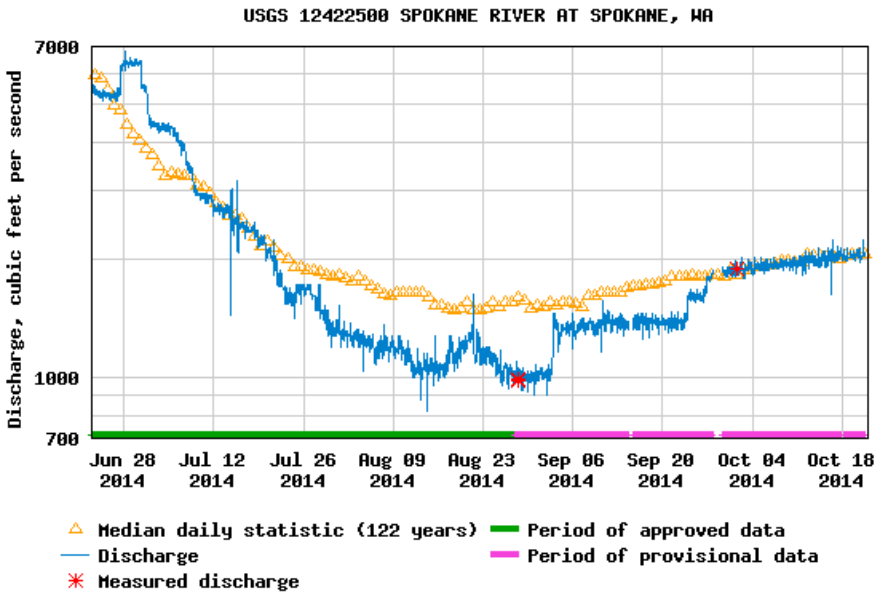


Figure 3 shows the USGS flows measured in the Post Falls dam controlled river. The flows in downtown Spokane averaged over the past 122 years match our recommendation fairly closely. Since Lake Coeur d'Alene stores a substantial quantity of spring runoff, an instream flow that matches our recommendation is very achievable, and unlikely to have an impact on lake levels.

Figure 3 – Post Falls Dam controlled flows at downtown Spokane.



Commenter(s)
Lands Council (Peterson, Mike) 2, 3;

Response
These instream flows are not established to mimic current or historical flows in the river. They are developed to protect and preserve instream resources.

They were developed by collecting data about water velocity and depth, the substrate of the river, what species of fish inhabit the river, and what developmental stages the fish go through at what times of year. The data are then assembled to enable predictions about how the water depth and velocity will change at different flow levels, and to show what depths, velocities, and substrates are most suitable for each life stage of each fish species in the river.

A computer program known as "PHABSIM" (for physical habitat simulator) is then run using this assembly of data. The output of the PHABSIM program includes a set of charts or tables. Each chart or table indicates for a given fish species and a given life stage of that species the "weighted usable area" available at different flow levels. "Weighted usable area", roughly, is how much area of the river the fish can use as habitat. These are then used by fisheries biologists to determine the appropriate instream flows for the river.

There is uncertainty inherent in the computer modeling of the complex biological system of the river. For example, the PHABSIM model uses only three of the many variables that determine fish habitat. The three variables PHABSIM uses are water depth, water velocity, and substrate. There are other important flow-related habitat variables, including (1) predation, (2) competition and

territoriality, (3) sedimentation and its effect on eggs and food supplies, (4) the adequacy of flows to prevent eggs from dehydrating, and (5) the creation of barriers to migration. Since PHABSIM's predictions regarding fish habitat are based on this artificial concept of habitat, WDFW's biologists are conservative in their estimation of the flows that would best protect the fishery. The computer model maximizes for an "optimum" flow regime for fish, but this optimization is only in the sense that for a given species and a given life stage of that species, the model predicts at what flow the largest amount of weighted usable area of habitat will be present.

Even on the assumption that maximizing weighted usable area is "optimum" for that life stage of that species, the same flow regime may not be optimum for other life stages of the same species or for other species. Rule instream flow numbers often require a balancing of multiple, IFIM 'optimum' flows for multiple species in the river during the same time periods.

Comment 75
More water is further supported by the recreational, navigational and aesthetic interests that desire higher flows and have commented as such. Ecology should develop flow numbers for early to mid-summer and the fall and winter months that better preserves the statutorily protected interests and better serves the navigational and recreational communities, including the River's aesthetic qualities.

Commenter(s)
Spokane Tribe 10, 11;

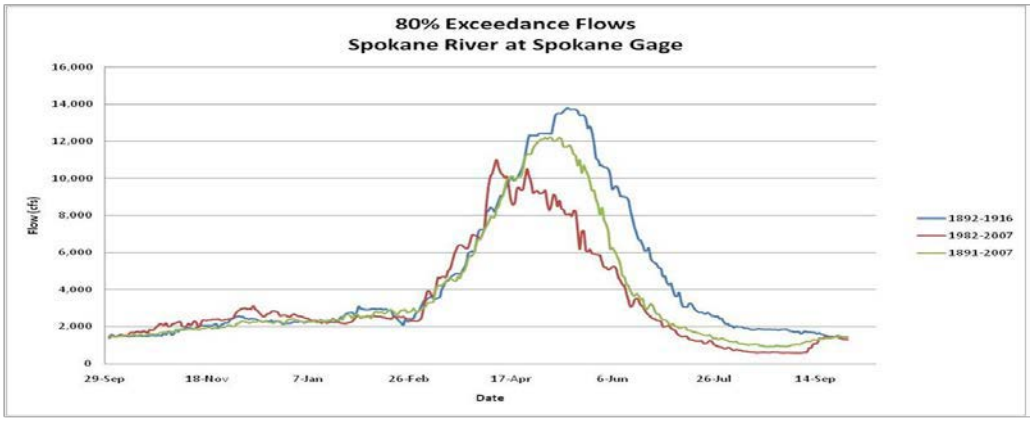
Response
Flows that serve the recreational community occur every year in the Spokane River. What varies from year-to-year is the timing and duration of those recreational flows. The instream flow rule does not control the hydrograph of the river. It does not require or control the release of water from storage. An instream flow establishes the flow levels in the river that must be protected from future new withdrawals of water. It is a tool used to notify junior water users when they have to turn off their use to protect the senior instream flow, or to determine the amount of mitigation required.

To change the actual flow in the river to better suit a particular recreational use, one would need to seek changes in the FERC license, which does have control over water storage and ramping rates and the shape of the hydrograph (for parts of the year at least). The FERC licenses for Avista's dams were last issued in 2009.

Comment 76
The proposed seasonal flows should be based on historic hydrology of the river before the influence of extensive aquifer pumping. I believe that analysis on that basis will yield minimal flows substantially higher than those proposed. The flow data that was used for the proposed rule is based on data compiled before 2008. I don't know that using more current data will make any difference, but I do know that the understanding for the protection s of the impacts to our weather and water supplies with climate change have advanced substantially during those intervening six years.

The base flow recommendations should be -- I'm sorry, we should be basing flow recommendations on data clear back to 1899 and not begin at 1986. I know that seems odd, but I think to bracket that rule making with that data set that starts at '86 contributes to kind of a creeping base line syndrome, and it creates a new normal that may not be normal at all. The reasonable flows seen in the descending hydrograph may actually represent a crisis of overconsumption, and historic flows should be used in this sense to better tell us what normal actually is.

The Spokane Riverkeeper believes that the Ecology should incorporate the early 20th century hydrograph that is not degraded by over- pumping, close proximity pumping and over consumption for the model of recommended low flows. First, the State Caucus's reliance on a Spokane River hydrograph that spans the years 1986 and 2008 contributes to a flow recommendations that contribute to the aforementioned, "creeping baseline."



80% exceedance flows graph (Graph courtesy of John Gross)

Commenter(s)
Morrison, Harvey H4; Spokane Riverkeeper 14, 15, H7, H8;

Response
Neither historical flow data nor exceedance curves were used in establishing the instream flows in this rule. The numbers were derived from four scientific studies conducted to evaluate the instream needs of the fish species present in the river. Streamflow data from 1986 onwards (and exceedance curves based on these flow numbers) were used to show how the instream flow numbers compare to actual flows that have recently been recorded in the river. Still, the numbers adopted in the rule did not come from USGS flow data collected at their gages nor an exceedance analysis of that data.

Comment 77
It was extremely disappointing and disillusioning to see the Department of Ecology proposed minimum instream flows levels set at such minimal levels, far below what is recorded in historic hydrographs.

Commenter(s)
Gold, Raelene 2;

Response
Neither historical flow data nor exceedance curves were used in establishing the instream flows in this rule. The numbers were derived from four scientific studies conducted to evaluate the instream needs of the fish species present in the river. Streamflow data from 1986 onwards (and exceedance curves based on these flow numbers) were used to show how the instream flow numbers compare to actual flows that have recently been recorded in the river. Still the numbers adopted in the rule did not come from USGS flow data collected at their gages nor an exceedance analysis of that data.

Comment 78
Ecology has proposed the following base (or low) flows for a future Spokane River:

- October 1 – March 31 – 1700 cfs (cubic feet per second)
- April 1 - June 15 – 6500 cfs
- June 16 to September 30 – 850 cfs

These flows do not refect what the Spokane River historically had as flows, and could create huge problems if junior water rights were given based on them, particularly during the June 16 to September period.

Commenter(s)
Lands Council (Peterson, Mike) 2;

Response
It is true that these instream flows are not established based on historical flows. They are derived from studies conducted to determine which flows protect and preserve the instream resources in the Spokane River.

Allowing for climate change/safety margin

Comment 79
In modeling the availability of water in the future years, climate change must be one of the factors applied to any analysis.

We have local climate change that's likely to reduce Idaho's snow packs to levels that I just learned that today at the Columbia Basin conference that we may even be losing our Idaho snowpack, and the Spokane is a rain based system, by the year 2080. That's the UW Climate Science Group is doing that research. That's a pretty bleak future in that sense.

In the face of climate change, which is also not addressed in this rule, the importance of this cold water and the health of the system is critically important as we look at rising temperatures and the threat of fish populations in the basin.

Climate change is likely to make the Spokane River more important over time as a source of refuge and recreation.

Climate scientists tell us that as global temperatures warm, the snowpack and glaciers in our regional mountains will diminish. Rivers will flow differently, including lower flows in summer months, hotter water temperatures, and overall degradation of aquatic habitat as we know it. It is therefore extremely important that you adopt instream flow rules that build resilience into the system. We ask that you go back and re-think your selection of Spokane River instream flows in view of what climate change is already bringing us, and which will only intensify in the next several decades.

The proposed summer minimum flows of 850 cfs in the "Downriver Reach" of the Spokane River and 500cfs at Greenacres are at the very bottom of the summer historic lows in hydrograph USGS 12422500 Spokane River, 2009 to 2014. Establishing a summer flow level at this lowest bar does not allow for any unexpected climate impacts

Little, if any, consideration in the proposed rule addressed the likelihood of climate change and it's influence on the future flows of the River. SFTU understands that speculating on the impact is difficult to project; however, models do exist that tell us that our winters will be warmer and rainy and summers hot and dry.

The authority and purpose of the instream flow rule is to protect ecological values, aesthetic values and recreational values for future generations of river-users. This has never been so important as it is in an age of global climate change.

Our rivers are one of our most valuable assets. As climate change effects runoff levels and rainfall quantities it will be especially important that we manage this natural resource and all it effects.

We were glad to hear of Ecology's decision to finally set an instream flow level for the Spokane River and the Spokane Valley Aquifer to "protect and preserve water in streams for instream resources including fish, wildlife, recreational uses, wastewater and hydropower". We believe designating this instream flow level will be particularly important in light of anticipated changes in climate with increased temperatures and lowered snow pack.

Establishing minimum instream flows is important for the future of the fishery on the Spokane River, particularly as a warming climate may change the snowpack and runoff.

We are and will continue to face, the loss of both ground and surface water recharge due to the growing impacts on our river from global climate change. In the Climate and Hydrology Datasets for Use in the River Management Joint Operating Committee (RMJOC) Agencies' Longer-Term Planning Studies report compiled by the United Sates Army Corps of Engineers, the U.S. Department of the Interior, Bureau of Reclamation and the Bonneville Power Administration in 2011, trends for the next century are for warmer, wetter winters and dryer, hotter summers. This has profound implications for the ground water and surface water supplies that feed the Spokane River. This report states, "For sub-basins in the Columbia River Basin, the trend from historical to future average annual runoff was found to generally follow the same trend as the average annual precipitation (Figure 8). Monthly runoff patterns are expected to change in the future relative to historical conditions, with warming leading to increased winter-spring runoff and reduced summer runoff. These seasonality changes are due to increased winter rainfall and reduced snowpack, which reduce the snowmelt volume through the summer. Scenario precipitation trends varied geographically within the Columbia River Basin; however,

absent any precipitation change, warmer conditions led to increases in evapotranspiration and a reduction in runoff in these scenarios".

The implications of climate change are more stress on water consumption because 1) population growth in our area due to suitable climate and an unliveable southwest 2) Less surface and ground water due to diminished snowpack and more consumption of water due to weather that has extreme heat.

Ecology should consider the impacts of climate change on Spokane River hydrology and aquatic health as part of the instream flow setting process. Climate change is expected to alter the Spokane River's hydrology. Climate change will affect the timing and availability of the water resources of the Spokane River and associated groundwater. Ecology did not adequately analyze the impacts of climate change on Spokane River instream flows, and may not have analyzed such impacts at all.

Commenter(s)
Morrison, Harvey H5; Spokane Riverkeeper 13, H5; Sierra Club (Osborn, John) 18, H8; Bates, Melissa & Jim Briggs 2, 5; Smith, Bruce & Denise 2, 4; Spokane Falls Chapter of Trout Unlimited 8; Lawrence, Christopher 4; Zovanyi, Louise 4; Lands Council (Peterson, Mike) 1; CELP/Sierra Club 8, 23, 43;

Response
Climate change is an important topic. The instream flow rule does not control the hydrograph of the river. It does not require nor control the release of water from storage. It cannot be used to mitigate for climate change impacts.

An instream flow establishes the flow levels in the river that must be protected from future new withdrawals of water. It is used to notify junior water users who are interruptible to the senior instream flow right that they need to stop exercising their rights, or to determine the amount of mitigation required, if the flows in the river drop below the instream flow listed in the rule.

See also the response to Comment 2.

Comment 80
A positive margin of error (+15%) should also be added to the minimum instream flow to ensure the above goals [healthy fish populations and year-round recreational opportunities] are met.

Including a factor of safety or margin of error related to changing climate impacts on water resources is prudent.

I will start my comments by saying that much is unknown about the ecological function of all urban streams in America, and the Spokane River is no exception. Really, we have no detailed studies on aquatic amphibians and numerous other native fish in the river that constitutes an entire wetland and eco system. Given the lack of science and the resulting uncertainties around that lack of knowledge and science, and given that there are no absolutes, we -- I think you're going to hear my comments are very conservative in approach.

Commenter(s)
Rush, Richard 3; Peterson, Kerry 3; Spokane Riverkeeper H2;

Response
Ecology believes the flow levels in the rule contain an appropriate safety margin and are set consistent with statutory authority..

Comment 81
We simply do not have the science to understand setting flows for healthy ecosystem function. There is an emerging body of evidence that documents the health of urban river ecosystems and the unique variables that affect their function and health.

> "Urban streams have been the focus of much research in recent years, but many questions about the mechanisms driving the urban stream syndrome remain unanswered… The key questions address major gaps in our understanding of ecosystem structure and function responses (e.g., what are the sublethal impacts of urbanization on biota?), characteristics of urban stream stressors (e.g., can we identify clusters of co-varying stressors?)" (Wegner, et al, 2009)

Certainly this quote captures the situation with regards to our current lack of understanding of how the Spokane River aquatic ecology functions and how the stresses of hydrologic change, and flow regimes affect the ecology or our urban river and its ecology.

Commenter(s)
Spokane Riverkeeper 4;

Response
As can been seen in the Spokane Riverkeeper's own KOP_Atlas of Images, the Spokane River is not a small urban stream where urban development greatly influences the channel, riparian vegetation, and hydrology of a significant part of its length. The Spokane River's channel was shaped by forces long before the area developed into the metropolitan area it is today. The instream flow numbers established in this rule are supported by four, scientific studies conducted specifically to evaluate the instream needs of the fisheries resources present in the river at all of their various life stages.

Comment 82
It is necessary, but not sufficient, that proposed flows be sustainable.

Commenter(s)
Peterson, Kerry 2;

Response
Thank you for your comment.

Comment 83
Given what we do know, the Spokane Riverkeeper concurs with Hal Beecher, Washington Department of Wildlife Biologist who states in his 2012 Instream Flow Recommendations for the Spokane River, that flow recommendations should be both "protective" and "conservative".

> "When there is uncertainty, the state recognizes that any water rights will be issued in perpetuity so instream flows should be protective and conservative. There is no harm to the river from being conservative, but it is hard to undo harm if the instream flows are not protective enough and water is appropriated down to the instream flow" (Beecher, 2012).

Within the context of global climate change (coupled with over-consumption), instream flows should be set to protect the ecological and aesthetic values of the river rather than rely on norms that potentially tilt the management of the Spokane River minimum flows towards protecting the over –consumption and miss- management of the Spokane River. Using a higher exceedance curve corrects for the depletion that the river has experienced after 1986 due to a trend of over-pumping. This "conservative" approach is designed to meet the above mentioned "authority and purpose" of the instream flow rule making.

We believe that in this era of uncertainty, the flows need to be protected at the highest minimal rather than the lowest minimal. Better to error on the side of caution. While nature and a changing hydrograph may reduce flows to or below those in the proposed rule, the River and Aquifer need to be protected as much as possible to prevent over allocation that will reduce flows artificially low.

We urge you to adopt a more conservative minimum flow, such as 80 percent of the exceedance curve for the Spokane gauge.

I ask that you set the summertime low flow at the protective level of at least 2,500 cfs pursuant to the precautionary principle.

Commenter(s)
Spokane Riverkeeper 8, 17; Spokane Falls Chapter of Trout Unlimited 9; Idaho Conservation League 5; Sierra Club (Osborn, John) 23;

Response
Thank you for your comments. Ecology does not agree with the suggestion to adopt a more conservative instream flow, such as an 80 percent exceedance flow. The instream flow levels in this rule are based on four studies that indicate flow levels necessary to protect fish and fish habitat in the Spokane River. The commenters do not provide any documentation justifying their recommended instream flow levels.

Comment 84
Unfortunately, some of the anthropogenic changes in SR flows may be difficult to avoid in the coming decades. This is especially true given the sheer number of on-paper senior water rights that are held by water purveyors who could begin to use this water at some future point. However, it is imperative that the Department of Ecology (and others eg. municipalities) adopt an instream flow

rule that is protective of the Spokane River and a rule that applies pressure to normalize a high value for water.

Commenter(s)
Spokane Riverkeeper 37;

Response
Thank you for your comments.

Comment 85
Your attention to this most urgent matter would be much appreciated by all present & future generations of all species.

The only other thing I would say is that the instream flows that are set for overconsumption, and this is the only way we can continue to have Spokane River in the future and not see it blundered and it is critical for future generations to have this community asset.

Commenter(s)
Garvey, Lydia 6; Spokane Riverkeeper H14;

Response
The instream flows established in this rule are protective of the instream resources of the Spokane River.

Science

Comment 86
I applaud the apparent recognition in the [purpose] section of the interrelationship between surface water diversions and groundwater withdrawals-- including exempt wells--as RCW 90.54.020(9) requires. I should note that in a recent filing in the Hirst case, the Attorney General's office's brief does not appear to recognize the obligation on the part of permit-issuing governments to recognize this interrelationship.

Commenter(s)
Monthie, David 10;

Response
Thank you for your input. Filings made by the Attorney General’s Office in the Hirst case are unrelated to the adoption of this rule.

Comment 87
There are three large factors that are threatening the flows to the Spokane River, things we do know even without the science, we know we have an overconsumption of water problem in this area that is taxing our aquifer which is intimately linked with the river. We have numerous wells

that are in close proximity to the river that amplify the extreme low flows we're seeing in the summertime.

Commenter(s)
Spokane Riverkeeper H4;

Response
Ecology acknowledges that well withdrawals affect river flows in the Spokane River. See Hsieh et al., 2007, Kahle et al, 2007, etc. such effects are most visible at summer low flow.

Comment 88
Per "New water use from the Little Spokane River, its tributaries, and the shallow aquifer associated with the Little Spokane River and its tributaries shall be regulated under chapter 173-555 WAC;" Is the referred shallow aquifer really a shallow aquifer or is it unsaturated zone preferential flow? What studies suggest that base flow is from a shallow unconfined aquifer? Does this mean that the deeper confined aquifer is not affected by this WAC? Please provide sources of scientific studies that indicate the Little Spokane river base flow is ground water and not other subsurface flow such as unsaturated zone flow.

What studies have been conducted that have proven that all base flow in the Spokane River is ground water base flow instead of unsaturated zone flow or a combination of unsaturated zone flow?

Where are the scientific studies that prove that all of the base flow in all of the seasonal and perennial streams is ground water and is not unsaturated zone flow or a combination of ground water and unsaturated zone flow.

You base the proposed rule on the notion that stream base flow is produced from a shallow unconfined aquifer, which would be highly unusual for Washington, where most stream base flow is from unsaturated zone preferential flow. Unsaturated zone preferential flow is not groundwater, nor is it a groundwater aquifer.

Commenter(s)
Ibbetson, Timothy 1, 11, 67; MacLeod, Norman 7;

Response
The nature of and relationship between the Spokane Valley Rathdrum Prairie Aquifer and the Spokane River have been understood for many years. See Hsieh and others (2007) and Kahle, et al (2007) for the most recent assessment and references to earlier studies.

Comment 89
What are the seismic controls on the aquifer?

Commenter(s)
Ibbetson, Timothy 5;

Response
There are no seismic controls, as that term is understood.

Comment 90
What structural controls are present in the the SVRP aquifer?

Commenter(s)
Ibbetson, Timothy 71;

Response
The SVRP Aquifer is hosted by Pleistocene flood sediments. No geologic structures are evident internally, the main control on the extent of the SVRP Aquifer is the bedrock contact, see Kahle, et al. (2007).

Comment 91
What are the recharge rates and what are the actual withdrawal rates for this aquifer?

Commenter(s)
Ibbetson, Timothy 6;

Response
See Hsieh and others (2007) for generally accepted values for these aquifer parameters and their system wide variability.

Comment 92
Is "saturated" an element of hydraulic connection; I do not think so.

Commenter(s)
Monthie, David 11;

Response
At some locations, the SVRP aquifer is connected to the Spokane River through saturated conditions. At other locations, there is an unsaturated interval between the River and the aquifer.

Comment 93
Anthropogenic change is creating a great deal of pressure and stress on the aquatic life of the Spokane River for numerous reasons low summer flows being important among them.

The first anthropogenic variable that affects appropriate flows is the persistent pumping of Spokane Valley Rathdrum Prairie Aquifer in close proximity to the Spokane River. There are 21 water purveyors within the Spokane Valley and Rathdrum Prairie who collectively run over 122 wells in the Spokane Valley alone. Because the Spokane River is dependent on its interchange with the aquifer, it is particularly vulnerable to losing flow to pumping in close proximity to the Spokane Riverbed.

Hortness and Covert have stated, “The largest impact on the hydrologic system stems from the withdrawal of ground water in both Idaho and Washington mostly for municipal and private water supply.

The average combined withdrawal rate is 317cfs (Hsieh and others, 2007, page 23). The summer peaks of the combined withdrawal generally range from 600 to 800 cfs.

Ground-water pumping impacts surface water systems via declining ground-water levels. Lower ground-water levels cause greater losses in hydraulically connected losing stream reaches and reduced gains in gaining reaches. It is important to remember that ground-water level changes only impact flow in streams where there is saturated hydraulic connection between ground water and the stream.” (Ralston and Johnson, 2014).

The lower Spokane River is just such a stream. Additionally, this pumping has a profound effect on the lower Spokane River low flows because as G.S. Johnson et al, states, “In the portion of the aquifer immediately below Trinity Trough, nearly all pumping or recharge effects are concentrated on that specific river reach because the aquifer is constricted at Trinity Trough and discontinuous at the lower end” (Johnson et al, undated).

Clearly when one looks at the data, historically the river had higher base flows in the earlier 20th century (see Figure 1). The current lower summer flows are very likely function of wells that are very close to the river bed.

Similarly, the second anthropogenic variable with implications for Spokane River base flows is the over-consumption of ground water. This is, of course, integrally connected to pumping in close proximity to the river. Statistics now say that ground water is being used at a rate of 3000 gallons per second in the months of July and august, the same season as the lowest River flows. The city of Spokane has some 25 billion gallons of water rights on paper that could be accessed and used, and if population projections are correct, water use is anticipated to increase 37% by 2040. Current and future over-consumption will continue to demand water that originally supplied the river with clean, cold water. This mounting pressure on the Spokane River has major implications for the future viability of the aquatic ecosystems that the river has supported for thousands of years.

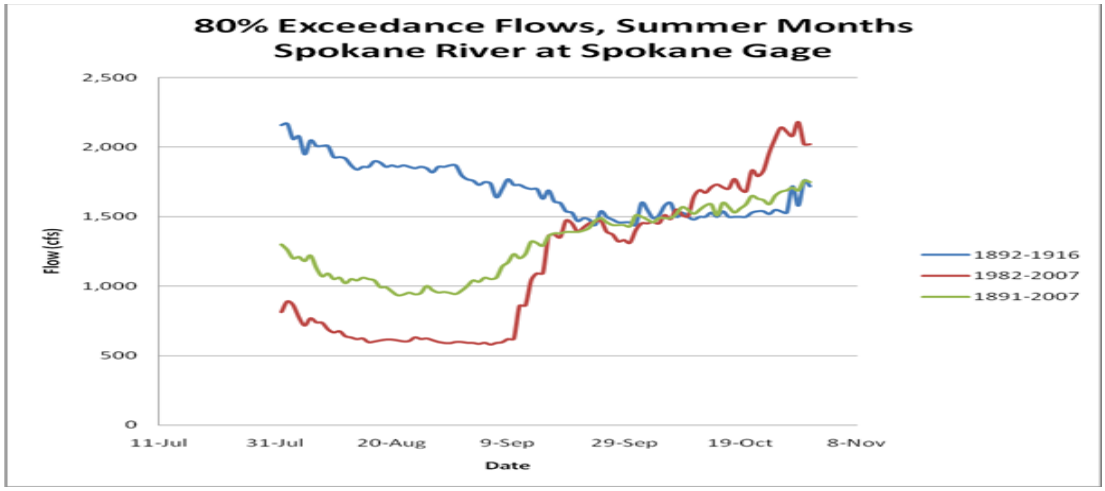


Figure 1. Using 80% exceedance clearly demonstrates the moving baseline between the early 20th century and the latter. To bracket flow rulemaking with late 20th century data is to normalize over-consumption of ground water at the expense of flow in the lower Spokane river and to compromise the ecosystem it supports. (Graph courtesy of John Gross)

Commenter(s)
Spokane Riverkeeper 7, 9, 10, 11;

Response
Ecology concurs in general with your statements and assessment of the situation.

Comment 94
What pump test have been conducted in the vicinity of the Spokane River that shows a reduction in base flow when the aquifer is pumped heavily? Ecology has not proven that the base flow is actually the same ground water that is being utilized from exempt water wells and agricultural wells (and municipal wells)?

This has nothing to do with the connectivity of surface water to ground water, it only determines how much water is required for fish (even this is unscientific). It is unclear how Ecology links ground water withdrawals from wells to "the volume of water" removed as base flow in a river, or how they correlate water use for each well and how this effects the surface water flow (or volume, such as lakes and ponds). There are no scientific studies that Ecology lists for the SVRP that would provide this information.

What science is used to measure ground water use from wells to base flow in a stream, in other words how can this be measured? How much ground water is removed by the wells and how does this affect base flow to the perennial and seasonal streams? How are these calculations made?

Is there a direct correlation between ground water withdrawals and reduced base flow and if so, where are these scientific studies. The reverse is true, is there a correlation between increased base flow when ground water withdrawals are restricted? Where are the scientific studies that document this?

Most residential wells will drain to a onsite septic system, which means that 98% of the domestic water use will be infiltrated beneath the ground surface to the ground water aquifer or to unsaturated zone flow in the same area the ground water was removed.

How is the base flow (assuming the flow rates are actually accurate) correlated to ground water withdrawals and why would ground water withdrawals need to be regulated during the periods of high flow?

What is the purpose of metering or limiting ground water withdrawals?

How does Ecology calculate the "consumption" of ground water relative to base flow and impacts to base flow?

How do ground water withdrawals impact the Spokane River. What studies have been conducted that demonstrate that the ground water withdrawals from wells impact the flow of the Spokane

River? There is no correlation related to the effects of ground water use from wells to the base flow in the perennial and seasonal streams in this area. What studies have been conducted to determine that reducing ground water withdrawals from wells increases base flow to perennial and seasonal streams?

How many wells in this area produce unsaturated zone flow?

No one actually knows or has proven how much ground water is available, where is the recharge, how much, how much ground water is being "permanently removed" by "exempt water wells"? How much is actually providing base flow to the river compared to unsaturated zone flow?

How is the use of private "exempt" wells more of an impact than using water from a municipal water supply?

Commenter(s)
Ibbetson, Timothy 7, 10, 20, 35, 36, 53, 55, 57, 60, 63, 65, 66, 68, 70, 73;

Response
Many tests and studies have been conducted in the SVRP aquifer. For background, see the latest studies which, among other things, summarize previous work: Kahle, et al, 2007, and Hsieh and others, 2007, together commonly known locally as the “bi-state Aquifer study.” The SVRP Aquifer, an unconfined aquifer, is the sole source of water in the area in the rule.

Capture of water otherwise made available for surface supplies is well known, and is a fundamental precept of hydrogeology. There are many straightforward methods of estimation, both analytical and numerical. Please see any available text on the subject.

In Washington, impact need not be measurable, only calculable. See Hubbard v. Department of Ecology, 86 Wn. App. 119, 936 P.2d 27 (1997), and Postema, et al., Appellants, v. The PCHB, et al., Respondents. 142 Wn.2d 68 (2000). Well impacts are proportional to pumping rate, total volume, distance from the river, and aquifer properties. Permit exempt wells, generally pumped at a low rate, produce less impact than a high producing municipal supply well, all other things being equal.

Comment 95
If saturated conditions are present in the bed of a river, water is not moving down. This means that ground water is present in the bed of the river. Saturated conditions are impervious, similar to trying to fill a glass that is completely full of water. This is an unscientific definition.

Ground water aquifers are saturated, however ground water is recharged by unsaturated zone flow. It is very possible that much if not all of the recharge to the Spokane and Little Spokane River and the tributaries is actually unsaturated zone flow. This is not saturated by definition (the pressure is less than atmospheric).

Commenter(s)
Ibbetson, Timothy 30, 31;

Response
Ecology does not agree with every statement made in this comment. Please see our response to comment 93.

Comment 96

"Water right permits authorized after the effective date of this rule will be conditioned to prevent impairment of instream flows established in this rule."

Does this mean all wells, even those that are located miles from the Spokane River? How will these wells impact the base flow in the Spokane River?

Commenter(s)
Ibbetson, Timothy 69;

Response
All wells drilled to establish a new permit-exempt withdrawal after the effective date of this rule, and permits issued after the effective date of the rule that are located within the Spokane Valley Rathdrum Prairie Aquifer, will be conditioned to prevent impairment of the instream flows. Those wells capture base flow to the river, as outlined in Hsieh and others, 2007.

Comment 97
Why are the proposed restrictions proposed year around instead of only when the river flow is base flow?

Commenter(s)
Ibbetson, Timothy 12;

Response
The instream flows are based upon the needs of different life stages of fish in the Spokane River (Beecher, 2012). Those life stages extend year around.

Comment 98

"This rule does not supersede the instream flow rule of the Little Spokane River (Chapter 173-555 WAC), except where a proposed withdrawal is from waters in direct hydraulic continuity with the SVRP Aquifer as determined by ecology."

How will this be determined? There is one study referenced and this study will not provide this information. Additionally, the one study referenced indicates there are two aquifers in the Little Spokane River drainage area and one is confined and obviously does not provide base flow to the Little Spokane River. How is this addressed in Chapter 173-555 WAC)?

Commenter(s)
Ibbetson, Timothy 27;

Response
The study referenced does provide this information. In the area governing the Little Spokane (Ch. 173-555 WAC), that rule will apply to shallow groundwater in hydraulic continuity with the Little Spokane River. The deep confined aquifer in this area is part of the Spokane Valley Rathdrum Prairie aquifer, as outlined in the study. It will be subject to Ch. 173-557 WAC.

Other streams

Comment 99
It would surely affect in a negative way other rivers and streams in the region.

Commenter(s)
Clark, Jerry 5;

Response
Thank you for your comment. Ecology does not agree that the instream flows established in this rule will negatively affect other rivers and streams in the region.

Comment 100
Every river is important.

Sets a poor precedent for rivers statewide.

As goes the Spokane Rivers, so goes the other rivers of Washington State.

Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers statewide. As goes the Spokane Rivers, so goes the other rivers of Washington State.

I believe it would set a dangerous precedent that could adversely affect rivers statewide including those in SW Washington because the Department of Ecology failed to analyze flows needed for recreational use of the river.

Please take steps to protect this important river and don't set a precedent that will surely result in degraded and dewatered rivers elsewhere in the state.

Please take steps to better protect this and other important rivers throughout Washington.

I care about the in stream flow program, and the future of our rivers in the State. This proposed low flow would set an extremely poor precedent for future in stream flow considerations regarding other eastern washington streams.

You need to explain how you arrived at your [flow] figures. This is especially important if this is to be a model for setting of minimum instream flows for other rivers in our state.

Commenter(s)
Reynolds, Carol 1, 6; Sierra Club (Roberts, Lynda) 4, 9; Pringle, Bruce 4, 9; Sierra Club (Donaldson, Jamie) 4, 9; Sierra Club (Lanz, James) 4, 5, 9; Sierra Club (Sendrey, Robert) 4, 9; Seifert, Lorelei 6; Seifert, Lorelei 4, 9; Paxson, M C 4, 9; Sierra Club (Effler, Dean) 4, 9; Sierra Club (Peterson, Terrance) 4, 9; Sierra Club (Lukos, Stravo) 4, 9; Sierra Club (Andrew Martin) 4, 9; Sierra Club (Milne, Linda) 4, 9; Sierra Club (Glover, Julia) 4, 9; Laegreid, Peter 4, 9; Wilder, Stewart 5, 11; WaterWatch of Oregon 4, 10; Sierra Club (Nixon, Shirley) 4; Aagaard, Ann 8, 9; Sierra Club (Titon, Julie) 6; Osborn, Cal 4, 9; Gold, Raelene 6; Sierra Club (Osborn, John) 20;

Response
Ecology does not agree the instream flows adopted in this rule are a debacle for the Spokane River. Ecology does not agree that the adoption of this rule sets a poor precedent for instream flow protection for other rivers in the State of Washington. Instream flows in every watershed throughout the state are established based on studies of the rivers and streams in that watershed. The water resource management framework for each rule is tailored to local needs.

Watershed Planning

Comment 101
Who prepared these plans and who adopted them? Were the citizens who actually use wells included in developing these plans?

Who are these planning units from 2006, and 2009. This can be changed and it should. These planning units, (if the County chooses to plan) should include actual geologists and hydrogeologists , and citizens who are actually dependent on the water resources (those who are affected by the plan(s)) Were these unit decisions clearly understood without the use of facilitators and was it clear that decisions made at the time could possibly impact rule-making in 2014?

How were members of the "planning unit" selected? Is there an Ecology appointed facilitator for this “planning unit"? http://www.spokanecounty.org/wqmp/projects/ASP/WhosIn.asp

Commenter(s)
Ibbetson, Timothy 8, 14, 49;

Response
Chapter 90.82 RCW specifically defines participation in watershed planning and requires planning groups to invite and include all water users. Participation in watershed planning is public record and included citizen groups and individuals as well as organizations, interest groups, corporations, and various levels of government. Participant lists were maintained by the groups during the approximately ten years of monthly meetings. All meetings were published and publicized and all members of the public were welcome to attend. Every group had participants who included geologists or hydrogeologists or other related fields, and also contracted with consultants and technical specialists who conducted specific studies or analyses as directed by the watershed group. Facilitators were chosen by the watershed group and usually were a consultant/company

that would conduct many of the administrative and technical functions of the group on behalf of the group.

Watershed planning groups that chose to take on instream flows were very specifically informed about the law (Chapter 90.82 RCW) and that their work would constitute the basis for instream flow rule-making.

Comment 102
What does the watershed plan have to do with ground water? Ground water is not necessarily limited to a surface water "drainage basin". What was stated in these plans and how does this address ground water use or availability.

Commenter(s)
Ibbetson, Timothy 13, 15;

Response
Watershed planning and watershed plans specifically looked at surface water and groundwater resources throughout each watershed and the interrelationships of surface and ground waters. One of the requirements under watershed planning was to conduct a water balance so that everyone would have an understanding of how much water comes into and goes out of each basin both at the surface and underground. The water balance assessment provides specific information as to how much water is used by and is available for human consumption as well as all other uses.

Comment 103
If science based studies were conducted, produced, and peer reviewed, Where are those studies supplied to the public?

Who conducted these studies [conducted as part of watershed planning]?

Commenter(s)
Ibbetson, Timothy 39, 48;

Response
Numerous scientific studies have been conducted both as part of watershed planning and outside of it. Ecology has copies of many of these and has made them available on-line at http://www.ecy.wa.gov/programs/wr/rules/557-res.html, as well as Spokane County on their watershed planning website. Many studies and papers are also available at both public and academic libraries in the Spokane area.

Politics

Comment 104
"Whether we and our politicians know it or not, Nature is party to all our deals and decisions, and she has more votes, a longer memory and a sterner sense of justice than we do." Wendell Berry

Commenter(s)
Monthie, David 2, 24;

Response
Thank you for your comments.

Comment 105
Just as a small number of very wealthy people can create massive imbalances in society, a small number of people with intellectual acuity can restore it.

Commenter(s)
DeLateur, Marc 5;

Response
Thank you for your comment.

Comment 106
What is appalling about your proposal, is in the guise of taking a positive action towards achieving your stated goals, you are actually using it as a subterfuge to help new development at the expense of all the other interests.

It is important that the people of Washington have confidence in their Department of Ecology Water Resource Program's aim to measure up its mission and not allow itself to be pressured by a powerful few.

Commenter(s)
Gold, Raelene 9, 13;

Response
Ecology does not agree. Ecology has been transparent about instream flow development for years, within numerous public processes. See responses to Comment 108, Comment 1, and Comment 204.

Comment 107
Historically, the fate of water flows everywhere has been determined by the power and influence of corporate users and withdrawers of river water. Avista in particular has maintained great fortune by dominating the decision process locally. But the river doesn't belong to corporations and users. The river has rights itself, to thrive and maintain its balanced system of interdependence of all these living species that must have adequate flows, and proper timing of those flows. If the water itself "belongs" to anyone it belongs to the people and communities of the area, which must act as stewards, as guardians, for its welfare. Please change the process on how our rivers get managed. Corporations bleed resources to their absolute limits, without concern for ecosystem species interdependence, without long term vision, without concern for climate. It's like they don't care about their grandchildren. Just look anywhere on Earth; they overfish the oceans, they clearcut the forests, the pitmine the land, they spill oil, they frack water

supplies, they pollute all, especially rivers. The only sensible response to this endless onslaught on Nature and our home is the most conservative choice in decision making, as in the present concern of how much water should flow through the Spokane watershed. Do the right thing for your grandchildren and choose the highest possible flows, 2-3,000 cfs, not the lowest and most suitable for Avista Power and future "users".

Commenter(s)
Holmquist, Gunnar 2, 3;

Response
See response to Comment 1. Your request to change the process is most properly a legislative matter. No scientific basis is presented in the comment for establishing instream flow requirements of between 2,000 and 3,000 cfs.

Other States

Comment 108
Washington State should make sure to protect the Spokane River when water is allocated between Washington and Idaho: the proposed flow would be a major giveaway of water to Idaho.

Washington and Idaho are heading for a clash as to how much Spokane River instream and outstream water each state is entitled to. By picking low numbers Ecology is putting our state's negotiating position in serious jeopardy, and seemingly ignoring interstate sovereignty issues, which incidentally also seem to be off the governor's radar.

The proposals also do not protect Washington's interests vis-à-vis the State of Idaho. All the water that's left unprotected in the river is available for Idaho to allocate through its groundwater permitting program.

As acknowledged in Ecology’s public statements and responses to public comments one of the purposes of this instream flow rule is to better position the State of Washington if and or when a bi-state apportionment of the Spokane River occurs between Idaho and Washington. The failure of Washington to protect the current higher flows completely fails to do this, and leaves the Washington portion of the Spokane River unprotected. Although, it is sometime stated in tongue in cheek fashion, Idaho’s stated policy is that a drop of water leaving Idaho is a wasted drop of water. Washington must take this seriously because Idaho throughout all the Basin wide processes never fails to act this policy out. Given that the Spokane River likely is or will be over appropriated in the near future based on the municipalities activities in Idaho and Washington, adopting a stepped down approach to protect a more natural hydrograph is very appropriate and supported by the data.

This rule does not go far enough to protect our water rights in the Spokane River. Please do not give away our water to Idaho.

I hope that the Dept of Ecology advocates for a flow level that benefits Spokane and not waterfront owners in Idaho.

This has already been discussed, the issue, and the impending water wars with Idaho are not addressed by this agency, and, in fact, it appears that the agency is advocating the state's position, and has responsibility to protect the waters of this river system for the people of the state. It is -- I think it's -- I would hope that the agency would take a moment to really reflect on its responsibility to protect the river and a shared river basin with the State of Idaho where pumping continues for water residents to use that river.

If the minimal flow rule is to be used as leverage in negotiations with Idaho over water, then setting the flows at a proposed level puts Washington at a tactical disadvantage.

I would also not like to see Washington State give away the river to Idaho, the upstream state that will claim all water not protected by Washington's flow rule.

In my opinion, water rights with the state of Idaho will become a huge issue in years to come.

This opportunity to protect Washington’s sovereign waters should not be squandered. Georgia and Florida recently ended up in the nation’s supreme court asking for adjudication. We do not want to follow that path which allows harm to Washington.

Idaho can take all water not claimed under the proposed Washington's flow rule. Ecology needs to assess the interstate allocation implications of its flow rule.

This rule has negative interstate water allocation consequences.

I do not believe that Idaho should take all water that is not claimed in Washington’s flow rule.

If I understand correctly Idaho can take all water not claimed under Washington's flow rule. This makes absolutely no sense. Water is becoming an ever scarce resource and should be treated as such. Water that flows between states needs to have an interstate allocation for all effected parties.

Washington State is effectively giving away the river to Idaho that will claim all water not protected by Washington's flow rule.

By low-balling the flow, Washington State is effectively giving away the river to Idaho the upstream state that will claim all water not protected by Washington's flow rule.

For fish health, recreational use, and to help mitigate Idaho upriver water use, I favor keeping the minimum April, May ,June flow higher than 10,000 cfs and the July, Aug, Sept minimum flow between 900 and 1200 cfs as possible depending on the various controlling factors.

To say that 840 is adequate for all of the uses, while Idaho is going to drain the water shed on their end much more severely than we will, means sooner or later, we are heading for a conflict with Idaho. And if mandating flow levels means more released, and I know it was in Idaho, not in Washington, there's nothing we can do about it.

By low-balling the flow, Washington State is effectively giving away the river to Idaho the upstream state that will claim all water not protected by Washington's flow rule.

Most disturbing is the poor position it will put WA State in when it comes time to negotiate with Idaho over water rights. Why would we want to leave so much water out there for grabs? We need to allocate and defend as much water as possible for the Spokane River.

It is folly to issue more water rights based on the 'available water' assumption with setting such low flows (taking all water not claimed in Washington's proposed flow rule). This is outrageous for many reasons; such as the alarming interstate allocation implications of the flow rule.

Ecology should consider the relationship of the instream flow rule to Washington State's need for interstate allocation of Spokane surface and groundwater between Washington and Idaho. Idaho is taking water from the Spokane River now through its aggressive water right permitting program on the Rathdrum Prairie. The groundwater permits issued in Idaho pump water that is hydraulically connected to the Spokane River in Washington.

The instream flows claimed in this rule effectively establish Washington's future water claims in an interstate water allocation proceeding with Idaho. The U.S. Supreme Court, in deciding equitable allocation cases, evaluates several factors including physical and climatic conditions, the consumptive use of water, the character and rate of return flows, the extent of established uses, the availability of storage water, the practical effect of wasteful uses on downstream areas, and the damage to upstream areas as compared to the benefits to downstream areas. The factor of concern with the proposed Spokane rule is "the extent of established uses." It is a decidedly modern concept to protect instream flows as an established use. How is that done, given that no physical diversion is involved? We believe the adoption of the Spokane instream flow rule will establish Washington's instream claim. Given Idaho's aggressive water right permitting from the SVRP Aquifer, Washington should seek to protect maximum flows, not minimums.

Allocation of the waters of the Spokane River and SVRP Aquifer between Idaho and Washington is a coming controversy. Idaho has issued or accepted claims for nearly 1,000 cfs in water rights over the past century. Since September 2001, the Idaho Department of Water Resources has issued 901 licenses, decrees or permits with a total diversion rate of 189.16 cfs, in Basin 95 – which comprises most (but not all) of the watershed.

Water pumped from the SVRP aquifer in Idaho depletes flow in the Spokane River in Washington. This physical phenomenon has been thoroughly studied and documented in US Geological Survey reports. An inventory of those reports is attached and these reports are incorporated herein by reference, and can be found on the USGS website at http://wa.water.usgs.gov/projects/svrp/publications.htm.

Absent also is the necessary discussion of Idaho continuing to issue water rights, the issuance by Washington Dept of Ecology of extensive paper water rights, and the eventual allocation of water between Idaho and Washington that will further deplete river flows.

Commenter(s)
Cervenka, Aimee 4; Crafton, Laura 4; Garvey, Lydia 4; Huron Valley Software Consulting 1; Peterson, Kerry 9; Soeldner, W Thomas 7; Systems Coaching LLC 7; Zovanyi, Louise 3; Sierra Club (Coleman, Timothy) 5; Pringle, Bruce 7; Sierra Club (Donaldson, Jamie) 7; Sierra Club (Lanz, James) 7; Sierra Club (Sendrey, Robert) 7; Seifert, Lorelei 7; Paxson, M C 7; Sierra Club (Effler, Dean) 7; Sierra Club (Peterson, Terrance) 7; Sierra Club (Lukos, Stravo) 7; Sierra Club (Andrew Martin) 7; Sierra Club (Milne, Linda) 7; Spokane Fly Fishers 5; Sierra Club (Glover,

Julia) 7; Scherer, Arthur 2; Laegreid, Peter 7; Goodner, Tom 4; Wilder, Stewart 8; WaterWatch of Oregon 7; Enviroscience Group 5; FLOW Adventures 6; Aagaard, Ann 6; Silver Bow Fly Shop 7; Center for Environmental Law & Policy H12; Burnhart, Bruce H4; Sierra Club (Osborn, John) 6, 21, H9; Spokane Tribe 13, 14; Osborn, Cal 7; Mace, Samantha 5; Aqua Permanenté 3, 4; CELP/Sierra Club 9, 19, 24, 44; Morrison, Harvey H9; Sierra Club (Roberts, Lynda) 7; Townsell, John 7;

Response
As regards the application of this rule in Idaho: The instream flows established are in a Washington State administrative rule, and only affect water users in Washington, much in the way a speed limit only applies to an appropriate jurisdiction. The hydrogeology of the Spokane-Coeur d'Alene region, crossing the boundary between two states, complicates management of this shared resource. Once implemented, Ecology believes the two state agencies, and more importantly the local water users, will have a benchmark for flow representing a healthy river. A clean, flowing river benefits all regional interests. Neither state alone is in a position to ensure that occurs; it must be accomplished largely on a regional level.

As to the potential for litigation, the State Caucus has developed these flows based upon fisheries science. Cooperation and collaboration between the states is widely acknowledged to be the preferred method of managing water and other resources in this basin. In order to do so, applicable standards must be science based. Should litigation result, negative consequences for the variety of uses of river flow in Washington, including all recreation, hydropower, waste management, and fish habitat are at risk. For instream flows established in this rule to be credible and taken seriously by potential litigants, the State Caucus believes science-based flows are needed. These flows contain adequate accounting for uncertainty, without "padding" or "inflation" to create some "advantage," and without becoming a negotiating position.

Comment 109
Ecology must also assess how the instream flow rule will affect future interstate allocation with Idaho. Idaho will take all water not claimed in Washington's flow rule. Ecology needs to assess the interstate allocation implications of its flow rule.

It is necessary to assess the rules potential impacts to interstate water allocation schemes.

This rule has interstate water allocation consequences i.e. with the state of Idaho. Please enumerate what these consequences might be.

The Tribe applauds Ecology for beginning this important task, particularly in light of Idaho's continued over allocation of the Spokane River and the Rathdrum Aquifer for consumptive use within Idaho.

Ecology must also assess how the instream flow rule will affect future interstate allocation with Idaho.

Idaho to take all water not claimed in Washington's flow rule. Ecology needs to assess the interstate allocation implications of its flow rule.

This rule has interstate water allocation consequences - what are they? Will Idaho be able to take unallocated river flow?

Commenter(s)
Peterson, Kerry 7; Townsell, John, 3; Townsell, John 8; Sharar, Jan 4; McRoberts, James 4; Aagaard, Ann 6; Spokane Tribe 1; Mackrow, Paula 3, 6, 9;

Response
It is not possible at this time to enumerate all potential interstate water issues in this basin. At this time, Ecology believes that this rule will represent Washington's interest in minimum stream flows for beneficial use in Washington. While the rivers is a shared resource with Idaho, potential interstate issues are beyond the purview of this rule.

Comment 110
I am concerned that Idaho's water right permitting practices in Idaho's Basin 95 combined with Washington State's low proposed inflow requirement of 850 cfs will lead to environmental consequences in Washington state.

Commenter(s)
Williamson, Grant 1;

Response
Water use throughout the Spokane Valley-Rathdrum Prairie Aquifer affects flows in surface waters, most immediately in the Spokane River. These instream flows limit future water right issuance in Washington. Region-wide water use considerations must be addressed by local entities.

Comment 111
The stated purpose of this rule is to protect the Spokane River and the Washington interest if Washington and Idaho go to court over State appropriations/allocations, as stated many times by ecology representatives. Yet, when we previously asked if setting an instream flow would have any effect on such a court case, the answer was an instream flow rule would NOT have any advantages.

Commenter(s)
Stevens County 2;

Response
See responses to Comment 108 and Comment 110.

Comment 112
The discussions [on dividing the water between Idaho and Washington] should involve all stakeholders in the flow between states or border countries when involved.

Commenter(s)
Wilder, Stewart 9;

Response
Any agreements between the two states will comply with applicable laws and rules, including requirements for public notice and opportunity to comment. No “discussions on dividing water between Idaho and Washington” have happened or are contemplated at this time.

Comment 113
Maintaining a higher flow level may have impacts on the lake level in Coeur d’Alene Lake.

What we're really talking about is an impounded waterway and you're arguing over what's being let out of the dam spillways. Even your hydrographs reflect that those spillages that are excess water that is not being impounded, and we all know that Post Falls Dam mandated the lake level because of the fixed docks in Lake Coeur d'Alene, and that's not even part of the study.

Commenter(s)
Enviroscience Group 4; Burnhart, Bruce H3;

Response
Dam operations and lake levels are regulated by the Federal Energy Regulatory Commission through their license issued to Avista, Project Nos. 2545-091 and 12606-000, dated June 18, 2009. Though some of the same studies used for establishing the FERC flows were used to derive these instream flows, they are for different purposes. Avista’s FERC license governs river operations by their hydroelectric facilities. Instream flows are set by rule to condition future, junior water rights.

Comment 114
I am concerned about the possibility of water exports and/or off channel storage of the seasonal flows that exceed the minimums. With the growing urgent need for water in other regions of our country, I believe it's only a matter of time before the politicians will be coming after our Northwest water system.

Commenter(s)
Morrison, Harvey H8;

Response
Future water allocations will require mitigation if instream flows or other senior rights are impaired. All proposals will be evaluated on a case by case basis and permits issued only after public notice and compliance with State Environmental Policy Act. Public input will be important in these processes.

In the scenario you present, once the rule is in place, future allocations will need to ensure protection of instream flows. Without the rule, flows will not necessarily be protected.

Economic Issues

Comment 115

The small business impact statement definitely did not consider Outfitters on this section of river. Our business provides local jobs, recreational opportunity to the local community and tourism by showcasing the river. My business was never approached by those writing this statement or the Department of Ecology. The flow of 850 cfs would have a negative impact on my business and the experience of local tourists.

The agency did not consider all economic impacts, including impacts on local businesses such as outfitters and gear shops.

Being a small business that is affected by flows and rules on the Spokane River, I wish we would have been contacted about the economic impacts that it will have on mine and other fishing businesses around the region.

Nor does tourism seem to have been considered. The "Small Business Economic Impact" did not even consider non-consumptive users such as those businesses that provide recreational opportunities for the public. These are businesses that draw tourist dollars to Spokane. Only consumptive users seemed to have been considered.

The study states that, "All currently established businesses using an established water right are not required to comply with the proposed rule. Essentially this proposed rule has little or no impact on small or any other business. All current businesses already operating under an established water right are not affected." But this is false. Recreational business using the Spokane River are heavily impacted by the rule, and the job impact could be significant.

We appreciate the fact that you're considering minimum instream flow standards for the Spokane River, but the limited studies conducted thus far do not satisfy the requirements, including giving more consideration to the growing use of the river by commercial and private outdoor recreation interests. We support another take at this process that gives recreational uses of the river the proper consideration. The "Small Business Economic Impact" did not even consider non-consumptive users such as those businesses that provide recreational opportunities for the public.

I read your statement about small business impact on the river. I believe the impact of a min. flow of 850 on the Lower Spokane would definitely impact my business as a river outfitter on the Spokane river. Department of Ecology did not consider the 5 commercial companies or the two universities that use this stretch of water in their small business impact satement.

The Small Business Economic Impact Statement (Publication 14-11-005) only addressed current or future small businesses and their ability to obtain water. The only impact stated was if the businesses "…choose to pursue a change or transfer of an existing water right."

The Impact Statement failed to recognize the impacts on small businesses that provide the services of guided fishing, recreational rafting and kayaking. These businesses will be economically harmed by summer flows of 850 cfs.

Many of our local members are owners or employees of businesses that provide commercial outfitting services for those who recreate on the Spokane River. An instream flow of 850 cfs would have a devastating impact on these small businesses.

Ecology should re-evaluate the small business impacts associated with the rule. Ecology failed to consult with guide, outfitter and outdoor gear companies about the impacts of the 850 cfs flows, which will reduce fishing and boating opportunities.

The study also states: "All currently established businesses using an established water right are not required to comply with the proposed rule. Essentially this proposed rule has little or no impact on small or any other business. All current businesses already operating under an established water right are not affected."

This is absolutely false. If river flows dropped to the proposed 850 cfs on June 15th, as the proposed rule would allow, it would be devastating for our business, our employees and our economic health. How could the author of this study completely omit consideration for non-consumptive businesses? The concluding paragraph says: Ecology expects no net job impacts to come from this proposed rule. Again, this is certainly not true for my business, nor the other recreation-service companies that currently operate on the Spokane River. We employ guides, drivers, support staff, office staff and others to provide the services we offer and run our business.[7]

Ecology needs to start completely over in this Small Business Economic Impact to create a study that has any credibility.

Commenter(s)
FLOW Adventures 4, 5; Systems Coaching LLC 14; Out There Monthly 5; Center for Environmental Law & Policy 5; Silver Bow Fly Shop 8; Spokane Falls Chapter of Trout Unlimited 12; American Whitewater 13; CELP/Sierra Club 13; ROW Adventures 7, 8;

Response
In accordance with the Regulatory Fairness Act, Chapter 19.85 RCW, the Small Business Economic Impact Statement is required to analyze “the costs of compliance for businesses required to comply with the proposed rule” (RCW 19.85.040). Businesses that do not require a water right to do business are not subject to this analysis.

The instream flow rule does not change the hydrograph of the River. It does not increase or decrease flows, it is a regulatory tool used to notify junior water users when they have to turn off their water use to protect the senior, instream flow. To change the actual flow in the river to better suit a particular recreational use, one would need to seek changes in Avista’s FERC license, which does have control over water storage and ramping rates and the shape of the hydrograph (for parts of the year at least). The FERC licenses for Avista’s dams were last issued in 2009.

River users appear to be seeking enhanced flows for their activities, something that is beyond the purview of this rule. See the response to Comment 23.

Comment 116
The protection of our river wildlife is an absolutely integral part of our natural economy.

Recreational boating, rafting and angling are huge economic drivers in Washington State and the Spokane River area is a vital part of that. Recreation is one of the largest economic drivers in the state and ECY's proposal is basically hamstringing the economy.

Particularly in the summer, the River is an important recreational attraction not only to people of the area, but also many visitors who contribute to the economy.

The economic impact of outdoor recreation to Spokane has grown tremendously in recent years and needs to be taken more seriously in this process.

Keeping a viable waterway not only for ecological values is most important. Fisherman and recreational users create jobs too!

Tourism, as everyone knows, is key to the economic health of our region and recreational activities such as floating the Spokane River are one of the most unique tourist attractions the region has. This simply underscores the need for the DOE to follow its own mandate and study minimum flows specifically with recreational considerations in mind.

Ecology should perform economic studies of river-oriented businesses including guides, outfitters, gear shops, and businesses along the river.

Commenter(s)
Center for Environmental Law & Policy 3; Nelson, Dan 1, 6; Clark, Jerry 3; Kop Construction Co Inc 4; Out There Monthly 2; ROW Adventures 5; CELP/Sierra Club 5;

Response
Under the Administrative Procedures Act RCW 34.05.328(1)(d) it is Ecology's job to "determine that the probable benefits of the rule are greater than its probable costs." The economic analysis for the proposed rule does this. See also the general response on Further Studies.

Comment 117
The "Small Business Economic Impact" did not even consider non-consumptive users such as those businesses that provide recreational opportunities for the public.

This study claims: "Small businesses, local governments, and others, were involved in watershed planning region wide. Small business (water purveyors and users) were also briefed by Ecology staff in numerous public forums during development of the rule language." Here Ecology admits that their idea of concerned small businesses are only "water purveyors and users" and one can only assume that a "user" means a consumptive user. How myopic indeed!

This is further made clear where the study says: Ecology has determined that water purveyors are the only know(n) businesses that would be affected by the rule and required to comply with the rule. Clearly Ecology has not been out to see the thousands of people that pay outfitters to float on the river, and without sufficient flows, we cannot provide that service. Thus the study is flawed because in fact water purveyors are not the only businesses that would be affected.

I find the economic analysis provided in the DOE documents very insufficient. Recreational fishing and boating and the economic benefits it generates aren't even allocated. We have several local businesses that guide and provide equipment for fishing and boating. Fishing and boating is a special quality of life asset for our town that is generating economic and civic benefits by making our city an attractive and special place to live.

We also have concerns with the conclusions of the Small Business Economic Impact Statement, which states, "essentially this proposed rule has little or no impact on small or any other business." Many of our local members are owners or employees of businesses that provide commercial outfitting services for those who recreate on the Spokane River. An instream flow of 850 cfs would have a devastating impact on these small businesses.

The economic analysis documents do not adequately address potential impacts on businesses (e.g., recreational and fishing) that would be affected by the rule's proposed reductions in flows.

Commenter(s)
ROW Adventures 6; Mace, Samantha 6, 7; American Whitewater 12, 13; Monthie, David 6;

Response
In accordance with the Regulatory Fairness Act, Chapter 19.85 RCW, the Small Business Economic Impact Statement is required to analyze “the costs of compliance for businesses required to comply with the proposed rule” (RCW 19.85.040). Businesses that do not require a water right to do business are not subject to this analysis.

The instream flow rule does not change the hydrograph of the River. It does not increase or decrease flows, it is a regulatory tool used to notify junior water users when they have to turn off their water use to protect the senior, instream flow. To change the actual flow in the river to better suit a particular recreational use, one would need to seek changes in Avista’s FERC license, which does have control over water storage and ramping rates and the shape of the hydrograph (for parts of the year at least). The FERC licenses for Avista’s dams were last issued in 2009.

Ecology recognizes there are many surrounding users of the river that contribute to the surrounding economy. Under the Administrative Procedures act RCW 34.05.328(1)(d) it is Ecology’s job to “determine that the probable benefits of the rule are greater than its probable costs.” The economic analysis for the proposed rule does this for the twenty year time line that is the planning horizon for the analysis.

Comment 118
An “economically viable” Spokane River does not require taking water out of the river to be put to use by private corporations. Rather, countless studies confirm that true sustainable economic vitality needs to be measured in a holistic manner and the economic value of instream flows for people and fish is a critical component of that analysis.

What will be the overall economic impact to existing enterprises and business that capitalize on a robust Spokane River?

Economic analyses fail to address the benefits of higher flows for recreation- based businesses and hydropower generation.

Commenter(s)
Law Offices of Andrea K Rodgers Harris 4; Gold, Raelene 8; Sierra Club (Osborn, John) 8;

Response
Ecology agrees that protecting instream flows will help maintain economic vitality for the region. The economic analyses only evaluate the proposed rule. They do not analyze options that are not included in the proposed rule.

Comment 119
On page 13, there is no economic analysis of recreational and aesthetic benefits--simply an assertion that they will be protected. At a minimum, the analysis needs to include a description of differences in these benefits between other possible instream flow levels.

Commenter(s)
Monthie, David 20;

Response
Ecology recognizes there are many surrounding uses of the river that contribute to the local and regional economy. Under the Administrative Procedures Act RCW 34.05.328(1)(d) it is Ecology's job to "determine that the probable benefits of the rule are greater than its probable costs". The economic analysis for the proposed rule does this for the twenty year time line that is the planning horizon for the analysis. See also the response to comment 120.

Comment 120
RCW 34.05.328 (1)(d) requires you to determine that the probable benefits of the rule are greater than the probable costs. Your probable benefit numbers are artificially inflated, while your probable cost numbers are seriously understated. You failed to include the opportunity cost represented by agricultural activities and other businesses that will not be able to locate within the proposed rule's regulated area. You have failed to adequately comply with RCW 34.05.328 (1)(d).

Commenter(s)
MacLeod, Norman 2;

Response
Ecology disagrees with your assertions. Tens of thousands of acre-feet of inchoate water rights are available (through existing water purveyors senior water rights) to be used by any businesses that chose to locate in this area and reach agreements to be served water.

Comment 121
The cost-benefit analysis includes mention of alternatives that were considered, but these were not alternatives to rule making because they would have to be implemented by rule.

The cost-benefit and least burdensome alternative analyses document leaves out many reasonable alternatives that should be evaluated. Therefore, the analyses are incomplete. Because you have not included a diverse group of reasonable alternatives, you lack sufficient basis for declaring the proposed rule to be the least burdensome alternative. You have failed to fully comply with RCW 34.05.328 (1)(e).

Commenter(s)
MacLeod, Norman 3;

Response
Ecology disagrees. The commenter fails to identify any reasonable alternative that should be assessed. All alternatives identified were assessed to consider whether the rule is the least burdensome alternative for those required to comply with the rule while meeting the objective of protecting instream resources in the Spokane River. It is unlikely any other significant alternatives exist and could affect the regulated area with or without the rule.

Comment 122
The "least burdensome" analysis, starting on page 13, provides very little data or information, and simply makes general assertions. For instance, it states that recreational users prefer a variety of flow levels, without documenting that assertion, or discussing specific flow levels that were considered. This is not the kind of analysis that chapter 34.05 contemplated in rulemaking.

Commenter(s)
Monthie, David 21;

Response
Ecology disagrees. RCW 34.05.328(1)(e) requires consideration of alternative versions of the rule to determine that the rule being adopted is the least burdensome alternative for those required to comply with the rule. The least burdensome analysis meets this requirement.

Comment 123
The analysis notes at the end that new water right permit holders will be required to meter their withdrawals, but permit-exempt wells will not. There is no economic analysis for this, and no explanation.

Commenter(s)
Monthie, David 22;

Response
The economic analyses only evaluate the proposed rule. They do not analyze options that are not included in the rule proposal. See also the response to comment 177, about metering.

Comment 124
The Preliminary Cost-Benefit and Least Burdensome Analysis included a reference to mitigation that would be acquired by Ecology, but this type of language is not part of Proposed Rule itself:

"The proposed rule also requires mitigation be achieved through an Ecology-approved mitigation plan. In a separate action, Ecology has acquired a water right to provide mitigation for new permit-exempt withdrawals that cannot acquire water from a public water supplier. Permit-exempt well users gain a reliable water supply (uninterruptible) through the use of the mitigation requirement in the rule. Implementation of the proposed rule will require tracking the number of new permit-exempt groundwater withdrawals within the rule area." Preliminary Cost-Benefit and Least Burdensome Analysis, at 5.

Commenter(s)
Builder & Realtor Associations 6;

Response
Although all probable new uses have been mitigated for the 20 year time frame that is the planning horizon for the economic analysis, Ecology chose to leave the details of the mitigation strategy out of the rule itself to allow for flexibility into the future. See also the response to Comment 138.

Comment 125
Neither the Proposed Rule, nor any related documents such as the Preliminary Cost- Benefit and Least Burdensome Analysis, include any information or analysis about where connection to existing purveyors can and will occur and at what cost, and where it will cannot occur – and so therefore mitigation would be required under the Proposed Rule.

Commenter(s)
Builder & Realtor Associations 9;

Response
The economic analysis relied on Ecology well drilling records to estimate the number of future permit exempt uses that would require mitigation. All probable new uses of the permit exemption during the 20 year time frame that is the planning horizon of the analysis have been mitigated for. See also the response to Comment 175.

Comment 126
On page 10, the document states that Ecology is planning on acquiring a water right that can be used for mitigation of some new exempt wells. Please cite the statutory obligation that Ecology believes requires it to acquire mitigation, and why for this rule Ecology plans to use statewide taxpayer money to provide mitigation, rather than requiring the proposed new user to find/acquire that mitigation (e.g., Dungeness, Walla Walla).

Commenter(s)
Monthie, David 19;

Response
There is no statutory obligation for Ecology to acquire a water right to mitigate for new permit exempt water use. Ecology determined this was the least burdensome alternative for new permit-exempt well users required to comply with this rule and for Ecology's administration of this rule.

Process Issues

Broad deficiencies

Comment 127

I would like to observe that this proposal contains deficiencies in process and science that we have seen repeated to various degrees in WRIA after WRIA over the years. I am deeply concerned that with all of the experience you have had in setting instream flows, you continue to be seriously deficient in complying with the mandates contained in statutes such as RCW 34.05, Washington's Administrative Procedures Act. The lack of improvement in how you work with scientific information over time is also troubling to me, and speaks to a need for greater legislative oversight for this program.

These continuing deficiencies, occurring despite volumes of public comment, other correspondence, and time spent in meetings and hearings, add up to my strong perception of arbitrary capriciousness on your part in establishing instream flows and setting them in rule, to the great detriment of the human environment for the citizens of the State of Washington.

I believe the deficiencies of this proposed rule rise to a level that brings the proposed rule to a point where it is legally indefensible.

Commenter(s)

MacLeod, Norman 13;

Response

Ecology disagrees. Ecology is confident that all applicable provisions of the Administrative Procedures Act have been met. See responses to Comment 1, Comment 3, and Comment 204.

Laws

Comment 128

All state and federal laws be complied with prior to the rule making.

These rules, should they become law should be compliant with all current laws regarding rule-making process.

Commenter(s)

Backcountry Hunters and Anglers 5; Ibbetson, Timothy 77;

Response

Thank you for your comment. Ecology is confident that we have complied with all applicable state and federal laws, including RCW 34.05- the Administrative Procedure Act, in enacting this rule.

Comment 129
RCW 34.05.328 (1)(i) mandates that you coordinate the proposed rule, to the maximum extent practicable, with other federal, state, and local laws applicable to the same activity or subject matter. You have not presented evidence that you have performed such coordination, nor that you have coordinated with local governments to ascertain what laws, rules, or regulations they may have that have application for the same goals and objectives as the proposed rule. In order to perform this coordination, you would need to contact each local government within the area affected by the proposed rule. This would include the government of each county in the affected area, each municipality in the affected area, and each smaller government entity (junior taxing districts) having responsibility for water supply within those jurisdictions.

In order to coordinate your proposal with other federal, state, and local laws, you need to be able to access those laws. In the case of junior taxing districts, such as irrigation districts, you would need to contact those entities for access to the necessary information.

There does not appear to be any evidence in your publicly available information for this proposal that you have contacted many of these entities. Several of them have passed legislation that applies to the activity and subject matter of the proposed rule. Unless you have obtained those legislative documents, and coordinated them with the proposed rule you have failed to comply with RCW 34.05.328 (1)(i).

Commenter(s)
MacLeod, Norman 4;

Response
Ecology, in accordance with RCW 90.03.247, has exclusive authority to adopt instream flow levels in administrative rules. Ecology has coordinated the proposed rule, to the maximum extent practicable, with other federal, state, and local laws applicable to the same activity.

In addition, the City of Spokane, Spokane County, Stevens County, the smaller cities in the Spokane valley, citizens groups, and municipal water purveyors have been involved in watershed planning for WRIAs 55/57 and 54, as well as the Instream Flow Work Group that was established jointly by the two watershed planning units. Ecology's outreach on the preliminary draft and proposed rules also included coordination with local government entities in the rule area.

Comment 130
In order to be consistent with state law and what I believe to be in the Spokane watershed plan, you should include in your identification of potential new sources the use of reclaimed water for purposes authorized under state law, and should require evaluation of their availability before issuing new permits, or allowing new uses, for nonpotable purposes.

Commenter(s)
Monthie, David 1;

Response
Thank you for your comment, however, Ecology respectfully disagrees with your recommendation regarding adding rule requirements related to the use of reclaimed water. This rule establishes instream flow levels that must be protected from future new withdrawals of water. Reclaimed water, while potentially a "new" source of water, is put to uses chosen by the reclaimer, and may not be widely available. Also, the use of reclaimed water has site specific impacts that do not always result in protecting instream flows. For these reasons, we reserve decisions on use of reclaimed water within individual permit decisions, considered on a case-by-case basis.

Comment 131
The Spokane Canoe & Kayak Club wants Ecology to protect high flows in the river – Safe boating flows for everyone is around 2500 cfs. 850 cfs flow from June15 to September 30 is an unacceptable flow and extremely dangerous one for some. By reducing flows to 850 cvs DOE is taking the recreation aspect out of the equation and I believe that is illegal. The State Minimum Flow Act and Water Resources Act require protection of recreational and navigational use of Washington's rivers. We ask that Ecology follows the law.

Commenter(s)
Spokane Canoe & Kayak Club 6, 7, 8;

Response
Adopting instream flow protection levels in a rule does not control the rise or fall of flow levels in the river. Such flows as discussed are operational flows and the subject of Avista's relicensing on their Spokane River dams. See response to Comment 2.

Comment 132
In addition, Ecology failed to even assess what flows are appropriate for recreation and aesthetic purposes, in direct violation of the law.

Designated uses of state waters include: "salmonid spawning, rearing and migration; primary contact recreation; domestic, industrial, and agricultural stock watering; wildlife habitat; harvesting; commerce and navigation, boating; and aesthetic values." WAC 173-201A-600(1) (emphasis added). "Aesthetic values" constitute a "general criteria" for "recreational use," which is "designated for protection in fresh surface waters of the state." WAC 173-201A-200(2)(a)(ii). Aesthetic uses also constitute an independent, and separate "designated use" to be protected by state water quality laws. WAC 173-201A-200(4). Thus, aesthetics are both a "designated use" and a "general criteria" and demand protection as such. Jefferson County, 511 U.S. at 714 (quoting 33 U.S.C. § 1313(c)(2)(A) ("a water quality standard must 'consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses.' "). Ecology is authorized to "take all action necessary" to secure to the state the benefits and to meet the requirements of the CWA. RCW 90.48.260.

Washington's anti-degradation regulations provide a third, independent basis for Ecology's authority and obligation to mandate instream flows that protect aesthetic and recreational uses. See WAC 173-201A-300. The state's anti-degradation policy mandates that "[e]xisting and designated uses must be maintained and protected. No degradation may be allowed that would interfere with, or become injurious to, existing or designated uses, except as provided for in this

chapter." WAC 173-201A-310(1). The function of the anti-degradation policy is "to provide protection against activities which, even though they may meet specific water quality and sediment standards, may nevertheless have the effect of degrading water or sediment quality to such a degree that other beneficial uses of an affected water body suffer adverse impacts, thereby calling into question the overall sustainability of those uses." Friends of Cowlitz v. City of Tacoma, PCHB No. 02-022, at *4 (December 13, 2002) (quoting Marine Environmental Consortium v. Ecology, PCHB 96-257 (1998)).

In addition to the state's anti-degradation policy, Washington law affirms that "sufficient lowering of the water quantity in a body of water could destroy all of its designated uses, [like] recreation." Jefferson County, 511 U.S. at 719; see also WAC 173-201A-200. "Recreational use" is a characteristic use designated under the state's water quality classification scheme and is described as encompassing "aesthetic enjoyment." WAC 173-201A-030(5)(b)(v). A "state may impose minimum instream flow conditions as part of 401 water quality certifications where necessary to enforce a designated use and conform to state and federal anti-degradation policies." Pend Oreille County, 146 Wash.2d at 811. In Snoqualmie Tribe v. WA Dep't of Ecology, the plaintiffs asserted rights to minimum instream flows based on cultural and spiritual interests. The Pollution Control Hearings Board found court that "aesthetic enjoyment, which is a characteristic use, includes enjoyment of beauty," and that "the tribe's interest is in much more than the beauty of the falls." Snoqualmie Tribe, 2004 WL 763071, at *15 (April 7, 2004). The Board also confirmed that Washington statutes and regulations codify a concrete basis to protect interests in aesthetics. Id. Thus, Ecology's authority to set instream flows extends to consideration and protection of recreational enjoyment and aesthetic beauty.

Commenter(s)
Law Offices of Andrea K Rodgers Harris 3, 7, 9, 10;

Response
Thank you for your comment. This rule is adopted under the authority of state water code statutes: RCW 90.22 – *Minimum Water Flows and Levels,* RCW 90.54 – *Water Resources Act of 1971,* RCW 90.82 – *Watershed Planning,* RCW 90.03- *Water Code,* RCW 90.44 – *Regulation of Public Groundwaters,* and RCW 43.27A – *Water Resources*. This rule is not adopted under the authority of RCW 90.48 – *Water Pollution Control Act.* Please also see the response to Comment 2**.**

Comment 133
Ecology is required to protect aesthetic values when drafting its instream flow rule for the Spokane River. The Pollution Control Hearings Board has specified that "aesthetic enjoyment can be through sight, smell, touch, and taste and is also a form of recreation." CELP et al v. Ecology et al., PCHB No. 12-082 (Findings of Fact, Conclusions of Law & Final Order) (As Amended Upon Reconsideration) (Aug. 30, 2013) at 25. Under the Washington state water quality standards, aesthetic uses of state waters including the Spokane River are protected in several ways. Aesthetic uses are certainly protected by the narrative criterion that requires that "aesthetic values shall not be impaired by the presence of materials or their effects, excluding those of natural origin, which offend the senses of sight, smell, touch or taste." WAC 173-201A-260(2)(b). However, this is by no means the only provision within state law that protects aesthetic uses of water.

Washington's Water Resources Act, Ch. 90.54 RCW, also protects aesthetic values in state waters. Beneficial uses of state waters are defined to include "preservation of environmental and aesthetic

values" (RCW 90.54.020(1)), and "perennial rivers of the state shall be retained with base flows necessary to provide for preservation of aesthetic and other environmental values." RCW 90.54.020(3)(a). The Washington Supreme Court specifically identified these laws as "other appropriate requirement(s) of state law" under Clean Water Act Section 401(d) that support the imposition of instream flows to protect designated uses of state water bodies. Dept. of Ecology v. PUD No. 1 of Jefferson County, 121 Wash.2d 179, 189-92, 849 P.2d 646 (1993), aff'd on other grounds, PUD No. 1 of Jefferson County v. Ecology, 511 U.S. 700 (1994).

Commenter(s)
Law Offices of Andrea K Rodgers Harris 6, 8;

Response
RCW 90.03.247 grants the Department of Ecology exclusive authority to establish minimum flows. Minimum flows are established *"for the purposes of protecting fish, game, birds or other wildlife resources**, or** recreational or aesthetic values"* (RCW 90.22.010, emphasis added). Under 90.22 Ecology is not required to establish minimum flows for fish **and** recreational values or aesthetic values. The department has some discretion and leeway in the process.

RCW 90.54.020(3)(a) says "*streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values…. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served."* This doesn't mandate that minimum flows must be set for navigational flows or aesthetic values, it states that base flows necessary for preservation of these values be retained. In addition, new withdrawals shouldn't conflict with these values unless there is some clear overriding public interest at stake. If the department issues any new, junior water rights after the adoption of the rule, they will be conditioned to be interruptible (or fully mitigated) to comply with RCW 90.54.

While they are based on fish habitat studies, the instream flow levels established in this rule will preserve wildlife, scenic, aesthetic, and other environmental values in the Spokane River, in accordance with RCW 90.54.020.

Comment 134
Ecology must adopt this or a similar provision to meet its obligations in adopting a new instream flow rule. Under Washington law, Ecology must demonstrate that water is available for the proposed instream flow and that establishing the instream flow will not be detrimental to public welfare. Ecology should not treat effluent from the IEP mill as available to the purposes of the instream flow for the Spokane River. This is the effect of the rule where the 50th percentile of historic flows is reserved for the instream flow rule during the summer months.

Commenter(s)
Inland Empire Paper 6, 7;

Response
Regulatory instream flows are not established through the water right permitting process, and, thus, the criteria in RCW 90.03.290 are not applicable in the context of instream flow rulemaking.

Instead, the authority and factors governing the establishment of instream flows through rulemaking are provided under provisions of RCW 90.22 and RCW 90.54.

Comment 135
It would also be contrary to the public welfare and public interest for Ecology to establish a new water right in the instream flow rule that could in any way undermine or reduce the flexibility currently available to meet very stringent water quality obligations.

Ecology is required to make findings on the availability of water as well as the public welfare and public interest that support the proposed instream flows. The failure of Ecology to make specific findings on the availability and public welfare in the context of water quality issues is inconsistent with the ruling in Swinomish Tribal community v. Ecology, 178 Wn.2d 571, 311 P.3d 6 (2013). In Swinomish, the court repeatedly stated that a minimum instream flow set by rule is a water right with a priority date as of the effective date of the rule. 178 Wn.2d at 584. The court specifically found that "minimum flow rights established by rule are treated as other rights." Before enacting the rule Ecology must affirmatively find (1) that water is available, (2) for a beneficial use, and that (3) an appropriation will not impair existing rights, or (4) be detrimental to the public welfare. 178 Wn.2d at 589 (citing Postema, 142 Wn.2d at 79, and RCW 90.03.290(3)).

At the very least Ecology must determine the proposed minimum instream flows are in the public interest. This is expressly required in RCW 90.48.010. That section calls for the protection of wildlife, recreational and aesthetic values "whenever it appears to be in the public interest." See 178 Wn.2d at 592.

Commenter(s)
Inland Empire Paper 8, 9, 10;

Response
Thank you for your comment. Protecting and preserving instream resources, and ensuring compliance with water quality standards are both expressions of public interest in managing the state's water resources. Balancing water quantity and water quality concerns is an issue of statewide significance and Ecology works to coordinate implementation of both programs.

Regulatory instream flows are not established through the water right permitting process, and, thus, the criteria in RCW 90.03.290 are not applicable in the context of instream flow rulemaking. While, under RCW 90.03.345, instream flows are equivalent to water rights in that they are assigned priority dates based on the dates of their establishment and cannot be impaired by the exercise of junior rights, they are established by Ecology through rulemaking under authority of RCW 90.22.010-.020 and RCW 90.54.040, and are not subject to the four-part test for permit applications.

Protection of instream flows through adoption in a rule is consistent with the public interest as expressed in RCW 90.22 – Minimum Water Flows and Levels, and RCW 90.54 – Water Resources Act of 1971.

The instream flow level of 500 cfs at the Greenacres gage is based on recommendations in adopted watershed plans for WRIAs 54 and 55-57. In addition, recommendations in the watershed plan for WRIAs 55/57 call for the additional studies that were completed prior to developing the instream

flow levels for the Spokane gage. In accordance with RCW 90.82.130(4), the recommendations in an adopted watershed plan are to be relied on as a primary consideration in determining the public interest in making water resource decisions.

Comment 136
In addition to the practical concern of having the rule adopted without also establishing a mitigation program that functions, we also question whether Ecology's legal obligations under the state's Water Resource Act can be bifurcated so that the instream flow protections are afforded the certainty and status of an adopted rule, while the water supply components are not included as part of the rule itself. RCW 90.54.020(5), which governs Ecology's adoption of water resource rules, provides that "adequate and safe supplies of water shall be preserved and protected in potable condition to satisfy human domestic needs." Under Ecology's approach, the Proposed Rule could be adopted with the intent of then finalized the mitigation process, only to have that mitigation process sidetracked by budgetary, political, or other factors outside Ecology's control. Even if Ecology has the best of intentions in creating a mitigation process that provides groundwater mitigation and takes the burden off homeowners and homebuilders, this process should be an equal part of the rule, not a secondary action. Instream flow protections and out-of-stream water needs should proceed together, not separately.

Commenter(s)
Builder & Realtor Associations 10;

Response
We understand your interest in having a mitigation program spelled out in the rule. We believe it is preferable to have a mitigation program or process that is required in general in the rule, but it remain adaptable and able to change according to the needs of the community and new opportunities.

Ecology has acquired a water right that will provide adequate mitigation for future permit-exempt withdrawals in areas where new homes cannot obtain water from a municipal purveyor. Ecology does not agree that the state's provision of mitigation should be incorporated in the rule. Ecology is confident the mitigation we are able to provide will be adequate for foreseeable demand, however, Ecology does not agree that the state should commit to providing open ended mitigation.

Alternatives analysis

Comment 137
RCW 34.05.328 (1)(b) requires you to analyze alternatives to rule making and the consequences of not adopting the rule. Proposed WAC 173-557-010 includes language responsive to RCW 34.05.328 (1)(a), but does not include language responsive to RCW 34.05.328 (1)(b). Proposed WAC 173-557-010 fails to comply with the plain language mandate of RCW 34.05.328 (1)(b).

Commenter(s)
MacLeod, Norman 1;

Response
Ecology disagrees. Ecology has determined it is necessary to adopt this rule to achieve the goals of Chapter 90.22 RCW and RCW 90.54.020.

SEPA

Comment 138
Your determination of non-significance does not include the information necessary to develop policy that complies with the RCW 43.21C.020 (2)(f) mandate to achieve a balance between the human environment and the natural environment. If you do not have that information in the record, your final decision on whether to adopt the proposal fails to comply with the statute.

Commenter(s)
MacLeod, Norman 6;

Response
Thank you for your comment. Ecology does not agree.

Comment 139
All pertinent documents have not been made available to the public, especially a complete SEPA, and an EIS. The public has a right to see these missing documents and rule making should include the documents. Comment period should not be closed before these documents have been produced, and ample time allowed for public review and comment.

A Project of these proportions requires a complete and accurate SEPA, and a complete and accurate EIS, which have not been produced by DOE.

Commenter(s)
Ibbetson, Timothy 79, 82;

Response
A SEPA determination of non-significance was signed on September 10, 2014 and Ecology provided a combined comment period for the document and the draft rule. By considering the comments received before adopting the rule, Ecology has completed the SEPA process.

Comment 140
CAPR takes issue with Ecology having determined that an EIS is not required which is inconsistent with the SEPA codes. The provided SEPA is simply an inadequate and inappropriate SEPA Checklist. This checklist is not intended for rule making purposes and is therefore misleading to the public and lacking in the required science for this type of action. CAPR believes that the Department of Ecology is required to provide a complete SEPA as well as a complete EIS detailing the impact of the proposed WACs to the Environment, and the People in this WRIA.

A close look at the checklist would provide insight into the sophomoric preparation done by the DOE for this major rule change and it is clear that RCW 34.05 and its many provisions was

entirely disregarded in DOE decision making. Ecology must be forced to prepare an EIS and provide detailed, peer reviewed and current science.

Ecology should be sanctioned until the agency provides the necessary studies conducted and prepares a complete SEPA, and detailed EIS that also addresses the . . . cumulative effects . . . that will be realized if this rule is adopted.

This direct quote from page 26 is one serious example of the flawed preparation the DOE has conducted. "There has been concern raised about possible conflict between implementation of this rule, if adopted, and implementation of requirements under the State Water Pollution Control Act, Chapter 90.48 RCW. And the federal Clean Water Act. The need to ensure compliance with water quality standards or discharge permit requirements may compel removal of waste water or storm water discharges to the Spokane River, potentially reducing stream flow in the river." This statement alone should cause concern over the lack of a complete SEPA and EIS.

Commenter(s)
Citizens' Alliance for Property Rights 4, 8, 10, 12;

Response
SEPA has been satisfied in full compliance with the statute. Ecology supplied an environmental checklist and threshold determination for public review, complying with the SEPA process, and determined an EIS was not required. Public notice and opportunity to comment was held concurrent with the draft Rule, representing 30 days beyond the statutory requirement of 15 days for review of a threshold determination and checklist.

Comment 141
On September 10, 2014, the Department of Ecology issued a determination of non- significance for the proposed rule. This determination is erroneous because it disregards the fact that there are two components to "environment" in environmental policy law: the natural environment and the human environment. While the proposal may not have significant adverse impacts to the natural environment, it does have profound adverse impacts to the human environment. Therefore, an environmental impact statement, including analysis of alternatives to the proposal's preferred alternative, needs to be prepared in compliance with RCW 43.21C.030 (2)(c).

Commenter(s)
MacLeod, Norman 5;

Response
Ecology disagrees. Ecology believes the threshold determination is correct.

Comment 142
CAPR believes that the Department of Ecology is required to provide a complete SEPA as well as a complete EIS detailing the impact of the proposed WACs to the Environment, the People in this WRIA, and detailed Economic Impacts.

Ecology should be sanctioned until the agency provides the necessary studies conducted and prepares a complete SEPA, and detailed EIS that also addresses the cost benefit analysis, cumulative effects, and the economic impacts that will be realized if this rule is adopted.

Commenter(s)
Citizens' Alliance for Property Rights 5, 10;

Response
Evaluation of economic impacts is not required in the SEPA process. Draft economic documents required by the Administrative Procedures Act were the subject of public notice and opportunity to comment concurrent with the draft rule.

Comment 143
There are many errors in the SEPA checklist, but comments on those errors would require several pages, and would not apply, as a SEPA checklist is the wrong vehicle for a determination of non-significance.

Commenter(s)
Citizens' Alliance for Property Rights 7;

Response
Thank you for your comment. A SEPA checklist is the required document for making a threshold determination of significance or of non-significance.

Comment 144
Furthermore it is clear that if this provided SEPA checklist is used for rulemaking, the DOE is putting the state at risk for several lawsuits.

There is dearth of standards against which Ecology is evaluating its proposed flows. In order to adequately assess the flows, Ecology must have some standards. In particular, the approach towards setting flows for the Spokane River is inconsistent with what members of the Rural Water Supply workgroup, in a presentation by Ecology staff, were the standards being used by Ecology to set instream flows by rule. In the absence of any standards, or consistent statewide approach, Ecology's proposed flows are arguably aribtrary.

Commenter(s)
Citizens' Alliance for Property Rights 11; Monthie, David 7, 8;

Response
Ecology does not agree that the SEPA checklist and Determination of non-significance create any unusual legal risk.

Ecology does not agree that the methods used to set the instream flow levels in this rule are arbitrary or inconsistent with what was presented to the Rural Water Supply workgroup.

Outreach/Stakeholder input

Comment 145
Thousands of Spokane's citizens enjoy the river for fishing, tubing, kayaking, canoeing, rafting and for its aesthetic and scenic values. Yet these people were not consulted nor was their enjoyment of the river considered. Specifically, the DOE did not reach out to the huge community of people that use the Spokane River corridor for recreation purposes. There are private associations of rafters, the Spokane Canoe and Kayak Club, local fishing groups, etc. and none of these were contacted. Nor was there any contact with businesses who depend on the river flows in order to operate our businesses. There are at least five companies that offer rafting trips, kayak tours, tubing trips and other activities and none of these were consulted. We are an important part of the economic fabric of the Spokane community and should have been consulted.

Ecology has done no research or outreach to these user communities [boaters, paddlers, and floaters] as to needed flows.

Ecology's own rule, WAC 173-557-01, indicates that the "authority and purpose" of the instream flow rule-making is designed to: "protect and preserve fish, wildlife, scenic, aesthetic, recreational, water quality, and other environmental values; navigational values; and stock watering requirements." Yet the thousands of Spokane's citizens who enjoy the river for fishing, tubing, kayaking, canoeing, rafting and for its aesthetic and scenic values were not consulted nor did their enjoyment of the river seem to be considered. The DOE did not reach out to the huge community of people including private associations of river users and recreational businesses who depend on the river flows in order to operate and who are an important part of the economic fabric of Spokane.

I am most concerned that the Department of Ecology did not involve the boating community in it's study of, and recommendation for ongoing river flows. This is an oversight that must be addressed before any permanent decisions are made for our river.

In the 25 years that our white water club has been in business, we've had no -- nobody contact us regarding any flows, so, you know, hopefully in the future, as this goes forward, we will be on your list of experts who know the river intimately at all levels and know every stretch of the river to, you know, be some real eyes on what is needed on the river, and I will leave it at that.

I had the opportunity to talk to people as they got off the river. Remember those really hot days, those almost 100 degree days on the weekends, and there would be so many people down on the river, and I talked to them and I asked them if I could take photographs and they allowed me to do that. And I said, you know, the rule that the state is now proposing will make it impossible for you to use this river as you are currently using it, and people were very upset. I think people don't understand what this agency is proposing to do, and the impact it will have on our community.

To my knowledge no one at DOE contacted anyone at SCKC regarding our usage of the Lower Spokane. We know flows and recreating and feel we could have and should have offered our expertise in the matter. Return to the assessment phase of this process and conduct recreational flow surveys and outreach to SCKC and other boating groups to obtain data and a better understanding of the importance of the Spokane River for boating.

The NWA is a regional rafting club founded in 1989 that promotes river running, river safety, river access and conservation efforts.

You may sense a tone of anger in my letter and I will assure you this is not at all personal. I am, however, incensed that DOE NEVER made an effort at outreach to discuss this with ANY of those, like NWA, who use the Spokane River for fun year-around, or those businesses like ROW and Flow Adventures who, through their taxes, help fund DOE's existence.

NWA has been around for 25 years and there is a long line of outfitters who also have been in business for years, and years, as well. We've had agency personnel on floats on the river in the past so they knew how to reach ALL of us. You MUST revisit the assessment phase of this process to include the many, many, many people who recreationally and professionally use this river. I look forward as to how NWA can assist in doing this process right in order to serve ALL river users.

Thousands of Spokane's citizens enjoy the river for fishing, tubing, kayaking, canoeing, rafting and for its aesthetic and scenic values. Yet these people were not consulted nor was their enjoyment of the river considered. Specifically, the DOE did not reach out to the huge community of people that use the Spokane River corridor for recreation purposes. There are private associations of rafters, the Spokane Canoe and Kayak Club, local fishing groups, etc. and none of these were contacted. Nor was there any contact with businesses who depend on the river flows in order to operate our businesses. There are at least five companies that offer rafting trips, kayak tours, tubing trips and other activities and none of these were consulted. We are an important part of the economic fabric of the Spokane community and should have been consulted.

Commenter(s)
ROW Adventures 4; Soeldner, W Thomas 6; Systems Coaching LLC 6, 13; Schafer, Daniel 2; NW Whitewater Association 2, 7, 10, H3; Sierra Club (Osborn, John) H4; Spokane Canoe & Kayak 5, 9;

Response
Ecology has been working with watershed planning groups since 1998 to develop instream flow protection for the Spokane River. The rule has been vetted by top scientists, staff, and management of all concerned state government agencies. It has been reviewed and analyzed by all local Water Resource Inventory Area Watershed planning groups. We have solicited and received input from many individuals and organizations since that time.

We have considered the recreational, aesthetic, and navigational values arguments for protecting the Spokane River at multiple stages throughout the process which culminates in establishing these instream flows for the river. The subject was addressed in detail during Avista's FERC relicensing process for their Spokane hydroelectric facilities. The subject was addressed during the watershed planning process in all Spokane WRIAs. The subject was addressed during the comment period on the preliminary draft of this rule. And again, the subject came up during this comment period before final rule adoption.

Ecology has read the Whitewater Paddling Study conducted under the FERC process, and listened to many river users. Ecology has also reviewed the anecdotal observations, opinions, and photos submitted by whitewater enthusiasts and others.

Comment 146
I just attempted to use the on-line comment system and rec'd an error message that is attached as a pdf.

Also, please add this message to the rule-making record.

A large number of people will be sending you comments this week regarding the Spokane River rule. At your request, we are directing people to the on-line comment form. However, as noted in an e-mail you just received from John Townsell, the form is not working.

It is essential that people who want to comment on the rule be able to do so successfully and without difficulty. I would like to discuss with you tomorrow morning (Monday, 11/3/14) whether CELP and other groups should cease asking their members to use the on-line form for commenting. It is simply unacceptable that public comments might be lost due to technical difficulties.

I appreciate your immediate attention to this matter. Please call me when you receive this e-mail.

PROBLEM:
When I submitted the above message, twice I received:
"error" : true,
"message" : "Internal error",
"status" : 500

This is Sunday evening so I don't expect to be able to reach the contact shown: "If you are having problems with this form, contact Chris Anderson 360 407-6634." I don't see how I can contact the Department of Ecology through using this form. However, I see that I can email my comments to you, Ann Wessel, so I am doing so. Will you accept my comments so that they will be counted as a "comment" even though your Department's form doesn't work? Darn but I am frustrated!! Why can't Government agencies' forms work!!!

The on-line comment form has rejected comments from our members, at least three times that we are aware of in the last week. We are concerned that Ecology has lost comment letters.

The Department of Ecology's on-line comment response system was inconsistent. Messages and comments may have been lost.

Commenter(s)
Pascal Osborn, Rachael 1, 2; Townsell, John 11; CELP/Sierra Club 1, 5, 15, 45;

Response
On Sunday evening, November 2, 2014 a report that the comment form for the Spokane Instream Flow Rule was not working was sent to Chris Anderson of Ecology via e-mail by Rachael Osborn. On Monday morning November 3, he worked to fix the problem and then responded by phone to Rachael. The immediate fix was to remove the form from the web page and to point folks to the three additional methods of submitting comments. By Tuesday we had received over 1,200 comments on the rule via e-mail. The comment form was re-posted Tuesday morning and it functioned normally for the four days remaining in the comment period.

We do not believe any comments were lost. Most people who use computers for submitting comments through online forms have seen error screens before. The error screen for this outage explained that the submission did not function properly. We believe that People receiving the error message would either try again or find another way to submit comments.

We do not have an explanation for why the comment form did not function properly. It was probably a Socrata server problem. Although, we do not have a way to know if a comment was sent and failed to submit, we do know that the system provided an error screen to let the commenter know something is wrong. We then assume that people found the other means to provide us with their comment, or resubmitted later when the problem was repaired, well within the comment period.

Comment 147
CAPR believes that the Department of Ecology is required to provide a complete SEPA as well as a complete EIS detailing the impact of the proposed WACs to the Environment, the People in this WRIA, and detailed Economic Impacts. It is incorrect to ask for the required Public Comment without providing this important information to the Public to study. The Public comment cannot be complete or accurate without this information.

Without reasonable access to this information, the neither the lay nor the professional public cannot readily determine whether the threats to species and ecosystems actually exist to the degree you assert, nor can they determine whether the proposed rule is the most reasonable and necessary approach to take.

Without ready access to the information you have used to support and justify the proposed rule, members of the public cannot identify whether you have considered contrasting or contradictory scientific information pertinent to this proposal that they may be aware of, so that they could submit that information for your consideration.

RCW 34.05.328 (2) mandates that you must place in the rule-making file documentation of sufficient quantity and quality as to persuade a reasonable person that the determinations are justified. You have failed to comply with the plain- language mandate of RCW 34.05.328 (2).

Commenter(s)
Citizens' Alliance for Property Rights 6; MacLeod, Norman 10, 12;

Response
Ecology disagrees.

Comment 148
I look forward to continuing to be an active proponent of the Spokane River. Please keep citizens informed and extend the comment period for a suitable number of comments.

Commenter(s)
Banks, Aaron 9;

Response
Thank you for your comment. Ecology allowed a comment period in excess of what is required under the Administrative Procedures Act for rule adoption and did not agree that extending the comment period would be needed. Ecology received approximately 1,850 comments on the proposed rule language.

Comment 149
I hope there will be lots of thought put into this decision with the input from all parties that will be affected. I believe there can be a compromise to make the right decision for everyone.

Commenter(s)
Reed, Jake 5;

Response
Thank you for your comment. Ecology agrees.

Comment 150
I urge you to dialogue with the Spokane Chapter of Trout Unlimited and Spokane Riverkeeper to address this critical issue [determining flows].

Commenter(s)
Kistler, Claude 3;

Response
Thank you for your comment.

Comment 151
Spokane County looks forward to coordinating these details [about mitigation] with Ecology as this aspect of the proposed rule has significant potential to affect ongoing operations in Spokane County's Building and Planning Department. It is our position that these details, and any others that may arise, must be addressed prior to the effective date of the rule. While we understand the potential for development that will utilize permit exempt wells as a water source within the geographic area of the proposed rule is small, the items identified above are not trivial, and could take some time to put in place. If they are not in place there could be significant delay in processing a permit that proposes to utilize the purchased water right as mitigation for a new permit exempt well.

Commenter(s)
Spokane County 10;

Response
Thank you for your comment. We agree that these issues/items are not trivial and must be worked out in the near future. There are a number of other models and systems that have been used around the state. We do not believe that delaying completion of rule-making to work out these details is warranted. We intend to work closely and diligently with the County to get this worked out as

quickly as possible. Ecology will work with affected agencies to coordinate with local permitting processes, and to ensure documentation and tracking of necessary mitigation.

Other study concerns

Comment 152
Ecology should consider, in its rule-making decision, the full scientific and technical record (as listed in the State Environmental Policy Act checklist prepared by Ecology), as well as the long-standing data record on stream flows kept the United States Geological Survey, particularly for the Spokane River at Spokane (USGS gauge #12422500).

Commenter(s)
Avista 5;

Response
Thank you for your comment. Ecology has reviewed the entire record of flows and scientific studies done on the river.

Comment 153
Your most prudent course of action at this time is to withdraw the proposal as administratively deficient and not justified or supportable by the scientific information considered to date.

Commenter(s)
MacLeod, Norman 14;

Response
Ecology disagrees. See response to Comment 3.

Comment 154
Your list of scientific references is incomplete. It includes some studies pertinent to the area covered by the proposed rule, but it does not include key references that you are on record as using for other instream flow rules. These include studies and texts on the subject area of instream flows, such as Instream Flows for Riverine Resource Stewardship, or Integrated Approaches to Riverine Stewardship, both published by the Instream Flow Council. (You most certainly have access to these two particular texts . . . WDFW's Hal Beecher is one of the authors.)

Your list also lacks references that comprehensively describe the hydrogeologic processes and structures that provide water for stream flow, and evidence of which of those processes are providing water for stream flow for the specific areas covered by this proposed rule.

Commenter(s)
MacLeod, Norman 9;

Response
Thank you for your comment. The rule-making file includes documentation of sufficient quantity and quality so as to persuade a reasonable person that the determination to adopt this rule is justified.

Comment 155
You have not identified which of the listed studies have been published in a peer reviewed journal, which studies have been peer reviewed but not published, which studies have not been peer reviewed, nor which references should not be considered scientific information, such as the Instream Flow Recommendations Memorandum for WRIA Planning Units 54 and 55/57, WRIA 54/57 Spokane River Instream Flow Workgroup. Members of the public are unable to reasonably ascertain the quality of the science you use to justify and support the proposed rule without this information.

Commenter(s)
MacLeod, Norman 11;

Response
Thank you for your comment. All studies cited are fully referenced.

Ethics

Comment 156
Decisions about rivers may be driven by water politics and those who benefit from extracting and polluting freshwaters, but decisions should be ethically sound. Through my "From Bedside to Streamside" work in ethics, I have encouraged the adaptation of ethical conflicts-resolving models we use in hospitals to conflicts over water. My background in ethics includes in 1985 working with ethicist Johnny Cox to develop the ethics training program for resident physicians at Providence Sacred Heart Medical Center; in 1991, establishing the ethics consultation program for the Spokane VA Medical Center; and in 1997, along with ethics-consultant Rose Mary Volbrecht, co-founding the Regional Ethics Network of Eastern Washington (RENEW) that drafted and piloted Washington State's Physician Orders for Life Sustaining Treatment (POLST).The "Bedside to Streamside" work started with RENEW, and is moving forward through CELP, Sierra Club, and the Columbia Institute for Water Policy.

To resolve ethics conflicts in hospitals or over rivers, the first step is to obtain the basic information for making decisions. If there are conflicts of interest involving agency staff or consultants, then those conflicts need to be disclosed. For the draft Spokane River flow rule, substantial and necessary information is absent, including surveys of river users and necessary inventories of what the river looks like at different locations and different flows. There is no discussion of historical use and flows, and no projection of future use and flows.

Absent also is the necessary discussion of Idaho continuing to issue water rights, the issuance by Washington Dept of Ecology of extensive paper water rights, and the eventual allocation of water between Idaho and Washington that will further deplete river flows. The fisheries analyses are incomplete, flawed, and erroneous in their conclusions.

Economic analyses fail to address the benefits of higher flows for recreation- based businesses and hydropower generation. In failing to provide foundational information necessary for informed decision-making, the proposed rule is ethically unsound.

The next step in resolving ethics conflicts is to assess who is impacted by the decision and determine their preference (the ethical principle of autonomy). Thousands of people use the Spokane River. Flows in the river support recreational uses and businesses. Fish and wildlife depend on the river. More broadly, the decision on Spokane River flow will bind future generations who currently have no voice. And beyond the human constructs, there are matters of stewardship responsibilities for fish and wildlife who are voiceless in human decisions over their habitats. Respecting the needs and preferences of those impacted but who lack decisional-capacity is embodied in the phrase "Common Good" and its corollary, the Public Trust Doctrine. By failing to recognize and respect the many who have a stake in this decision, the proposed Spokane River flow rule is contrary to the Common Good and ethically unsound.

In a third step of ethics analysis, reviewing contextual features is essential. An ethics review includes applicable laws and regulations. For example the Washington State Water Resources Act of 1971 states that perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values.(RCW 90.54.020) Absent necessary studies, the agency is unable to ascertain whether the proposed base flows are adequate to provide for "preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values." Indeed, the failure of the agency to provide the foundational information for informed decision-making has prompted river advocates to provide the necessary studies. In failing to comport with laws that promote stewardship laws, the proposed flow rule is ethically unsound.

Commenter(s)
Sierra Club (Osborn, John) 5, 6, 7, 8, 9, 10, 11, 13, 14;

Response
Ecology disagrees. This rulemaking is accompanied by a substantial set of hydraulic and hydrogeologic studies, thorough and complete habitat evaluations, and a large volume of public input. The dataset is complete, the analysis is accepted and peer reviewed, locally and nationally, and the outreach was broad. Ecology has conducted thorough public review of this rule proposal, the underlying studies, and laws and rules enabling this effort. Your ethical observations are unfounded. See also the response to Comment 2.

Aquifer map

Comment 157
How is it determined when the areas in the Little Spokane River are using water from the Spokane Valley Rathdrum Prairie Aquifer?

Commenter(s)
Ibbetson, Timothy 2;

Response
Ecology assessd the hydrogeologic units in this area by comparing stream gage data with trends of aquifer heads (depth to water in wells) in water wells constructed in deep and shallow aquifer units.

Comment 158
What scientific studies (documented) suggest that there is only one unconfined aquifer in this area and that there are no confined aquifers in this area?

"WAC 173-557-020 – Applicability. (1) This rule applies to the mainstem of the Spokane River and all surface and groundwaters within that portion of Spokane County, Washington inside the boundary of the Spokane Valley Rathdrum Prairie Aquifer, as identified in U.S. Geological Survey Scientific Investigations Report 2007-5041. The map provided in WAC 173-557-110 is for informational purposes only. Hydrologic evidence of the SVRP aquifer determines applicability of this rule." This assumes this is one continuous aquifer with no structural controls. It also assumes that this aquifer can actually be defined from other aquifers in this area.

Commenter(s)
Ibbetson, Timothy 4, 25;

Response
Actually, the referenced study documents that condition, it does not assume it.

Comment 159
Mapping of the acquifer boundary changes are also a problem. The well logs shown on Plate 1 of report 2007-5041 show no well logs within the Stevens Co. Boundary.

The Boundary that extends into Stevens Co. as shown in Plate 1 of the 2007-5041 and 5044 reports shows the well log in alluvial gravels in Spokane Co. and may not be representative of the boundary into Stevens Co. portion.

Commenter(s)
Fackenthall, Ann 2; Wells, Lynn F 2;

Response
Ecology and the USGS drew that boundary using all wells available, not just those marked as measured on the map. There is, however, always uncertainty in specifics inherent in interpolating conditions between widely spaced drill holes as described.

Comment 160
This is based on limited studies, assumes there are no structural controls, assumes the aquifer is homogeneous, there are no confined or leaky confined aquifers present, and assumes that there are no isolated segments in this aquifer and that there are no fractured bedrock aquifers. This map is based heavily on interpretations with minimal data. I am unaware of any actual mapping of the

aquifer, especially geophysical studies that are conducted specifically to identify ground water resources and characteristics of the aquifer(s).

Commenter(s)
Ibbetson, Timothy 84;

Response
Ecology disagrees with your assertions. Multiple studies, conducted by the U.S. Geological Survey, were published in conjunction with their final report, U.S. Geological Survey Scientific Investigations Report 2007-5041, to develop the map used in this Rule.

Implementation

Comment 161
Assuming Ecology adopts an instream flow, we encourage it to work closely with local water purveyors and others to promote water conservation, and mitigation approaches or other options for appropriate new uses of water which don't impair instream values. This would require robust coordination with these and other entities.

In particular, Avista urges Ecology to build on cooperative efforts of recent years and engage the State of Idaho, in consultation with the Coeur d'Alene and Spokane Tribes, in long-range and creative interstate coordination and avoid default options which could include protracted and expensive litigation. Avista also looks forward to supporting such a collaborative effort.

Commenter(s)
Avista 6;

Response
Thank you for your comment. We will continue to work with the community, community groups, Tribes, Idaho, local governments, and water organizations in the future. We believe there are many steps ahead.

Comment 162
If concerns are not addressed, the ambiguity may impact land use and permit decision-making processes conducted by Spokane County. Contested land use and permitting decisions often hinge on the interpretation of language in administrative rules.

Commenter(s)
Spokane County 12;

Response
Thank you for your comment. Ecology agrees and has changed the rule language to help clarify application of the rule. In addition, Ecology agrees permitting decisions may be affected, and Ecology will work with affected agencies to maximize understanding of application of this rule.

Mitigation

Comment 163
The mitigation language is sufficient to support a mitigation program.

Commenter(s)
CELP/Sierra Club 14;

Response
Thank you for your comment. Ecology agrees.

Comment 164
Water reductions, restrictions, and mitigation are not attempted to be clearly and specifically codified by the DOE documentation.

Commenter(s)
Citizens' Alliance for Property Rights 3;

Response
Water reductions or restrictions are not proposed in the rule. Mitigation for some new uses will be required during times when flows drop below instream levels. The language proposed in the rule allows the widest opportunities to provide mitigation for new uses. In addition, Ecology plans to provide mitigation water to cover new permit-exempt uses for many years.

Comment 165
Definition of mitigation should say fully offset.

Commenter(s)
Monthie, David 13;

Response
Ecology believes the mitigation language is sufficient.

Comment 166
How does mitigation make more water available? This is scientifically impossible.

How has mitigation increased the base flow?

Commenter(s)
Ibbetson, Timothy 34, 58;

Response
The purpose of mitigation is to offset effects of new uses of water on the stream during periods when the instream flows are not met. This mitigation water will be senior to the instream flow rule and therefore not subject to curtailment. The purpose of mitigation is not to increase base flow, but to provide water that is legally available.

Comment 167
Municipal water is exported to areas, collected in municipal sewer systems (often combined sewer systems) and is removed from the area to be directly discharged into a river, lake, (or in areas bounding marine waters, into the marine waters), the water is not returned to the aquifer where it was produced from. If municipal water supplies were removed only from the river and returned to the river, the actual loss would be less and the impact to ground water supplies would be reduced.

Commenter(s)
Ibbetson, Timothy 37;

Response
Thank you for your comment.

Comment 168
How many people want to have to conduct groundwater studies before they can develop their property?

Commenter(s)
Ibbetson, Timothy 18;

Response
There will occasionally be a proposed development that will need a determination of whether they are in the rule area or outside of it based on the location of the proposed well in relation to the Spokane Valley Rathdrum Prairie Aquifer. This is a determination based on well drilling logs, not a groundwater study.

Comment 169
Spokane County understands that Ecology has acquired a water right that will be senior to 173-557 WAC, and this water will be utilized to offset new water use from permit exempt wells. Will Ecology develop a programmatic mitigation plan that can be used by subdivision and building permit applicants? How will this process be integrated into Spokane County Building and Planning permitting process?

Spokane County understands that Ecology has acquired a water right that will be senior to 173-557 WAC, and this water will be utilized to offset new water use from permit exempt wells. Will the mitigation credit be appurtenant to the parcel and owned by the parcel owner? Will the mitigation credit be recorded on the deed?

Commenter(s)
Spokane County 6, 8, 9;

Response
Thank you for your comment. Ecology will work with affected agencies to coordinate with local permitting processes, and to ensure documentation and tracking of necessary mitigation. Mitigation for individual permit exempt wells will likely require case-by-case decisions within the terms of the mitigation right. Subdivisions are often required to acquire water rights and may not

be eligible for mitigation credit. Review of available parcel data indicate parcels of significant area to be considered eligible for subdividing are within existing water purveyor service areas.

Comment 170
Spokane County understands that Ecology has acquired a water right that will be senior to 173-557 WAC, and this water will be utilized to offset new water use from permit exempt wells. Without meters, how will water use be tracked and debited against the senior water right?

Commenter(s)
Spokane County 7;

Response
Ecology is in the process of acquiring a senior right for the purpose of mitigation new water use from permit exempt wells. Ecology has not finalized the process for tracking and debiting these new uses. Ecology plans to work with the County and other stakeholders to find the best method for water use and tracking, assigning mitigation credits, and recording.

Comment 171
Spokane County understands that Ecology has acquired a water right that will be senior to 173-557 WAC, and this water will be utilized to offset new water use from permit exempt wells. How large is the water right, and how many new permit exempt withdrawals will it support?

Commenter(s)
Spokane County 5;

Response
The number of permit exempt withdrawals that can be mitigated for will depend on the outcome of calculating water use per mitigation credit. Ecology intends to work with the County and other stakeholders to develop this method.

Comment 172
The Proposed Rule lacks the very language that Ecology promoted in recent months as a key selling point of the Spokane Rule. Below is a comparison of the Draft Rule language previously circulated by Ecology, and the Proposed Rule language:

DRAFT RULE, WAC 173-557-060(3):
"Within the area regulated under this rule, public water suppliers are the primary sources of water for new uses. If water is not available from a public water system, the consumptive use impacts to surface water from new permit-exempt groundwater withdrawals must be mitigated when stream flow is below the instream flows established in this rule. Ecology has placed water into the Trust Water Right Program (chapter 90.42 RCW) to mitigate for new permit-exempt groundwater withdrawals when water from a public water system is not available in a timely and reasonable manner . . ." (emphasis added)

PROPOSED RULE: WAC 173-557-060(3):
"Within the area regulated under this rule, municipal water suppliers are the primary sources of water for new uses. If water is not available from a municipal water supplier, the consumptive use impacts to surface water from new permit-exempt groundwater withdrawals must be interrupted when stream flow is below the instream flows established in this rule, unless those impacts are mitigated. Mitigation must be achieved through an ecology-approved mitigation plan." (emphasis added)

The Proposed Rule is significantly different from the draft rule, in that it does not include mitigation as part of the rule, and instead requires a future decision by Ecology on whether a proposed exempt groundwater use is adequately mitigated. This means that as of the effective date of the Proposed Rule, a local government making a local water availability decision must find that Ecology has approved a mitigation plan for a proposed exempt groundwater withdrawal. The Proposed Rule does not include any standards for such mitigation plans or even guidance on how such plans should be developed or will be analyzed by Ecology.

Commenter(s)
Builder & Realtor Associations 4;

Response
Water purchased by Ecology and placed into trust to mitigate for new permit-exempt uses will be an Ecology-approved plan. By allowing other mitigation options to be proposed and reviewed on their individual merits provides additional opportunities to new water users. Ecology has acquired a water right that will provide adequate mitigation for future permit-exempt withdrawals in areas where new homes cannot obtain water from a municipal purveyor in a timely and reasonable manner. Ecology does not agree that the State's provision of mitigation should be incorporated in the rule. Ecology is confident the mitigation we are able to provide will be adequate for foreseeable demand, however, Ecology does not agree that the state should commit to providing open ended mitigation.

Comment 173
During the public comment process over Ecology's draft rule, Ecology stated a number of times that even though the rule would close the rule area to new groundwater uses, including new exempt wells, that water supply for residential development could be served by existing water purveyors in many areas. It has been represented that "only a few vacant parcels" cannot obtain water from purveyors. We have requested specific information on which parcels can be served by which water purveyors from both Ecology and those purveyors, and have not been provided with any information that confirms this.

The fact that a property may be within the service area or approved future service area of a water purveyor does not mean that it is feasible for that property to be served by that purveyor. There are numerous examples of parcels that are within a purveyor's service area but cannot be served because of extraordinary costs, engineering issues, or other factors. We again request that Ecology specifically identify which areas of the affected rule area can or cannot be served by existing water purveyors, so that the actual impacts of the rule can be analyzed.

In fact, Ecology is required to provide this type of analysis under state's Administrative Procedures Act ("APA"). An instream flow rule adopted by Ecology is defined as a "significant legislative

rule" under the APA. RCW 34.05.328(5). As such, the APA requires Ecology to "coordinate the rule, to the maximum extent practicable, with other federal, state, and local laws applicable to the same activity or subject matter." RCW 34.05.328(1)(i) The state and local laws "applicable to the same activity or subject matter" include the Growth Management Act, Chapter 36.70A RCW, Public Water System Coordination Act, Chapter 70.116 RCW, and the local water availability requirements discussed above. The Spokane County Coordinated Water System Plan ("CWSP") provides service areas for water utilities in the area affected by the Proposed Rule, and each of these utilities will have a Water System Plan that identifies the number of approved and actual connections, the location of distribution and service lines, general facilities charges and other connection fees, and other information directly relevant to whether existing purveyors can provide timely and reasonable service. Ecology's presumption that vacant land within a purveyor's service area can receive "timely and reasonable" water service has been a disastrous presumption in the Skagit County, and we still don't have the necessary information to analyze this issue under the proposed Spokane Rule.

Neither the Proposed Rule, nor any related documents such as the Preliminary Cost- Benefit and Least Burdensome Analysis, include any information or analysis about where connection to existing purveyors can and will occur and at what cost, and where it will cannot occur – and so therefore mitigation would be required under the Proposed Rule.

Commenter(s)
Builder & Realtor Associations 8, 9;

Response
Ecology cannot predetermine specific parcels as available for development since it has no authority to determine whether a parcel will be served by a purveyor. That decision lies solely with the purveyor. As mentioned in the comment, "location of distribution and service lines, general facilities charges and other connection fees, and other information directly relevant to whether existing purveyors can provide timely and reasonable service" is constantly changing in every service are for every purveyor. Thus it would be impossible to predetermine or even track whether water is available from a purveyor at any given property at any given time. That is a determination by the purveyor at the time the proposed development is taking place. The intent of providing a mitigation option and having the state contribute trust water is to provide a solution to water availability when the purveyor cannot provide water service.

The rule does not propose to control where purveyors can or cannot provide water and at what cost. The economic analysis did include an estimate of additional costs that might be reasonably expected for making a determination of whether an exempt well is located within or outside of the rule area (and therefore whether mitigation is required).

Comment 174
Proposed new section WAC 173-557-060(3) as written does not protect our citizens and residents in the affected part of Stevens County. Specifically, "Mitigation must be achieved through an ecology-approved mitigation plan." This language is unacceptable. In the preliminary draft, all of the presentations and in meetings with the department it has been stated that ecology was going to purchase a water right and place it trust to mitigate for all new permit exempt well withdrawals within the rule boundaries. It is paramount that development and property rights are protected.

Ecology must purchase and place in trust the necessary water quantity to mitigate for new exempt well uses prior to any new rule taking effect. If this cannot be done, then the rule should not be allowed to take effect.

It is imperative that the water mitigation plan be in place prior to enacting the revised instream flow rules within Chapter 173-557 WAC.

There is a definition for mitigation. It is necessary to have the mitigation in place before the instream flow rule is enacted.

The development of the mitigation program for new permit exempt wells prior to the effective date of the rule is essential to rule implementation.

Over the past year, Ecology has represented that it would adopt a rule that ensures rural water availability issues by incorporating into the rule the acquisition of mitigation water supply. Now, Ecology appears poised to adopt a rule that lacks the very certainty of rural water supply that was used to sell the rule to the stakeholders who will be most impacted. The Associations request that Ecology not adopt the proposed rule until necessary mitigation is in place. Based on recent experiences around the state, mitigation water supplies should be incorporated into the rule adoption itself, not delayed until after the rule is adopted.

Under the State's Subdivision Act (RCW 58.17.110) and Building Code (RCW 19.27.097), local governments must find that potable water is availability prior to approving a subdivision or issuing a building permit. Under the Supreme Court's Kittitas County decision, such water supply must be both physically and legally available. To be legally available, the proposed source of water must be consistent with or at least not prohibited by Ecology's water resource regulations.

As Ecology knows, this subject matter is one of the most complicated and contentious issues in state water law. Ecology has recently convened a stakeholder group to review rural water availability issues, and a second group to develop guidance to counties who must make these water availability decisions. The relationship between local land use decisions and Ecology water resource authority was at issues in the Supreme Court's Kittitas County v. Eastern Washington Growth Board decision, and is now at issue in the Hirst v. Whatcom County Western Growth Board case before the Court of Appeals. The issue has given rise to numerous appeals, and has been costly and complicated for landowners, the development industry, local governments, and Ecology. Ecology has engaged in this issue at a policy level for the stated reason of seeking to establish more certainty and predictability as to rural water supply issues – yet the Proposed Rule fails to achieve this.

In the Draft Rule released for public review, the Draft Rule language included a provision that as part of the adopted rule, Ecology would acquire mitigation water to account for those new exempt wells in areas where water service from an existing purveyor was not possible. In various public meetings, Ecology highlighted this proposed integration of mitigation water supply with the instream flow rule itself as a significant change in how Ecology adopts instream flow rules. By representing that mitigation water supply would be incorporated into the rule, Ecology sought to address concerns that this rule would be like other rules where Ecology requires mitigation for rural domestic uses, but does not establish any sort of mitigation program. In some parts of the state, efforts to develop such mitigation for rural domestic well users has taken months, years, or

decades to develop, and at considerable costs – especially relative to amount of water used by and impacts from rural domestic wells.

While we understand that Ecology is still seeking to acquire water rights for mitigation, that assurance does not provide adequate certainty. In recent years, Ecology's efforts to develop mitigation for exempt groundwater uses have greatly exceeded the outcomes. For example, when Ecology amended the Skagit Instream Flow Rule in 2006 to create specific reservations of water by sub-basin, it was known at that time that the size of some rural domestic water reservations would be inadequate to meet future residential build-out projections. Ecology (in 2006) committed to develop mitigation plans so that when those rural domestic water reservations were exhausted, rural water supply would still be available. These mitigation plans were never developed, and still no permanent mitigation plans have been approved in the Skagit Basin. Under the Dungeness Rule, it was not known that no outdoor mitigation water would be available in some areas until after the rule was adopted. Under the Upper Kittitas Rule, mitigation developed slowly and was not available at the time that Ecology adopted the groundwater closure. Even now, significant concerns exist about the for-profit water mitigation market created by Ecology's Upper Kittitas Rule.

Thus, while we take Ecology at its word that it is committed to acquire necessary mitigation water, recent experiences around the state give us little confidence, and show that mitigation requirements should be incorporated into the rule itself, not delayed until after the rule is adopted, and not imposed on individual homeowners or homebuilders.

If Ecology has in fact acquired water rights that adequately provide mitigation for future exempt wells mitigation in areas where new homes cannot obtain water supply from a purveyor, then Ecology should incorporate this into the Proposed Rule itself. If Ecology has not yet acquired mitigation water as it has represented, it should not adopt the Proposed Rule. It is clear from recent efforts in Skagit County, Snohomish County, Clallam County, and Kittitas County that homeowners or homebuilders lack the expertise and resources to develop their own mitigation plans to meet Ecology's instream flow rule mitigation requirements – and we think Ecology would agree with us on this point. Further, even where significant water resource technical expertise is available, approval of mitigation plans can be difficult and contentious. Why would Ecology again adopt another instream flow rule that creates a groundwater closure without contemporaneously adopting a mitigation process that is known, workable, and incorporated into the rule itself?

Commenter(s)
Fackenthall, Ann 1; Wells, Lynn F 1; Stevens County 1; Spokane County 13; Builder & Realtor Associations 1, 2, 3, 5, 7;

Response
Ecology agrees it is desirable to have mitigation in place prior to rule adoption. Ecology has acquired a water right that the agency believes should provide full mitigation for all future permit-exempt withdrawals in areas where water for new homes cannot be obtained from a municipal purveyor in a timely and reasonable manner. Ecology does not agree that the state's provision of mitigation should be incorporated in the rule. Ecology is confident the mitigation we are able to provide will be adequate for foreseeable demand, however, Ecology does not agree that the state should commit to providing open ended mitigation nor limit the potential mitigation options by only having reference to state-sponsored mitigation in the rule.

Metering

Comment 175

The tribe does not find any technical, scientific, or policy reason that remotely justifies the removal of the metering requirements that were contained in the pre-proposal draft of WAC 173-557-060. The metering requirement must be reinserted.

First, it appears the metering requirement removal was done for strictly political purposes, oddly when only two entities negatively commented on this requirement during the pre-proposal comment period.

Second, the Tribe has significant experience with the need for metering. The Tribe's experience with Chamokane Creek has taught us that a lack of data and metering mixed with an over allocation of groundwater will lead to senior water rights holder's use being curtailed to the benefit of junior "exempt well" owners. During the continued Chamokane Creek management under the federal water master it has become necessary to model the effects of exempt wells on the flows. This required metering on a voluntary basis creating a less than ideal situation. It makes absolutely no sense for Ecology to drop the metering requirements when any associated costs are de minimus and potential regulatory and scientific gains significant.

Third, the Tribe came to Ecology's defense in 2010 when two legislative proposals were developed to strip Ecology of the authority to meter exempt wells. (HB 2468 and HB 2548). It is extremely frustrating that almost four years later Ecology is now failing to use this important tool in the water resource protection tool box. In areas with direct hydraulic continuity like the proposed boundaries of this rule, exempt wells have the potential to directly affect senior water rights holders, and must be monitored in a scientifically defensible manner: meters.

Spokane County understands that Ecology has acquired a water right that will be senior to 173-557 WAC, and this water will be utilized to offset new water use from permit exempt wells. Without meters, how will water use be tracked and debited against the senior water right?

Ecology should require metering of all new uses of water, including permit-exempt wells.

We adopt and concur with Spokane Tribe's comments on this topic.

In surface water bodies as constrained as the Spokane River, and the interconnected Spokane-Rathdrum Aquifer, all users should be documenting their uses both for enforcement and management reasons.

Failure to require metering makes this rule inconsistent with other water management rules adopted by Ecology including Kittitas (WAC Ch. 173-539A), Dungeness (WAC Ch. 173-518), and Quilcene-Snow (WAC Ch. 173-517).

Commenter(s)

Spokane Tribe 3; Spokane County 7; CELP/Sierra Club 10, 11, 12; Monthie, David 23;

Response

The preliminary draft rule included a requirement for metering all new uses of water, including withdrawals from permit-exempt wells. The reason for requiring metering of permit-exempt wells

was to ensure that acquired mitigation water would offset the impacts of withdrawals from the wells.

Based on comments received in opposition to metering exempt wells, and on evaluation of the effectiveness of metering exempt wells in other watersheds in eastern Washington, Ecology has decided to not require metering of permit-exempt well uses for a couple of sound reasons:

- First, reasonable assumptions about domestic water used are as precise as necessary to ensure that the mitigation water sufficiently offsets the new uses. The Department has sufficient information to estimate the quantity of water withdrawn for in-house domestic uses and for the watering of up to a half-acre lawn and garden.

- Second, administering a metering program for only a few dozen exempt users would be very costly relative to the benefit gained, for both the water user and the Department. Staff and budgetary resources would be expended for no appreciable gain to the accounting of permit-exempt water uses.

Ecology will work with Spokane County to develop an effective, low-cost approach to account for new permit-exempt well uses to ensure that they are fully mitigated.

Metering
Comment 176
How many want to meter their ground water? Ecology should have more than one scientific study to base this requirement (metering) on, especially since this study provides no information on how water well use would impact perennial and seasonal stream base flow.

Commenter(s)
Ibbetson, Timothy 17, 65;

Response
Metering was a requirement in the preliminary draft rule, but was excluded from the proposed and final adopted rule.

Comment 177
"(5) All future new surface and groundwater appropriations, other than rainwater collection, shall measure withdrawals.
"(a) Water meters must meet specifications available through ecology.
"(b) Water meters must be read and reported in accordance with chapter 173-173 WAC or as directed by ecology."

The sentence in 5.b needs to be edited to redact the phrase "or as directed by ecology". Either these are going to be codified rules of law, or they are going to be directives. Directives have no place in a representative republic.

Commenter(s)
Ibbetson, Timothy 75;

Response
The provision cited is from the preliminary draft rule and was not included in the proposed rule language. It is not included in this adopted rule.

Rule content

Comment 178
The "authority and purpose" of the instream flow rule making is designed to "protect and preserve fish, wildlife, scenic, aesthetic, recreational, water quality, and other environmental values; navigational values; and stock watering requirements" SECTIONWAC 173-557-010.

Commenter(s)
Spokane Riverkeeper 6;

Response
Thank you for your comment.

Comment 179
While we applaud the Department of Ecology's efforts to set an instream flow rule for the Spokane River and the Spokane Valley Aquifer to "protect and preserve water in streams for instream resources including fish, wildlife, recreational uses, wastewater management and hydropower." However, you also indicate that you "will use the rule as a regulatory flow threshold to determine whether there is water to withdraw for new uses while still protecting fish and other instream resources." You also note "A clean and flowing river is good for the environment and good for our economy." However, the LWVSA has deep concern that Ecology's proposed minimum flows actually undermine and contradict your stated purposes, and the best interests of the Spokane community.

Commenter(s)
League of Women Voters, Spokane 9, 10, 11, 12, 23, 24, 25, 26; Gold, Raelene 3, 4;

Response
Thank you for your comment. Ecology believes review of the entire record shows this rule accomplishes the objectives.

Comment 180
In the purpose section (-010), the proposed rule says that it is intended to set flows in order to protect stockwatering. Stockwatering is a beneficial use of water, but is not a use enumerated in RCW 90.54.020(3)(a) as a use to be protected in the instream flow setting.

Protection of stockwatering is not an element of instream flow protection in RCW 90.54.020(3)(a).

Commenter(s)
Monthie, David 9, 12;

Response
RCW 90.22.040 calls for protection of instream flows for stockwatering.

Comment 181
Does this include point sources (municipal storm water systems)? How about City, County, and State roads and Highways that impact water quality? How is the volume of water diminished? Where does the water go? The law of conservation of mass indicates that the volume of water (mass) in a closed system cannot be lost. The earth is a closed system.

What is consumptive use if the water is not consumed and is returned to the aquifer?

Commenter(s)
Ibbetson, Timothy 29, 59;

Response
Consumptive use is defined in WAC 173-500-050; it does not include water that is returned directly to the aquifer. The watershed, as defined in the regulation, is not a closed system.

Comment 182
Under 173-557-020 WAC, the term "direct hydraulic continuity" is used. This term is not defined in the definitions section, and we are not aware of any definitive interpretation of 'direct' versus 'indirect' hydraulic continuity. We suggest including a definition or striking the word 'direct'.

Commenter(s)
Spokane County 3;

Response
Thank you for your comment. Ecology agrees and has changed the rule language.

Comment 183
The definition of permit-exempt well should include recognition of it being subject to enforcement, but being subject to enforcement is not an element of the definition.

Commenter(s)
Monthie, David 14;

Response
Ecology does not agree that enforcement is not an element of the definition of permit-exempt groundwater withdrawal in this rule. “Other applicable regulations” includes the enforcement provisions of the state water code.

Comment 184
I would question whether the definition of "withdrawal" should include "beneficial use;" a withdrawal is a withdrawal, irrespective of whether it is being put to a beneficial use recognized by the state.

Commenter(s)
Monthie, David 15;

Response
Authorized water withdrawals must be applied to a beneficial use per statute, RCW 90.03.010

Comment 185
In -060(3), with regard to supplies from municipal water suppliers, the rule should include language from the Municipal Water Law, and adopt a standard of timely and reasonable delivery of supply. In fact, the rule should consider directly referencing those provisions of the Municipal Water Law, and the duty to serve.

Commenter(s)
Monthie, David 16;

Response
Thank you for your comment. Ecology has revised section 060 in response to this and other comments. Ecology respectfully disagrees with the recommendation to adopt a standard of timely and reasonable delivery of water supply in the rule. It is up to water purveyors to determine whether water can be supplied in a timely and reasonable manner, and this may vary considerably between different water purveyors. A single definition in the rule would likely prove unworkable for some water purveyors.

Comment 186
In -060(4), I would question the limitation to "consumptive" impacts as a trigger for curtailment or mitigation. Any non-consumptive uses that create impairment should also be subject to the same actions.

Commenter(s)
Monthie, David 17;

Response
When water is diverted and returned immediately to the source at the point of diversion following its use in the same quantity as diverted and meets water quality standards for the source, the water use is classified as nonconsumptive. Such use is not likely to impair other rights.

Comment 187
-070 should include a direct reference to statutory requirements re changes and transfers, rather than paraphrasing them.

Commenter(s)
Monthie, David 18;

Response
Thank you for your comment.

Comment 188
The Tribe supports the language contained within WAC 173-557-100.

Commenter(s)
Spokane Tribe 15;

Response
Thank you for your comment.

Comment 189
Public comment should be a part of this [regulation review, WAC 173-557-100] according to 34.05 RCW. The public should have all available completed documents, and ample time to review and comment on those documents.

Commenter(s)
Ibbetson, Timothy 83;

Response
Thank you for your comment. If Ecology proposes revisions to the rule all public notice requirements of Chapter 34.05 RCW, the Administrative Procedure Act ,will be met.

Comment 190
This rule effective modifies the existing Little Spokane Rule (173-555 WAC, filed 1/6/76) to include "shallow" groundwater. The existing Little Spokane Rule does not mention groundwater; as written, this may add uncertainty to that rule. The Little Spokane Rule may need to be modified as well to incorporate these changes.

Commenter(s)
Spokane County 14;

Response
The only portion of WAC 173-555 that we are amending is section 010. No other sections of that rule are being addressed at this time.

Comment 191
The geographic area to be governed by the proposed rule (WAC 173-557) overlaps with a geographic area currently governed by the Little Spokane River Instream Flow Rule, WAC 173-555. In the overlapping geographic area the Spokane Valley Rathdrum Prairie (SVRP) aquifer is found in two distinct layers, as described in USGS Scientific Investigations Report 2007-5044. The lower layer of the SVRP aquifer is not connected to the Little Spokane River, while the upper layer is.

The proposed language for WAC 173-557 and the proposed amendment for WAC 173-555 states: "In the area where chapter 173-555 WAC and chapter 173-557 WAC overlap, the application of each rule shall be determined as follows:

"(1) New water use from the Little Spokane River, its tributaries, and the shallow aquifer associated with the Little Spokane River and its tributaries shall be regulated under this rule (chapter 173-555 WAC).

"(2) New water use .from the Spokane Valley Rathdrum Prairie aquifer shall be regulated under chapter 173-557 WAC, Water resource management program for the Spokane River and Spokane Valley Rathdrum Prairie (SVRP) aquifer."

Item 1 above references the "shallow aquifer associated with the Little Spokane River and its tributaries" which according to USGS Scientific Investigations Report 2007-5044 includes the upper layer of the SVRP aquifer. Item 2 references the "Spokane Valley Rathdrum Prairie aquifer" with no distinction between the upper and lower layers. Therefore, the upper layer of the SVRP aquifer associated with the Little Spokane River falls under both items 1 and 2.

If the intention is to regulate all SVRP water by 173-557 WAC, we suggest the following change to item 1 (the proposed change is shown as underline):

1. New water use .from the Little Spokane River, its tributaries, and shallow aquifers associated with the Little Spokane River <u>that are not part of the SVRP</u> shall be regulated under this rule (chapter 173-555 WAC).

If the intention is to regulate the upper layer of the SVRP aquifer within WRIA 55 by 173-555 WAC and the lower layer of the SVRP aquifer by 173-557 WAC, we suggest the following change to item 2 (the proposed change is shown as underline):

2. New water use from <u>the lower layer of</u> the Spokane Valley Rathdrum Prairie aquifer shall be regulated under chapter 173-557 WAC, Water resource management program for the Spokane River and Spokane Valley Rathdrum Prairie (SVRP) aquifer.

Commenter(s)
Spokane County 2;

Response
Thank you for your comment. Ecology agrees and has changed the rule language.

Comment 192
The attached maps show the Coordinated Water System boundaries for the municipal water purveyors; these boundaries appear to be the areas the water purveyors will ultimately serve and are much larger than what is actually being served at this time. An evaluation of the actual, active service areas would provide a more accurate representation of the number of parcels potentially affected by the water rights mitigation.

Commenter(s)
Spokane County 16;

Response
Thank you for your comment. Such maps change considerably year to year, and so may become irrelevant.

Comment 193
The map of the proposed rule area should include the boundaries of the Spokane River Basin and the Little Spokane River Basin, to more clearly define the areas within the Little Spokane River basin that would be affected.

Commenter(s)
Spokane County 15;

Response
The WRIA boundaries are included on the map. Ecology believes the current map is inclusive for purposes of the rule.

Comment 194
What is the difference between Chapter 173-555 WAC and Chapter 173-557 WAC?

Commenter(s)
Ibbetson, Timothy 3;

Response
Chapter 173-555 WAC, Water Resources Program in the Little Spokane River Basin, WRIA 55, is the instream flow rule applicable to the Little Spokane River Basin. Chapter 173-557 WAC, Water Resources Management Program for the Spokane River and Spokane Valley Rathdrum Prairie (SVRP) Aquifer, is the instream flow rule for the Spokane River and SVRP Aquifer.

Comment 195
How do these [instream flows] become water rights? How do fish and wildlife obtain water rights and how do the dams obtain water rights?

Commenter(s)
Ibbetson, Timothy 52, 62;

Response
RCW 90.03.345 reads, in part, as follows: "The establishment of …minimum flows or levels under RCW 90.22.010 or 90.54.040 shall constitute appropriations within the meaning of this chapter with priority dates as of the effective dates of their establishment." Fish and wildlife may also obtain water rights if water rights are purchased, leased, or donated and placed in the Trust Water Right Program for that purpose.

To gain water rights, dam operators must complete the same water right application process as other water users.

Rule consistency/precedent

Comment 196

The flows and other measures proposed in the rule give Spokanites far less protection than other watersheds in Washington. If you don't have a good reason, you should amend the proposal to give Spokane protections consistent with other areas of Washington.

Why does Ecology use different methods to establish instream flows for the Spokane River watershed than they do for other state watersheds? In other watersheds flows are protected in nine out of ten years. In Spokane the flows give 50% or less protection. Why is the Spokane River offered less protection than other rivers in the state?

The flows fail to follow also the scientific method that is used by Ecology on the west side, and so the Spokane River is receiving special attention as usual. We of course, disagree with the removal of the requirement for (inaudible) [metering?] which is inconsistent with the rules that are adopted all through the state. Once again, the Spokane River gets special treatment.

The proposed summer minimum flows of 850 cfs in the "Downriver Reach" of the Spokane River and 500cfs at Greenacres are at the very bottom of the summer historic lows in hydrograph USGS 12422500 Spokane River, 2009 to 2014. Establishing a summer flow level at this lowest bar is not consistent with Ecology's earlier instream flow setting processes.

The WDFW biologist involved in this flow study has acknowledged that the 850 cfs flow is a floor, i.e., a minimum flow. Minimum flows typically are not utilized by the Department of Ecology to set instream flows elsewhere in Washington.

There is dearth of standards against which Ecology is evaluating its proposed flows. In order to adequately assess the flows, Ecology must have some standards. In particular, the approach towards setting flows for the Spokane River is inconsistent with what members of the Rural Water Supply workgroup, in a presentation by Ecology staff, were the standards being used by Ecology to set instream flows by rule.

Commenter(s)

DeLateur, Marc 2; Soeldner, W Thomas 8; Systems Coaching LLC 8; Center for Environmental Law & Policy H8, H14; Smith, Bruce & Denise 5; CELP/Sierra Club 30; Monthie, David 7;

Response

The methodology used by Ecology for the Spokane Rule has been used by the agency in numerous watersheds throughout the state. Every watershed is unique. The habitat studies conducted in the Spokane River to establish protective flows for the species and life stages present in this river were used to determine the instream flows adopted in this rule. Ecology did not use exceedance curves as that method is not as rigorous and defendable as the IFIM method and other fish studies used.

Comment 197
Failure to require metering makes this rule inconsistent with other water management rules adopted by Ecology including Kittitas (WAC Ch. 173-539A), Dungeness (WAC Ch. 173-518), and Quilcene-Snow (WAC Ch. 173-517).

Commenter(s)
CELP/Sierra Club 12;

Response
Thank you for your comment.

Multi-facetted

Comment 198
The Department of Fish & Wildlife supports the adoption of the proposed instream flow rule WAC 173-557, the water resources -- water resource management program for the Spokane River and Spokane Valley Rathdrum Prairie Aquifer. This rule, if enforced, will provide significant protection for fish habitat in the Spokane River, so that the Spokane River can continue to support native fish and sustain a recreational fishery, as well as contributing to the aesthetics that are an important part of that fishery.

I'm the general manager of the Stevens County Public Utility District. We are a water conveyer, public water systems in Stevens and northern Spokane counties, all 17 water systems, two of which are over the aquifer in the Nine Mile area. We've been involved in watershed planning and WRIA 55 and WRIA 54 for many years, and our opinion is that Ecology has probably done a pretty good job trying to balance the many divergent interests and beneficial uses of the water in this state and in the aquifer.

Avista believes moving ahead with instream flow adoption is worthwhile in several respects. It will provide a basis upon which Ecology can make water right decisions in the basin, many of which have been pending for years. An instream flow rule will also protect those instream values which are spelled out in the draft rule [WAC 173-557-010(2)]: "wildlife, fish, scenic, aesthetic, recreation, water quality and other environmental values, navigational values and stock watering requirements…[and] existing water rights…"

Commenter(s)
WDFW H1; Stevens County PUD H1; Avista 2, 3;

Response
Thank you for your support of this rule adoption.

Comment 199
Plans look good to me. Too much damn water here in Washington anyway - you Califmorons just wouldn't understand.

Commenter(s)
Sierra Club (Conaboy, Mike) 1;

Response
Thank you for your comment.

Comment 200
Thank you for drafting a rule for the Spokane River. This is a step in the right direction.

Thank you for drafting legislation that works to protect such a valuable resource as the Spokane River.

Thank you for your foresight and please continue this protection of our rivers.

I would like to say that I do appreciate the DOE for drafting a rule to help protect the Spokane River, it is long overdue.

I would like to thank the Department of Ecology as well tonight for recognizing that the river has the right to exist.

The Tribe applauds Ecology for beginning this important task, particularly in light of Idaho's continued over allocation of the Spokane River and the Rathdrum Aquifer for consumptive use within Idaho.

First, I would like to thank the Department of Ecology for coming here and having this open forum. I think it's very important. I also applaud you on the efforts. I think this is an important step in preserving the integrity of the Spokane River, and in particular, using a community based approach to actually issue those goals.

I wish to commend the Department of Ecology for its attempt to set minimum flow rules for the Spokane River, and I thank them for the opportunity for this public commenting. I sincerely hope that this process works as intended to protect the river and the aquifer and the functioning ecological systems that they support.

The Spokane Riverkeeper appreciates the process of rulemaking that guarantees water in the Spokane River.

SFTU commends the Department of Ecology for its intent to set minimum flow rules for the Spokane River.

We commend the DOE for considering minimum instream flow standards for the Spokane River. It's high time that the value of water left in a river is recognized. Clearly the instream flow rule making purpose appreciates this by identifying the various needs and considerations for instream flow.

We applaud the Department of Ecology's efforts to set an instream flow rule for the Spokane River and the Spokane Valley Aquifer to "protect and preserve water in streams for instream resources including fish, wildlife, recreational uses, wastewater management and hydropower."

The LWVWA also supports the establishment and maintenance of minimum instream flows on all rivers in the State.

We are pleased that the Department of Ecology is exploring the issue of minimum stream flows for the Spokane River. As the Inland Northwest grows, and water becomes less reliable due to climate change, it's inevitable that our water resources will be strained by the many demands on them. Setting a minimum instream flow is a smart way to protect the habitat that rivers provide and to provide certainty to people and businesses that depend on the river.

Moreover, because of the interplay between the aquifer and river levels, establishing a minimum in-stream flow for the Spokane River can both protect the beneficial uses of the river downstream while creating incentives to conserve water that will help protect the greater resource the Rathdrum Prairie Aquifer for the benefit of the entire region.

Spokane County recognizes the value of this proposed rule in preserving instream resources in the Spokane River, protecting Washington's interest with respect to existing water rights, and addressing regional water management objectives.

Commenter(s)
Banks, Aaron 1; Cervenka, Aimee 1; Crafton, Laura 1; Zovanyi, Louise 5; Silver Bow Fly Shop 2; International Union for Conservation H1; Morrison, Harvey H1; Spokane Riverkeeper 1, H1; Spokane Tribe 1; Spokane Falls Chapter of Trout Unlimited 1; ROW Adventures 2; League of Women Voters, Spokane 9, 21, 23; Idaho Conservation League 1; Spokane County 1;

Response
Thank you for your comment.

Comment 201
I offer sincere thanks to the Department of Ecology for drafting a rule for the Spokane River, not least because instream flow rules create a "water right for the river" that prevents allocation of future water rights that harm stream flows. Such a right is vital for the future health of the river.

The Spokane River should have the first and ultimate water right.

Commenter(s)
Banks, Aaron 6; Soeldner, W Thomas 2; Systems Coaching LLC 1;

Response
Thank you for your comments.

Comment 202
In the face of overconsumption of groundwater that feeds our River, the Riverkeeper feels that the Department of Ecology recommendations do not go far enough in protecting the flow regimes that support healthy aquatic ecosystems and the recreational values of the Spokane River.

Commenter(s)
Spokane Riverkeeper 2;

Response
Thank you for your comment. Ecology does not agree that the instream flows in this rule do not protect healthy aquatic ecosystems and recreational values of the Spokane River. See the response to Comment 61.

Comment 203
This low level risks the integrity of this inland river and its value for aesthetics, recreation and habitat for fish and wildlife.

Peering down from the Westlink pedestrian bridge at these flows [2,500 to 3,500 cfs] we often see fish in the river. Many people are boating, especially when the weather is hot (as in July-August of 2014). Many people are fishing. I have walked this stretch of the Spokane River for 15 years, since I moved to my home in 1999. Every year, I observe the flows drop during late summer. I often look at USGS gage information on the web, showing instantaneous flows at the Spokane gage. As the flows drop below 2500 cfs, the rocks emerge, pools are created and isolated, and fewer people are boating. I am troubled that the proposed flows for the Spokane River will not protect these many instream uses. One can observe that 850 cfs is an extremely low flow for the river, and does not look healthy. The Spokane River provides an enormous array of social, economic and ecological benefits to our community, which the draft instream flow rule does not respect. I ask that you please study all of the values of the Spokane River for all of the people and species and processes that depend on it.

I'm extremely concerned about the low flows proposed for summer; it's not nearly enough flows to support recreational boating's, healthy conditions for native redband trout, not to mention the aesthetic values. We need much more water allocated for the river. The low level proposed by DOE is, frankly, shocking.

Commenter(s)
Smith, Bruce & Denise 6; Pascal Osborn, Rachael 3, 4, 6, 7, 10; Mace, Samantha 2, 3, 4;

Response
The instream flow numbers were determined from four separate fish studies developed since 2003. See response to Comment 1. Ecology is obligated to adopt flows protective of fish, higher flows are not prohibited by the rule, but are the subject of river operations. River operations are regulated under Avista's license granted to its river hydroelectric facilities in 2009 by FERC.

Comment 204
The Spokane River and our community deserve flow recommendations that truly protect the future of our river. You must do better.

Please do not shortchange the area residents, the recreational users and the fish and other inhabitants of the Spokane River.

If these flows are set too low, the Spokane River may well become a tragedy of the commons that relegates future generations to a life with a biologically dead river. To live in Spokane without a functioning Spokane River would degrade the quality of life for generations. The adoption of a sound instream flow rule is an essential step in ensuring a healthy environment for generations to come.

We urge you to reconsider the proposed minimum flow values in order to protect the Spokane River for future generations.

In its proposed instream flow rule for the Spokane River, Ecology failed to study what flows protect aesthetic and recreational interests, let alone implement its ample legal authority to protect present and future generations' rights to a Spokane River that has ample instream flows. That is unacceptable. Please withdraw the proposed Spokane River instream flow rule and create a rule that protects the beautiful Spokane River for generations to come.

We want healthy rivers for not only our children's future, but the future of everyone's children. Higher flow numbers are needed to protect the river for the future generations.

The decision on Spokane River flow will bind future generations who currently have no voice.

Commenter(s)
Lawrence, Christopher 5; Townsell, John 10; Spokane Riverkeeper 39; Smith, Bruce & Denise 7; Law Offices of Andrea K Rodgers Harris 11, 12; Bates, Melissa & Jim Briggs 4, 6; Sierra Club (Osborn, John) 11;

Response
The instream flow discussions began during the watershed planning process and have been presented to planning units in WRIA 55-57, 56, and 54 by the State Caucus during and after deliberations of the planning units over instream flows after the planning units failed to reach consensus. All those planning unit meetings were widely advertised and attended by a broad interest group. They were supplemented after acceptance of the local watershed plans by additional study, and again presented to joint meetings of the local planning units.

Preliminary draft and draft rule processes have contained significant outreach actions and included formal comment periods and public workshops. Ecology believes the rule adoption process has met all legislative requirements, the intent of the law, and any ethical criteria. Rule adoption includes all studies necessary contemplated for instream flow protection by the Legislature, codified under RCW 90.22, or 90.54. Please see response to Comment 1

Comment 205
Surely a "water right" for the river should assure the river's health and thereby the maintenance of normal river use for all the river's natural dependents.

Commenter(s)
Systems Coaching LLC 3; Soeldner, W Thomas 3;

Response
The instream flows in this rule will do exactly that. Also see response to Comment 1.

Comment 206
In summary, I believe that the seasonal minimal flows proposed by Ecology will jeopardize the Spokane River eco system, impact the aesthetic and recreational use of the river, and expose our region to the known and unforeseen risks.

I do not feel it's appropriate to use the 100 percent exceeding curve for instream flows. It's neither conservative nor protective nor does it meet the authority and purpose of the rule making to protect and preserve fish, wildlife, scenic aesthetics and recreational water quality values.

Commenter(s)
Morrison, Harvey H 10; Spokane Riverkeeper H6;

Response
Exceedance curves were not used to establish instream flow numbers in this rule. The numbers were determined from four, scientific studies that evaluated the instream needs of the fish species present in the river. Streamflow data from 1986 onwards (and exceedance curves based on these flow numbers) were used to show how the instream flow numbers compare to actual flows that have recently been recorded in the river. Still, the numbers adopted in the rule did not come from USGS flow data collected at their gages nor an exceedance analysis of that data.

Comment 207
Please reconsider the recommended river flow for the summer months. Make it safe for the ecology of the river.

Commenter(s)
Spickler, Dawn 4;

Response
The instream flows established in this rule are protective of the instream resources of the Spokane River.

Comment 208
The League of Women Voters of the Spokane Area (LWVSA) has concerns about Ecology's proposed minimum instream flows for the Spokane River as detrimental to the River.

Commenter(s)
League of Women Voters, Spokane 1;

Response
Thank you for your comment.

Comment 209
This is a MAJOR rule making and there are a great many impacts from this proposed rule, including the reduction of property values throughout the affect area and impacts to municipal

water suppliers, and will provide determents to growth and planning in the WRIA. It will heavily impact agriculture and industry. This proposed rule would impact 1,000s of citizens and a minimum of over 10,000 square miles.

Commenter(s)
Citizens' Alliance for Property Rights 2;

Response
The Cost-Benefit Analysis for this rule did not show any impact to property values. (See the Cost Benefit analysis). The proposed rule area is defined in the rule, and is significantly smaller than 10,000 square miles. See response to Comment 3.

Miscellaneous

Comment 210
The river suffers greatly from human-caused pollution and extraction. Annual flows have dropped on the average of 1,000 cfs since measurements began in 1891.

Then came Burlington Northern Railroad's forest liquidation of the "checkerboard" through its logging arm, Plum Creek Timber Company that led to our book published in 1995, "Railroads & Clearcuts: Legacy of Congress's 1864 Northern Pacific Railroad Land Grant." During the 1990s and early 2000s, the priority issue in protecting this river and lake basin was working with the Coeur d'Alene Tribe to find remedies for the massive mine wastes polluting the basin, and expanding the Superfund cleanup beyond "the box" in Kellogg, Idaho, to the entire polluted basin. More recently, my advocacy for the Spokane River has focused on the aquifer and river, including problems with dissolved oxygen, PCBs, and (now) with rule-setting for Spokane River flows.

Commenter(s)
CELP/Sierra Club 26; Sierra Club (Osborn, John) 2;

Response
Thank you for your comment.

Comment 211
How many people in Spokane County, Stevens County, and Pend Oreille County want to have their water rights denied or curtailed?

Commenter(s)
Ibbetson, Timothy 16;

Response
Ecology cannot answer that question.

Comment 212
The Spokane River also is something a waterman should patrol that would actually bring us into the 21st Century.

Commenter(s)
Center for Environmental Law & Policy H15;

Response
Ecology would like to install watermasters in many areas of the state, should funding become available for that purpose.

Comment 213
"Please read the blog located at http://naiads.wordpress.com/ for a detailed explanation of the concerns that all informed Spokanites should have about the proposal as it currently stands, and ignore whatever percentage of our population that might be."

Commenter(s)
DeLateur, Marc 4;

Response
Thank you for your comment.

Comment 214
"There are two kinds of adventurers: those who go truly hoping to find adventure and those who go secretly hoping they won't." Rabindranath Tagore

Commenter(s)
FLOW Adventures 9;

Response
Thank you for your comment.

Commenter Index

The table below lists the names of organizations or individuals who submitted a comment on the rule proposal and where you can find Ecology's response to the comment(s). If a comment was submitted by one or more persons representing an organization, the comment will be indexed under the organization's name. Comment numbers are listed below each name with the page number where that comment is located.

Aagaard, Ann
1 53
10 10
2, 3, 4, 5 8
3, 7, 8 6
4,5 15
6 ..... 92, 93
8, 9 86
American Whitewater
1, 2, 4, 15 8
10, 11, 14 56
12, 13 98
13 96
2 10
3 6
5, 6, 7, 8, 9 26
7, 10, 12, 13, 14 53
Aqua Permanenté
1, 2 ..... 15, 18
3, 4 92
3, 4, 5, 6 45
3, 5 8
7 10
Avista
1, 4 6
2, 3 138
5 117
6 121
Backcountry Hunters and Anglers
1 31
2 64
3 ..... 19, 31
4 32
5 102
Banks, Aaron
1 140
2 53
3 16
4 61
5 6
6 140
7 15
8 30
9 115
Bates, Melissa & Jim Briggs
1 6
2, 5 75
3 45
4, 6 142
6 56
Bertsch, Roger
1, 5 6
2 15
3 29
4 61
Blaeloch, Janine
1 6
Builder & Realtor Associations
1, 2, 3, 5, 7 128
10 108
11 10
4 125
6 101
8, 9 126
9 101
Burford, Heather
1 61
Burnhart, Bruce
H1 41
H2, H6 61
H3 94
H4 92
H5 47
Cannata, Amy

1..... 15
CELP/Sierra Club
1, 5, 15, 45..... 114
1..... 10
10, 11, 12..... 129
12..... 138
13..... 96
14..... 122
17..... 34
18..... 45
2, 3, 4, 6, 16, 28, 33, 37, 40..... 8
20, 21..... 45
22..... 43
25, 36, 39..... 6
26..... 144
27..... 61
28..... 15
29..... 54
30..... 137
31..... 21
32..... 18
34, 35..... 26
38..... 33
5..... 97
6..... 39
7, 41, 42..... 34
8, 23, 43..... 75
9, 19, 24, 44..... 92
Center for Environmental Law & Policy
1, H4, H5, H16, H17..... 10
2..... 16
3..... 97
4, H6, H13..... 8
4..... 39
5..... 96
6..... 64
H1, H2..... 43
H1, H3, H4, H16..... 44
H10..... 21
H11..... 33
H12..... 92
H15..... 145
H6..... 15
H7..... 18
H8, H14..... 137
H9..... 29
Cervenka, Aimee
1..... 140
2..... 53
3..... 61
4..... 91
Citizens' Alliance for Property Rights
1, 9..... 8
11..... 111
13..... 35
2..... 144
3..... 122
4, 8, 10, 12..... 110
5, 10..... 111
6..... 115
7..... 111
Clark, Jerry
1, 2, 7, 8..... 10
1..... 53
3..... 29, 97
4, 7..... 12
4..... 16
5..... 85
6..... 33
Cornelius, Scotty
1..... 33
2..... 29
Crafton, Laura
1..... 140
2..... 53
3..... 61
4..... 91
Croskey, Taylor
H1, H2, H3..... 20
H2..... 53
H3..... 15
Darilek, Marilyn
1..... 6
2..... 20
3..... 33
DeLateur, Marc
1..... 53
2..... 137
3..... 6
4..... 145
5..... 88
Dunphy, David
1..... 53
2, 3..... 8
4..... 6
Egesdal, Vicki
1..... 29
2..... 33

3..... 16
4..... 30
5..... 8
Enviroscience Group
1..... 8
2..... 15
3..... 33, 61
4..... 94
5..... 92
Fackenthall, Ann
1..... 128
2..... 120
Fair, John
1..... 29
2..... 61
FLOW Adventures
1..... 29
2..... 33
3, 8..... 61
4, 5..... 96
6..... 92
7..... 53
9..... 145
Gallaher, Pam
1..... 32
Garvey, Lydia
1..... 53
2, 3..... 8
4..... 91
5..... 6
6..... 78
Gold, Raelene
1..... 6
10..... 56
12..... 48
2..... 72
3, 4..... 131
5..... 49
6..... 86
7, 11..... 8
8..... 99
9, 13..... 88
9..... 41
Goodner, Tom
1..... 15
2..... 64
3..... 8
4..... 92
Grider, Chuck
1, 2, 3, 4..... 29
2, 5..... 61
6..... 15
7..... 8
Holmquist, Gunnar
1..... 11
2, 3..... 89
3..... 61
Huron Valley Software Consulting
1..... 91
Ibbetson, Timothy
1, 11, 67..... 79
12..... 84
13, 15..... 87
16..... 144
17, 65..... 130
18..... 123
19, 21, 22, 23, 24, 26, 42, 43, 44, 45, 46, 47, 54, 55, 56, 57, 64, 70, 72, 73, 74, 78, 81 8
2..... 119
27..... 84
29, 59..... 132
3..... 136
30, 31..... 83
33..... 49
34, 58..... 122
37..... 123
38, 40, 41..... 48
39, 48..... 87
4, 25..... 120
5..... 79
50, 51..... 49
52, 62..... 136
6..... 80
69..... 84
7, 10, 20, 35, 36, 53, 55, 57, 60, 63, 65, 66, 68, 70, 73..... 83
71..... 80
75..... 130
76..... 44
77..... 102
79, 82..... 109
8, 14, 49..... 86
80..... 39
83..... 134
84..... 121
9, 28, 32, 61..... 43
Idaho Conservation League

1..... 140
2..... 53
3..... 40
4..... 9
5..... 77
Inland Empire Paper
1, 2, 3..... 36
11, 13..... 37
4, 5, 12..... 37
6, 7..... 106
8, 9, 10..... 107
International Union for Conservation
H1..... 140
H2, H3..... 9
Kistler, Claude
1..... 53
2..... 6
3..... 116
Kop Construction Co Inc
1, 3..... 53
2..... 40
4..... 97
5..... 10
Laegreid, Peter
1, 2, 10..... 6
3..... 12
4, 9..... 86
4..... 53
5..... 9
6..... 15
7..... 92
8..... 10
Lands Council (Parrish, Amanda)
1, 3..... 29, 53
2..... 6
Lands Council (Peterson, Mike)
1..... 75
2, 3..... 70
2..... 73
4..... 9
Law Offices of Andrea K Rodgers Harris
1..... 41
11, 12..... 142
2..... 16
3, 11..... 9
3, 7, 9, 10..... 105
4..... 99
5, 6..... 39
6, 8..... 106
Lawrence, Christopher
1..... 6
2..... 29
3..... 42
4..... 75
5..... 142
League of Women Voters, Spokane
1..... 143
13, 27..... 53
19, 33..... 56
2, 4, 5, 6, 15, 16, 18, 29..... 6
28..... 33
3, 7, 14, 20, 31..... 9
32..... 41
8, 17, 22, 30..... 67
9, 10, 11, 12, 23, 24, 25, 26..... 131
9, 21, 23..... 140
Mace, Samantha
1, 7..... 6
2, 3, 4..... 141
2..... 15
5..... 92
6, 7..... 98
7, 8..... 30
Mackrow, Paula
1..... 39
10..... 6
11..... 41
2, 5, 8, 9..... 9
3, 6, 9..... 93
4..... 15
7, 12..... 54
MacLeod, Norman
1..... 108
10, 12..... 115
11..... 118
13..... 102
14..... 117
2..... 99
3..... 100
4..... 103
5..... 110
6..... 109
7..... 79
8..... 9
9..... 117
Markwardt, D D
1, 3..... 61
2..... 64

May, Kimbo
1 53
10 33
11, 12, 13 9
12 ..... 46, 47
2 12
3 20
4, 7 29
5, 6, 7, 8 32
9 23
McKay, Mariah
1 53
2 42
3 23
4 6
McRoberts, James
1 10
2 15
3 9
4 93
Monthie, David
1 103
10 78
11 80
13 122
14 132
15 133
16 133
17 133
18 133
19 101
2, 24 88
20 99
21 100
22 100
23 129
3, 4, 5, 6, 7, 8 10
4 16
5 9
6 98
7, 8 111
7 137
9, 12 131
Moore, Kari
1 53
2 29
3 6
Morrison, Harvey
H1 140
H10 143
H2 9
H3 53
H4 72
H5 75
H6 23
H7 18
H8 94
H9 92
Nelson, Dan
1, 6 97
2 6
3 15
4, 7 64
5 9
7 10
NW Whitewater Association
1, 7 10
2, 7, 10, H3 113
3, 5, 6, 8, 9, H2 61
4, 5, H1 53
4, 8, H1 29
6 9
9 24
Osborn, Cal
1, 2, 10 6
3 12
4, 9 86
4 53
5 9
6 15
7 92
8 10
Ostby, Bjorn
1, 2 15
2, 3 20
Out There Monthly
1 6
2 97
3, 4, 6 9
4, 7 29
5 96
7 53
Parker, Steve
1 61
2 6
Parks, Leonard
1, 5, 6 46
2 15

3, 4..... 6
Pascal Osborn, Rachael
1, 2..... 114
1, 2, 8..... 33
1..... 6
2..... 61
3, 4, 6, 7, 10..... 141
5..... 18
7..... 53
9..... 22
Paxson, M C
1, 2, 10..... 6
3..... 12
4, 9..... 86
4..... 53
5..... 9
6..... 14
7..... 91
8..... 10
Peak 7 Adventures
1, H1..... 61
1..... 29
Peterson, Kerry
1, 6, 8..... 9
10..... 64
11..... 10
2..... 76
3..... 76
4..... 6
5..... 14
7..... 93
9..... 91
Pringle, Bruce
1, 2, 10..... 6
3..... 11
4, 9..... 86
4..... 53
5..... 9
6..... 14
7..... 91
8..... 10
Reed, Jake
1..... 6
2..... 53
3..... 61
4..... 29
5..... 116
Reynolds, Carol
1, 2, 7..... 6
1, 6..... 86
3..... 11
4..... 61
5..... 10
Roast House (Bernardo, Deborah Di)
1..... 46
2..... 15
Roehl, Renee
1..... 53
2..... 61
ROW Adventures
1..... 25
10..... 61
12, 15, 18..... 67
13..... 18
17..... 53
2..... 140
3, 9, 10, 11, 14, 16..... 9
4..... 113
5..... 97
6..... 98
7, 8..... 96
Rush, Richard
1..... 23
2..... 32
3..... 76
Rust, Nancy
1..... 9
Rutherford, Jim
1, 2..... 6
3..... 61
Salem Lutheran Church
1, 2..... 6
Schafer, Daniel
1..... 9
2..... 113
Scherer, Arthur
1, 2..... 61
2..... 92
Schnell, Dan
1..... 33
2..... 53
Scholtz, Allan T
1..... 9
Schultz, Jule
1..... 6
2..... 54
3..... 29
4, 5..... 61

Seifert, Lorelei
1, 2, 10..... 6
3..... 12
4, 9..... 86
4..... 53
5..... 9
6..... 14, 86
7..... 91
8..... 10
Sharar, Jan
1..... 7
2..... 9
3..... 15
4..... 93
5..... 10
Sierra Club (Andrew Martin)
1, 2, 10..... 7
3..... 12
4, 9..... 86
4..... 53
5..... 9
6..... 14
7..... 91
8..... 10
Sierra Club (Coleman, Timothy)
1, 7..... 7
2..... 9
3..... 20
4, 6..... 10
5..... 91
Sierra Club (Conaboy, Mike)
1..... 139
Sierra Club (Donaldson, Jamie)
1, 2, 10..... 7
3..... 11
4, 9..... 86
4..... 53
5..... 9
6..... 14
7..... 91
8..... 10
Sierra Club (Effler, Dean)
1, 2, 10..... 7
3..... 12
4, 9..... 86
4..... 53
5..... 9
6..... 14
7..... 91
8..... 10
Sierra Club (Glover, Julia)
1, 2, 10..... 7
3..... 12
4, 9..... 86
4..... 53
5..... 9
6..... 15
7..... 92
8..... 10
Sierra Club (Lanz, James)
1, 2, 10..... 7
3..... 11
4, 5, 9..... 86
4..... 53
5..... 9
6..... 14
7..... 91
8..... 10
Sierra Club (Lombard, Marny)
1, 5..... 53
2, 4..... 12
3, 7..... 7
6..... 19
Sierra Club (Lukos, Stravo)
1, 2, 10..... 7
3..... 12
4, 9..... 86
4..... 53
5..... 9
6..... 14
7..... 91
8..... 10
Sierra Club (Milne, Linda)
1, 2, 10..... 7
3..... 12
4, 9..... 86
4..... 53
5..... 9
6..... 15
7..... 91
8..... 10
Sierra Club (Nixon, Shirley)
1..... 61
2..... 53
3..... 10
4..... 7, 86
Sierra Club (Osborn, John)
1, 10, 15, 16, 25..... 7

11 142
11, 12, 17 12
18, H8 75
19, 20 54
2 144
20 86
22, 23, 24, H1, H10 10
23 ..... 61, 77
3, 4, 5, 7, H2, H3, H5 9
5, 6, 7, 8, 9, 10, 11, 13, 14 119
6, 21, H9 92
8 99
H4 113
H6, H7 18
H8 20
Sierra Club (Peterson, Terrance)
1, 2, 10 7
3 12
4, 9 86
4 53
5 9
6 14
7 91
8 10
Sierra Club (Roberts, Lynda)
1, 2, 10 6
3 11
4, 9 86
4 53
5 9
6 14
7 92
8 10
Sierra Club (Sendrey, Robert)
1, 3, 10 7
2 11
4, 9 86
4 53
5 14
6 9
7 91
8 10
Sierra Club (Tardiff, Tracy)
1 61
Sierra Club (Titon, Julie)
1, 7 7
2, 3 61
4 9
5 15
6 86
Silver Bow Fly Shop
1 7
2 140
3 15
4 9
5, 6 61
6 33
7 92
8 96
9 65
Smith, Bruce & Denise
1 7
2, 4 75
3 40
5 137
6 141
7 142
Soeldner, W Thomas
1 7
2 140
3 142
4 14
5 29
6 113
7 91
8 137
9 61
Solberg, Steve
1, 2 15
1, 2, 3 61
1 53
Spickler, Dawn
1 53
2 7
3 ..... 42, 46
4 143
Spokane Canoe & Kayak
5, 9 113
Spokane Canoe & Kayak Club
1, 3, 4, 6, 7, 8, 10, H1 29
2, 6, 10, H1, H2 61
6, 7, 8 104
9 10
Spokane County
1 140
10 116
11, 17 38
12 121

13 128
14 134
15 136
16 135
2 135
3 132
4 48
5 124
6, 8, 9 123
7 ..... 124, 129
Spokane Falls Chapter of Trout Unlimited
1 140
10 67
11 ..... 15, 67
12 96
15 45
16 10
2 53
3, 7, 13, 14 9
4 21
5, 6 18
8 75
9 77
Spokane Falls Trout Unlimited
1 53
2, 4 7
3 61
Spokane Fly Fishers
1 10
2, 4 9
3 15
5 91
Spokane Riverkeeper
1, H1 140
12 62
13, H5 75
14, 15, H7, H8 72
16, 18, 20 63
19, H9 23
2 141
21, 34 67
22 67
24, H6, H12 53
25 65
26 66
27, 28, 29, 30 9
3, 23, 31, 32, 33, 36, H11, H13 61
35 16
36, H9, H13 15
37 78
38 42
39 142
4 76
5 21
6 131
7, 9, 10, 11 82
8, 17 77
H10 65
H14 78
H2 76
H3 46
H3, H4 79
H6 143
Spokane Tribe
1 ..... 93, 140
10, 11 71
13, 14 92
15 134
2, 6, 7, 12 68
3 129
4, 14 65
5 9
8 15
9 ..... 21, 53
Stevens County
1 128
2 93
3, 4 10
3 43
Stevens County PUD
H1 138
Steward, Mark
1, 6 7
2, 3, 4 53
5 61
Stracchino, Keith V
1 53
2 41
Struck, Fred
1 53
2 23
3 64
Systems Coaching LLC
1 140
11, 12, 15, 16 9
14 96
18 33
2, 10, 17, 19 53

3..... 142
4..... 14
5..... 29
6, 13..... 113
7..... 91
8..... 137
9..... 61
Townsell, John
1, 2, 6..... 9
1..... 10
10..... 142
11..... 114
3..... 93
4..... 47
5..... 15
7..... 92
8..... 93
9..... 64
Upper Columbia United Tribes
1, 2..... 18
3..... 23
Wagstaff, William
1..... 53
2..... 61
WaterWatch of Oregon
1, 2..... 7
3..... 12
4, 10..... 86
4..... 53
5..... 9
6..... 15
7..... 92
8, 9..... 10
WDFW
H1..... 138
H2..... 23
H3..... 24
Wells, Lynn F
1..... 128
2..... 120
White, Jerry
1..... 53
2..... 7
3..... 29
Wilder, Stewart
1, 2, 3, 12..... 7
1, 6..... 9
10..... 10
4..... 12
5, 11..... 86
5..... 53
7..... 15
8..... 92
9..... 93
Williamson, Grant
1..... 93
Zovanyi, Louise
1..... 53
2..... 61
3..... 91
4..... 7, 75
5..... 140

Appendix A: Copies of all comments

(Includes comment numbers)

The following incorporates all written comments and testimony received at the public hearing. Originals of written comments and the hearing transcript are available in Ecology's rule file.

Aagaard, Ann

Department of Ecology:

I am commenting on the Department of Ecology's intent to adopt an in stream flow rule of 850 cfs in summer months for the Spokane River. Please add my comments to your public record.

1. The proposed in stream flows are unacceptable.[1] They do not consider the public needs for recreation and for scenic beauty.[2] Many visitors and residents view these waters, especially during the summer months at Riverside Park.[3]

2. The fish studies are not tailored to the unique habitat of this river,[4] nor to the needs of the red band trout species dependent on this special habitat.[5]

3. This rule has interstate water allocation consequences i.e. with the state of Idaho. Please enumerate what these consequences might be.[6]

4. As a Washington citizen, I have visited Spokane, and have friends in the area.[7] I care about the in stream flow program, and the future of our rivers in the State.[8] This proposed low flow would set an extremely poor precedent for future in stream flow considerations regarding other eastern washington streams.[9]

I urge you NOT to adopt 850 cfs in summer months for the Spokane River.[10]

Please send me a copy of your decision regarding this matter.

Ann Aagaard

American Whitewater (O'Keefe, Thomas)

RE: Chapter 173-557 WAC, Water Resources Management Program for the Spokane River and the SVRP Aquifer and Establishment of Instream Flows for the Spokane River.

Dear Ms Wessel:

American Whitewater appreciates having the opportunity to provide comment on the Department of Ecology's ("DOE") proposed instream flow rule for the Spokane River (WAC 173-555-010). We are very concerned that the rule was developed without a quantitative evaluation of the flow levels that are necessary to protect the recreational and navigation values of the Spokane River. The proposed rule amendment outlines instream flow levels of 850 cfs in the summer and 6,500 cfs in the spring; these flows are inadequate to support the recreation and navigation values of the Spokane River.[1] We request that the DOE conduct a recreation flow study before taking further action on the proposed rule amendment.[2]

American Whitewater is a national non-profit 501(c)(3) river conservation organization founded in 1954.

We have approximately 5,800 individual members and 100 local-based affiliate clubs, representing thousands of whitewater paddlers across the nation. American Whitewater's mission is to conserve and restore America's whitewater resources and to enhance opportunities to enjoy them safely. As conservation oriented paddling organization, American Whitewater has an interest in the Spokane River. A significant percentage of American Whitewater members reside in the greater Spokane area-a short driving distance from this river for recreation.[3]

The proposed rule amendment needs to recognize instream resources and values of recreation and navigation of the Spokane River. In order to do this, a proper evaluation of the flows that support these values needs to be conducted. Instream flow is a fundamental determinant of recreational quality for this river; it determines whether the river is navigable for different types of boats as well as the quality of the overall experience, including the challenge of the whitewater.' Among the steps outlined by DOE's own methodology is a need to "conduct studies to determine what stream flows are needed to protect instream resources and to evaluate past, current and the potential future hydrology in the basin," and then "review and evaluate study results to determine the stream flows needed to protect and preserve the identified instream resources and values." The studies and approach to quantitatively evaluate instream flow needs for river-based recreation are generally accepted by the scientific community and have been peer reviewed. We are concerned that this approach has not been applied in this process to establish an instream flow for the Spokane River.[4]

Instream flow needs for recreation and navigation have been evaluated for the Spokane River in the past. In 2003, American Whitewater worked with Avista to evaluate the impacts of its hydropower project operations on instream flows in the Spokane River. As part of that process, we conducted a recreational flow study using standard methodology. This study found that whitewater boating opportunities on the Spokane River occur year round and that river running opportunities exist at flows of approximately 1,500 cfs and greater. Of 21 participants in this study, 11 considered 1,500 the minimum flow, and the majority preferred higher flows (median 4,000 cfs). Study participants estimated the lowest navigable flow at approximately 1,350 cfs. While some hard-shell kayakers indicated that they could navigate the reach at lower flows, they also indicated that these flows were less than optimal for recreation.[5] Study participants generally preferred the 2,500 cfs study flow for play paddling and safety, but indicated that boatable flows extend well above the study flows.[6] In light of this, it is clear that an instream flow of 850 cfs for the period of June 16'h to September 30'h, as proposed for WAC 173-557-050, is inadequate.[7]

In November of 2014, American Whitewater conducted an online survey of boaters who kayak, canoe, and raft the Spokane River. 1n the 5 days that we collected data for this survey, 70 individuals responded. Of those, 59% recreate more than 20 days a year on the Spokane River and 56% have more than 10 years of experience paddling on the Spokane River.[8] The preliminary results show that acceptable flows ranged from 1,500 cfs to 15,000 cfs, with 5,000 cfs as the optimal flow. Note, however, that these are averages for all water craft and we expect that a more detailed analysis by the DOE would reveal that rafts require additional flow.[9]

While additional analysis of our data would be required along with some field work and focus group discussions we can unequivocally state that 850 cfs is well below an acceptable flow for recreation and navigation and does not adequately protect these beneficial uses.[10] In addition, the proposed instream flow of 6,500 cfs for the period April 1st to June 15 does not adequately protect high-flow opportunities that are enjoyed by our community.[11]

We also have concerns with the conclusions of the Small Business Economic Impact Statement, which states, "essentially this proposed rule has little or no impact on small or any other business." Many of our local members are owners or employees of businesses that provide commercial outfitting services for

those who recreate on the Spokane River.[12] An instream flow of 850 cfs would have a devastating impact on these small businesses.[13]

In summary, we request that you revisit the proposal for 850 cfs instream flows in summer and 6,500 cfs in spring.[14] Specifically, we request that you apply methodology generally accepted by the scientific community and widely used in regulatory proceedings to determine instream flows for recreation and navigation on the Spokane River. We have extensive experience working with agencies to determine instream flow needs for recreation that are scientifically and legally justified and would welcome the opportunity to assist you in this effort.[15] Sincerely,

Thomas O'Keefe,PhD
Pacific Northwest Stewardship Director

Aqua Permanenté (Bates, Melissa)

Comments on Draft WAC 173-557 Spokane River-SVRP Aquifer Rule

Thank you for the opportunity to provide comments regarding the Draft of the Spokane River Instream Flow Rule. These comments are submitted on behalf of Aqua Permanente, a Washington State non-profit public interest water watchdog group. As water right holders in the Yakima Basin, Aqua Permanente has a keen interest in all tributaries of the Columbia River.

The Department of Ecology is proposing summer season flows that will not clearly protect Redband Trout, the Spokane River's signature wild fish.[1] This is especially important as the Columbia River Treaty is renegotiated with the intention of many entities to return salmonids to all historic rivers. The Spokane River must fully protect Redband Trout which would, in turn, prepare the river for returning anadromous salmon.[2]

In addition, it is folly to issue more water rights based on the 'available water' assumption with setting such low flows (taking all water not claimed in Washington's proposed flow rule).[3] This is outrageous for many reasons; the alarming interstate allocation implications of the flow rule,[4] poor and incomplete scientific reasoning for setting the proposed flows under the river's current conditions,[5] and, most importantly, the lack of consideration for the impacts of climate change on the future of the river.[6]

For all these reasons and many more, we ask that Ecology not implement this Draft Rule.[7]

Thank you very much, Melissa Bates for Aqua Permanente'

Avista (Howard, Bruce)

Dear Ms. Wessel:

Avista Utilities (Avista) appreciates the opportunity to submit comments on the Department of Ecology's (Ecology's) proposed instream flow rule for the Spokane River, Chapter 173-557 WAC. Avista, which began as a company 125 years ago along the banks of the Spokane River, is involved in the production, transmission and distribution of energy. In fact, we provide electricity to the vast majority of people in the Spokane River basin, with a service territory that covers 30,000 square miles in eastern Washington, northern Idaho and parts of southern and eastern Oregon. In total, we provide energy services and electricity to 368,000 customers and natural gas to 325,000 customers.

During the late 1990s and over the decade that followed, Avista participated in the Spokane Watershed planning process. Beginning formally in 2002, Avista worked with a wide range of stakeholders, including

the States of Idaho and Washington, the Coeur d'Alene and Spokane Tribes, numerous interest groups and the broader public, to secure a new license from the Federal Energy Regulatory Commission (FERC) for the Spokane River Hydroelectric Project. In that collaborative effort, we joined with the Watershed Planning process to conduct instream flow studies, based on fish habitat, which included water temperature. In addition, we worked with local, state, and federal agencies and river paddling enthusiasts, to evaluate recreational interests associated with the Spokane River. Those studies, and many more, along with over two hundred meetings over a seven-year period, led to a number of agreements that informed FERC's 2009 decision to issue the Project a 50-year license. All of the studies, correspondence, meeting notes and more are part of FERC's formal record. These documents, including our license, are available at www.avistautilities.com/spokaneriver.

I am providing this background information to demonstrate the degree to which Avista engaged key parties on river flow issues, and to acknowledge that this work, to which Ecology was a key party, has provided relevant and important information on which Ecology's proposed rule is based.

Avista's interests are multiple; as an electric utility, we wish to optimize the generation potential of our hydroelectric facilities. As a result, we have a keen interest in instream flows, which support long-standing water rights. In addition, our obligations relative to the River, as expressed in our FERC license, go beyond electrical generation and include other values associated with the River: aesthetics, recreation, water quality, fisheries and related resources. In addition, we have a keen interest in the economic vitality of our region, and in fact, most of our customers live within the Spokane River basin. We understand that consumptive use of water, including that from the river and aquifer to which it is completely enjoined, is essential. Finally, as we serve customers in both Idaho and Washington, we have an interest in cooperative management of the water resources that connect the two states and the Tribes that are our nearest neighbors.[1]

We understand the range of opinions of Ecology's proposed rule. Some entities are opposed to any rule making; others feel that the minimum flow, particularly during the summer months, should be higher.

Avista believes moving ahead with instream flow adoption is worthwhile in several respects. It will provide a basis upon which Ecology can make water right decisions in the basin, many of which have been pending for years.[2] An instream flow rule will also protect those instream values which are spelled out in the draft rule [WAC 173-557-010(2)]: "wildlife, fish, scenic, aesthetic, recreation, water quality and other environmental values, navigational values and stock watering requirements…[and] existing water rights…"[3] Clearly, Avista has an important interest in protecting our water rights for hydroelectric generation as well as our consumptive water uses.[4]

Ecology should consider, in its rule-making decision, the full scientific and technical record (as listed in the State Environmental Policy Act checklist prepared by Ecology), as well as the long- standing data record on stream flows kept the United States Geological Survey, particularly for the Spokane River at Spokane (USGS gauge #12422500).[5] Assuming Ecology adopts an instream flow, we encourage it to work closely with local water purveyors and others to promote water conservation, and mitigation approaches or other options for appropriate new uses of water which don't impair instream values. This would require robust coordination with these and other entities.

In particular, Avista urges Ecology to build on cooperative efforts of recent years and engage the State of Idaho, in consultation with the Coeur d'Alene and Spokane Tribes, in long-range and creative interstate coordination and avoid default options which could include protracted and expensive litigation. Avista also looks forward to supporting such a collaborative effort.[6]

Thank you again for this opportunity to comment on the proposed rule. Sincerely,

Bruce Howard
Director, Environmental Affairs

Backcountry Hunters and Anglers

The Washington State Chapter of Backcountry Hunters and Anglers, would like to thank WA. state Dept. o Ecology for the opportunity to comment on the Spokane River Flows Need Protection.

WA. State chapter of Backcountry Hunters and Anglers(BHA) work across the state of WA. to pass on opportunities for solitude, physical challenge and healthy populations of fish and wildlife. We focus on responsible access to public lands and waters.[1]

BHA supports the science in the determining the minimum river flows.[2] We also support the WA. State Dept. of Fish and Game that the minimum flows meet the fisheries and habitat needs.[3]

As a regular user of the Spokane River it is imperative that river flows are determined by fisheries requirements and recreational users.[4]

All state and federal laws be complied with prior to the rule making.[5]

Banks, Aaron

Thank you for drafting legislation that works to protect such a valuable resource as the Spokane River.[1]

I have a concern and wish to comment on the instream minimum flow of 850 cfs.[2] These flows are too lov and will not sustain a healthy habitat for native species of fish and wildlife.[3] My proposal would be for flows at 2500 cfs.[4]

Please protect this valuable resource and manage it sustainably regardless of water rights that Avista or Idaho may have.[5] The Spokane River should have the first and ultimate water right.[6]

I'm dumbfounded that a river that once could support thousands of fish per mile and the return of salmor and steelhead is now a crippled fraction of what it used to be.[7] The state should consider the thousands of pristine river miles available to us yet we offer residents one "blue ribbon" fishing experience.[8]

I look forward to continuing to be an active proponent of the Spokane River. Please keep citizens informed and extend the comment period for a suitable number of comments.[9]

Regards,
-Aaron Banks

Bates, Melissa & Jim Briggs

Dear Ann Wessel, Dept. of Ecology:

We are writing this comment letter on the Spokane River Instream Flow Rule on behalf of our children, Connor and India, and the future they must live with. We live in Cle Elum, but visit Spokane for business and pleasure and have walked along and enjoyed the Spokane River and Falls often. The river is a tremendous asset for the Spokane community.[1]

Climate scientists tell us that as global temperatures warm, the snowpack and glaciers in our regional

mountains will diminish. Rivers will flow differently, including lower flows in summer months, hotter water temperatures, and overall degradation of aquatic habitat as we know it. It is therefore extremely important that you adopt instream flow rules that build resilience into the system.[2] The proposed Spokane flow rule does not protect existing flows in the river, and instead will make water available for new water allocations, even though half the river is gone due to out-of-stream consumption.[3]

We want healthy rivers for not only our children's future, but the future of everyone's children.[4] We ask that you go back and re-think your selection of Spokane River instream flows in view of what climate change is already bringing us, and which will only intensify in the next several decades.[5] Higher flow numbers are needed to protect the river for the future generations.[6]
Thank you very much, Melissa Bates and Jim Briggs

Bertsch, Roger

Ann, our family moved to Spokane after I retired from the Navy in 1993. I have been a regular user of the Spokane River for fly fishing and kayaking.[1] The proposed minimum flow of 1000 cfs is below the minimums to sustain a healthy population of Native Red Band Trout[2] and is insufficient to permit recreational water sports.[3] I would recommend a minimum flow of 2,000-2,500 cfs as good number supported by scientific evidence to sustain the fishery and permit recreational use of the river.[4] The Spokane River is a true treasure to the region as a stewards of the local environment we need to to move to protect and enhance this valuable resource.[5] Thank you, Roger B. Bertsch

Blaeloch, Janine

I am writing to express my concerns about the inadequacy of the proposed rule for the Spokane River. I understand from scientific and policy analysis that the proposed flows are greatly inadequate. While insteam flows really are important to me as a conservationist, I write today more from the point of view o one who appreciates the scenic and recreational qualities of the River. I have enjoyed many short journeys by foot along the Spokane River—mainly at Riverside Park, sometimes closer to downtown—and have been astonished at the beauty of the river as it flows through Spokane. I am taken aback every time I see the falls in downtown Spokane. I remember well the years when the falls were just a ghost—with no water flowing whatsoever, a sad joke.

I am of the fourth of six generations in Washington State. My family planted itself here when my great-grandfather trekked from Tennessee to Portland to Spokane Falls, where he finally settled. While my parents brought us up in Seattle, I knew Spokane from a very young age, from annual trips, and remembe how impressive it was that a town would "have a river in it."

Please respect and accommodate the profound scenic and recreational values a strongly-flowing Spokane River provides to people, and the necessity it is to wildlife and the redband trout.

Builder & Realtor Associations

Dear Ann:

This letter is from the Washington REALTORS®, Spokane Association of REALTORS®, Building Industry Association of Washington and Spokane Home Builders Association, collectively ("Associations"). The Associations represent the vast majority of individuals and companies in the Spokane area that assist citizens in buying and selling real estate, and building and remodeling homes.

Our comments are limited to the issue of rural water availability under Ecology's Proposed Rule, the lack of information regarding whether and how water is available from water purveyors and at what cost, and the significant change in the rule from the Draft Rule language to the proposed rule language. Over the past year, Ecology has represented that it would adopt a rule that ensures rural water availability issues by

incorporating into the rule the acquisition of mitigation water supply. Now, Ecology appears poised to adopt a rule that lacks the very certainty of rural water supply that was used to sell the rule to the stakeholders who will be most impacted. The Associations request that Ecology not adopt the proposed rule until necessary mitigation is in place. Based on recent experiences around the state, mitigation water supplies should be incorporated into the rule adoption itself, not delayed until after the rule is adopted.[1]

BACKGROUND – LOCAL GOVERNMENT WATER AVAILABILITY REQUIREMENTS
Under the State's Subdivision Act (RCW 58.17.110) and Building Code (RCW 19.27.097), local governments must find that potable water is availability prior to approving a subdivision or issuing a building permit. Under the Supreme Court's Kittitas County decision, such water supply must be both physically and legally available. To be legally available, the proposed source of water must be consistent with or at least not prohibited by Ecology's water resource regulations.

As Ecology knows, this subject matter is one of the most complicated and contentious issues in state water law. Ecology has recently convened a stakeholder group to review rural water availability issues, and a second group to develop guidance to counties who must make these water availability decisions. The relationship between local land use decisions and Ecology water resource authority was at issues in the Supreme Court's Kittitas County v. Eastern Washington Growth Board decision, and is now at issue in the Hirst v. Whatcom County Western Growth Board case before the Court of Appeals. The issue has given rise to numerous appeals, and has been costly and complicated for landowners, the development industry, local governments, and Ecology. Ecology has engaged in this issue at a policy level for the stated reason of seeking to establish more certainty and predictability as to rural water supply issues – yet the Proposed Rule fails to achieve this.[2]

ECOLOGY'S DRAFT RULE vs. PROPOSED RULE
In the Draft Rule released for public review, the Draft Rule language included a provision that as part of the adopted rule, Ecology would acquire mitigation water to account for those new exempt wells in areas where water service from an existing purveyor was not possible. In various public meetings, Ecology highlighted this proposed integration of mitigation water supply with the instream flow rule itself as a significant change in how Ecology adopts instream flow rules. By representing that mitigation water supply would be incorporated into the rule, Ecology sought to address concerns that this rule would be like other rules where Ecology requires mitigation for rural domestic uses, but does not establish any sort of mitigation program. In some parts of the state, efforts to develop such mitigation for rural domestic well users has taken months, years, or decades to develop, and at considerable costs – especially relative to amount of water used by and impacts from rural domestic wells.[3]

Now, however, the Proposed Rule lacks the very language that Ecology promoted in recent months as a key selling point of the Spokane Rule. Below is a comparison of the Draft Rule language previously circulated by Ecology, and the Proposed Rule language:

DRAFT RULE, WAC 173-557-060(3):
"Within the area regulated under this rule, public water suppliers are the primary sources of water for new uses. If water is not available from a public water system, the consumptive use impacts to surface water from new permit-exempt groundwater withdrawals must be mitigated when stream flow is below the instream flows established in this rule. Ecology has placed water into the Trust Water Right Program (chapter 90.42 RCW) to mitigate for new permit-exempt groundwater withdrawals when water from a public water system is not available in a timely and reasonable manner . . ." (emphasis added)

PROPOSED RULE: WAC 173-557-060(3):
"Within the area regulated under this rule, municipal water suppliers are the primary sources of water for

new uses. If water is not available from a municipal water supplier, the consumptive use impacts to surface water from new permit-exempt groundwater withdrawals must be interrupted when stream flow is below the instream flows established in this rule, unless those impacts are mitigated. Mitigation must be achieved through an ecology-approved mitigation plan." (emphasis added)

The Proposed Rule is significantly different from the draft rule, in that it does not include mitigation as part of the rule, and instead requires a future decision by Ecology on whether a proposed exempt groundwater use is adequately mitigated. This means that as of the effective date of the Proposed Rule, a local government making a local water availability decision must find that Ecology has approved a mitigation plan for a proposed exempt groundwater withdrawal. The Proposed Rule does not include any standards for such mitigation plans or even guidance on how such plans should be developed or will be analyzed by Ecology.[4]

While we understand that Ecology is still seeking to acquire water rights for mitigation, that assurance does not provide adequate certainty. In recent years, Ecology's efforts to develop mitigation for exempt groundwater uses have greatly exceeded the outcomes. For example, when Ecology amended the Skagit Instream Flow Rule in 2006 to create specific reservations of water by sub-basin, it was known at that time that the size of some rural domestic water reservations would be inadequate to meet future residential build-out projections. Ecology (in 2006) committed to develop mitigation plans so that when those rural domestic water reservations were exhausted, rural water supply would still be available. These mitigation plans were never developed, and still no permanent mitigation plans have been approved in the Skagit Basin. Under the Dungeness Rule, it was not known that no outdoor mitigation water would be available in some areas until after the rule was adopted. Under the Upper Kittitas Rule, mitigation developed slowly and was not available at the time that Ecology adopted the groundwater closure. Even now, significant concerns exist about the for-profit water mitigation market created by Ecology's Upper Kittitas Rule.

Thus, while we take Ecology at its word that it is committed to acquire necessary mitigation water, recent experiences around the state give us little confidence, and show that mitigation requirements should be incorporated into the rule itself, not delayed until after the rule is adopted, and not imposed on individual homeowners or homebuilders.[5] The Preliminary Cost-Benefit and Least Burdensome Analysis included a reference to mitigation that would be acquired by Ecology, but this type of language is not part of Proposed Rule itself:

"The proposed rule also requires mitigation be achieved through an Ecology-approved mitigation plan. In a separate action, Ecology has acquired a water right to provide mitigation for new permit-exempt withdrawals that cannot acquire water from a public water supplier. Permit-exempt well users gain a reliable water supply (uninterruptible) through the use of the mitigation requirement in the rule. Implementation of the proposed rule will require tracking the number of new permit- exempt groundwater withdrawals within the rule area."

Preliminary Cost-Benefit and Least Burdensome Analysis, at 5. [6] (emphasis added)

If Ecology has in fact acquired water rights that adequately provide mitigation for future exempt wells mitigation in areas where new homes cannot obtain water supply from a purveyor, then Ecology should incorporate this into the Proposed Rule itself. If Ecology has not yet acquired mitigation water as it has represented, it should not adopt the Proposed Rule. It is clear from recent efforts in Skagit County, Snohomish County, Clallam County, and Kittitas County that homeowners or homebuilders lack the expertise and resources to develop their own mitigation plans to meet Ecology's instream flow rule mitigation requirements – and we think Ecology would agree with us on this point. Further, even where significant water resource technical expertise is available, approval of mitigation plans can be difficult and

contentious. Why would Ecology again adopt another instream flow rule that creates a groundwater closure without contemporaneously adopting a mitigation process that is known, workable, and incorporated into the rule itself?[7]

AVAILABILITY OF WATER FROM AREA PURVEYORS

During the public comment process over Ecology's draft rule, Ecology stated a number of times that even though the rule would close the rule area to new groundwater uses, including new exempt wells, that water supply for residential development could be served by existing water purveyors in many areas. It has been represented that "only a few vacant parcels" cannot obtain water from purveyors. We have requested specific information on which parcels can be served by which water purveyors from both Ecology and those purveyors, and have not been provided with any information that confirms this.

The fact that a property may be within the service area or approved future service area of a water purveyor does not mean that it is feasible for that property to be served by that purveyor. There are numerous examples of parcels that are within a purveyor's service area but cannot be served because of extraordinary costs, engineering issues, or other factors. We again request that Ecology specifically identify which areas of the affected rule area can or cannot be served by existing water purveyors, so that the actual impacts of the rule can be analyzed.

In fact, Ecology is required to provide this type of analysis under state's Administrative Procedures Act ("APA"). An instream flow rule adopted by Ecology is defined as a "significant legislative rule" under the APA. RCW 34.05.328(5). As such, the APA requires Ecology to "coordinate the rule, to the maximum extent practicable, with other federal, state, and local laws applicable to the same activity or subject matter." RCW 34.05.328(1)(i) The state and local laws "applicable to the same activity or subject matter" include the Growth Management Act, Chapter 36.70A RCW, Public Water System Coordination Act, Chapter 70.116 RCW, and the local water availability requirements discussed above. The Spokane County Coordinated Water System Plan ("CWSP") provides service areas for water utilities in the area affected by the Proposed Rule, and each of these utilities will have a Water System Plan that identifies the number of approved and actual connections, the location of distribution and service lines, general facilities charges and other connection fees, and other information directly relevant to whether existing purveyors can provide timely and reasonable service. Ecology's presumption that vacant land within a purveyor's service area can receive "timely and reasonable" water service has been a disastrous presumption in the Skagit County, and we still don't have the necessary information to analyze this issue under the proposed Spokane Rule.[8]

Neither the Proposed Rule, nor any related documents such as the Preliminary Cost- Benefit and Least Burdensome Analysis, include any information or analysis about where connection to existing purveyors can and will occur and at what cost, and where it will cannot occur – and so therefore mitigation would be required under the Proposed Rule.[9]

BIFURCATION OF INSTREAM AND OUT-OF-STREAM COMPONENTS OF RULE

In addition to the practical concern of having the rule adopted without also establishing a mitigation program that functions, we also question whether Ecology's legal obligations under the state's Water Resource Act can be bifurcated so that the instream flow protections are afforded the certainty and status of an adopted rule, while the water supply components are not included as part of the rule itself. RCW 90.54.020(5), which governs Ecology's adoption of water resource rules, provides that "adequate and safe supplies of water shall be preserved and protected in potable condition to satisfy human domestic needs." Under Ecology's approach, the Proposed Rule could be adopted with the intent of then finalized the mitigation process, only to have that mitigation process sidetracked by budgetary, political, or other factors outside Ecology's control. Even if Ecology has the best of intentions in creating a mitigation process

that provides groundwater mitigation and takes the burden off homeowners and homebuilders, this process should be an equal part of the rule, not a secondary action. Instream flow protections and out-of-stream water needs should proceed together, not separately.[10]

CONCLUSION
Ecology's Proposed Rule is a significant step backwards from its Draft Rule, which included mitigation water supplies as part of the rule itself. Over the past year, Ecology made the incorporation of mitigation for rural domestic wells into the rule a key feature of the rule. Ecology should not adopt the Proposed Rule until adequate mitigation water is acquired and incorporated into the rule itself.[11]

Sincerely,

George McGilliard, 2014 President
Washington REALTORS®

Art Castle, Executive Vice-President
Building Industry Association of Washington

Joe Garst, 2014 President
Spokane Association of REALTORS®

Joel White, Executive Director
Spokane Homebuilders Association

Burford, Heather

Please keep the flow levels above 1000csfs during low flow to ensure that wildlife and recreation alike are not hindered on our beloved river.[1]

Burnhart, Bruce

My name is Bruce Burnhart. I'm also retired from forestry with the Nez Perce and spent a few years with the Forest Service. I managed the rivers, so I'm pretty familiar with the processes agencies go through to adjudicate resources, but mostly what it boils down to is environmental quality versus economic growth and development.[H1]

And what we are talking about is the Spokane River, after all the water has been squeezed off where a trickle is let down a major urban waterway that is used for recreation by thousands of people during the summer months that you're proposing the 840 cfs, which is based solely on fish, not the recreational needs of other people. 800 cfs is kind of laughably low. It's okay if you really want to hit your butt up on the rocks as you're going down the river if you're floating it or boating it. Down in the lower stretch between Devil's Toenail and the Bowl & Pitcher, the rocks are in evidence everywhere. I have been down 1,200, and I won't go any lower than that. Now they're lowering it to under 3,000, which I think should be the minimum for the Spokane, but that's me. [H2]

What we're really talking about is an impounded waterway and you're arguing over what's being let out of the dam spillways. Even your hydrographs reflect that those spillages that are excess water that is not being impounded, and we all know that Post Falls Dam mandated the lake level because of the fixed docks in Lake Coeur d'Alene, and that's not even part of the study.[H3]

To say that 840 is adequate for all of the uses, while Idaho is going to drain the water shed on their end

much more severely than we will, means sooner or later, we are heading for a conflict with Idaho. And if mandating flow levels means more released, and I know it was in Idaho, not in Washington, there's nothing we can do about it.[H4]

There is an opportunity at this time to establish minimum flows that are more realistic for a whole gamut of reasons, including recreation. And we live in a huge metropolitan area, and it's only going to get bigger Soon it will be developed from here to Coeur d'Alene. That needs to be taken into consideration. Because growth and development will occur, it will mean more demands on ground water and wells and private property rights. Those will never be able to be adjudicated using this scale and satisfy all the demands. We will be back at this again in ten years fighting over the exact same issues.[H5]

So for what it's worth, I think 2,500 should be the absolute minimum flow in the Spokane River, and I'd even push for 3,000, I think is much better for all.[H6] Thank you.

Cannata, Amy

I am very concerned that the minimum flows will not be enough to sustain the Spokane River's fish population. The Spokane River is home to its own native Redband trout, which is already struggling due to the pressures of nonnative fish, pollution and development.

Please alter the minimum flows. Even 1,000 cfs is too low. Protect our fish![1]

CELP/Sierra Club (Pascal Osborn, Rachael)

Department of Ecology:

Thank you for the opportunity to provide comments regarding the Final Draft of the Spokane River instream flow rule (draft WAC 173-555). These comments are submitted on behalf of the Center for Environmental Law & Policy (CELP) and Sierra Club.

CELP has been involved with the Spokane instream flow process since 1999, serving on the WRIA 55/57 Watershed Planning Unit until 2002, when the WPU elected to defer instream flow making until the WRIA 54 WPU was prepared to go forward. CELP representatives then served on the WRIA 55/57/54 Instream Flow Subcommittee for several years. CELP has also met with ERO staff on several occasions, formally and informally, to discuss Spokane flow matters. We assume that all notes, documents and communications regarding the WPU, Instream Flow Subcommittee, and stakeholder meetings are a part of the administrative record for this rulemaking.

CELP and Sierra Club were parties to an appeal of the Ecology 401 Certification issued to Avista. That lawsuit resulted in a settlement regarding flows in the Upper and Lower Spokane Falls. Relevant documents are discussed and attached, below.

1. Our Recommendations & Comments

1.1 Do not adopt the instream flow rule as currently drafted. The proposed flow regimes will not protect existing uses of the Spokane River.[1]

1.2 Ecology should re-evaluate the biological flow needs of native fish in the Spokane River.[2] See Section 4.

1.3 Ecology should evaluate the biological flow needs of anadromous fish that formerly used the river and for the return of which planning is now underway.[3] See Section 5.

1.4 Ecology should undertake more studies of recreational and aesthetic uses of the river, including use, and original research where appropriate, of the following types of information. See Section 6 and 7

☐ boater use and flow preference surveys,
☐ trail use data for the Centennial Trail and viewpoints along the river,
☐ Riverside State Park user data,
☐ City of Spokane Spokane Gorge parks/natural areas user data,[4] and
☐ Economic studies of river-oriented businesses including guides, outfitters, gear shops, and businesses along the river.[5]

1.5 Ecology should evaluate the impact of a 2.5 month 850 cfs flow on water quality in the Spokane River, including Long Lake.[6] See Section 8.

1.6 Ecology should adopt an instream flow for the Spokane Falls reach of the river as set forth in the Avista 401 Cert Certification requirements as modified by the CELP-Sierra Club-Avista settlement agreement.[7] See Section 9.

1.7 Ecology should consider the impacts of climate change on Spokane River hydrology and aquatic health as part of the instream flow setting process.[8] See Section 10.

1.8 Ecology should consider the relationship of the instream flow rule to Washington State's need for interstate allocation of Spokane surface and groundwater between Washington and Idaho.[9] See Section 11.

1.9 Ecology should require metering of all new uses of water, including permit-exempt wells.[10]

☐ We adopt and concur with Spokane Tribe's comments on this topic.[11]
☐ Failure to require metering makes this rule inconsistent with other water management rules adopted by Ecology including Kittitas (WAC Ch. 173-539A), Dungeness (WAC Ch. 173-518), and Quilcene-Snow (WAC Ch. 173-517).[12]

1.10.Ecology should re-evaluate the small business impacts associated with the rule. Ecology failed to consult with guide, outfitter and outdoor gear companies about the impacts of the 850 cfs flows, which will reduce fishing and boating opportunities.[13]

1.11 The mitigation language is sufficient to support a mitigation program.[14]

1.12 The on-line comment form has rejected comments from our members, at least three times that we are aware of in the last week. We are concerned that Ecology has lost comment letters.[15]

2. Overview of Washington's Instream Flow Program & How it Applies to the Spokane River

Washington's Minimum Flows Act and Water Resources Act both require protection of a variety of instream uses. "The department of ecology may establish minimum water flows or levels for streams, lakes or other public waters for the purposes of protecting fish, game, birds or other wildlife resources, or recreational or aesthetic values of said public waters whenever it appears to be in the public interest to establish the same." RCW 90.22.010. "The quality of the natural environment shall be protected and, where possible, enhanced as follows: (a) Perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmenta values, and navigational values. Lakes and ponds shall be retained substantially in their natural condition." RCW 90.54.020(3).[16]

In the PCHB's decision regarding the Enloe Dam 401 Certification, the Board agreed that use of trails adjacent to a river is "recreational use" of river that Ecology must consider when evaluating aesthetic flows.[17] CELP et al v. Ecology and Okanogan PUD, PCHB No. 12-082, Final Order (7-23-13).

Ecology's failure to consider all instream uses protected by Washington's statutes has consequences. The water that the instream flow does not protect is water that becomes available for out-of-stream allocation. This is occurring now, and could expand in the future, under at least four scenarios.[18]

First, Idaho is taking water from the Spokane River now through its aggressive water right permitting program on the Rathdrum Prairie. The groundwater permits issued in Idaho pump water that is hydraulically connected to the Spokane River in Washington.[19]

Second, the Department of Ecology could find that water is available for interruptible uses, or uninterruptible uses that are mitigated or for which storage is provided.[20]

Third, Ecology could deny new permits and the applicants could appeal and win a PCHB/court decision finding that water is available and must be allocated.[21]

Fourth, the City of Spokane and other Washington municipalities are likely to expand their use of inchoate water rights in the future, with further impacts on existing instream flows.[22]

On top of this, climate change is expected to alter the Spokane River's hydrology.[23]

Finally, the instream flows claimed in this rule effectively establish Washington's future water claims in an interstate water allocation proceeding with Idaho. The U.S. Supreme Court, in deciding equitable allocation cases, evaluates several factors including physical and climatic conditions, the consumptive use of water, the character and rate of return flows, the extent of established uses, the availability of storage water, the practical effect of wasteful uses on downstream areas, and the damage to upstream areas as compared to the benefits to downstream areas. The factor of concern with the proposed Spokane rule is "the extent of established uses." It is a decidedly modern concept to protect instream flows as an established use. How is that done, given that no physical diversion is involved? We believe the adoption of the Spokane instream flow rule will establish Washington's instream claim. Given Idaho's aggressive water right permitting from the SVRP Aquifer, Washington should seek to protect maximum flows, not minimums. [24]

3. The Instream Values of the Spokane River

The Spokane River is beautiful and beloved by the people who live in this region. It is an important economic, ecological, cultural and historical resource.[25] It suffers greatly from human-caused pollution and extraction. Annual flows have dropped on the average of 1,000 cfs since measurements began in 1891.[26] We believe the proposed instream flows are at the low end of historic flows, and at best 50% exceedance of modern flows, and that this proposal does a tremendous disservice to the river and the community.[27]

Attachments

- ☐ CELP-Sierra Club May 30, 2014 comment letter
- ☐ City of Spokane, Shoreline Master Program, Inventory & Analysis (2008)
- ☐ City of Spokane, Habitat Management Plan for Kendall Yards/Great Spokane River Gorge (4-26-12)
- ☐ Spokane County/SCCD – Proper Functioning Condition Stream Inventory & Assessment (2005)
- ☐ Spokesman Review, Editorial, Washington needs to get river flows set, and get markers right (11-2-14)

☐ Spokesman Review, Becky Kramer Article (10-1-14)
☐ USGS, Spokane River at Spokane gage hydrograph, 2009-2013 (modified)
☐ Dept. of Ecology, John Covert, Long-Term Trends in Spokane Aquifer & River

4. Fisheries Flows

The proposed instream flows are based on a fisheries study method which is not particularly well- adapted for the Spokane River. To improve this method, the fisheries study should have utilized more site-specific data including "focal point data" for native species of interest, such as redband trout.[28] The WDFW biologist involved in this flow study has acknowledged that the 850 cfs flow is a floor, i.e., a minimum flow Minimum flows are disfavored in the scientific community[29] and typically are not utilized by the Department of Ecology to set instream flows elsewhere in Washington.[30] Further, the WDFW biologist has acknowledged that higher flow regimes would not pose a detriment to fisheries. This makes sense given that summer season flows are now approximately 1,000 cfs less than they were historically.[31]

Attachments

☐ Al Scholz-Hal Beecher e-mail exchange re Spokane R IFIM Study (10-27-14)
☐ Beecher Caldwell Demond (2002)
☐ Beecher Carleton Johnson (1995)
☐ Beecher Johnson Carleton (1993)
☐ Instream Flow Council, Integrated Approaches to Riverine Resource Stewardship, excerpts(2008)
☐ Dept. of Ecology, Jim Pacheco, Instream Flow Science (2008)

5. Anadromous Fish Restoration

The Spokane River once harbored important Chinook and steelhead runs. Professor Allan Scholz of the Biology Department at Eastern Washington University has estimated historic salmon harvest and consumption from the Spokane River. Columbia Basin Tribes and First Nations have begun to study the potential for fish passage. The two federal agencies with the greatest control over the U.S. portion of the Columbia River have recommended that fish passage be studied as part of the Columbia River Treaty re-negotiation. The Northwest Power & Conservation Council's Fish & Wildlife Program is also calling for study of fish passage and restoration of salmon to major tributaries above Grand Coulee Dam. The Spokane City Council has issued a resolution supporting re-introduction of salmon into the Spokane River.[32]

Attachments

☐ Prof. Allan Scholz, Historical Distribution of Tribal Harvest in the Upper Columbia Basin Prior to Construction of Chief Joseph/Grand Coulee Dams (April 2014)
☐ Columbia Basin Tribes & First Nations, Fish Passage & Reintroduction into the U.S. and Canadian Upper Columbia Basin (final staff draft, rev. Oct. 2014)
☐ U.S. Entity (Army Corps of Engineers & Bonneville Power Administration), U.S. Entity Cover Letter and Regional Recommendation for the Future of the Columbia River After 2024 (12-13-13)
☐ NW Power & Conservation Council, Columbia Basin Fish & Wildlife Program 2014, pp. 84-86 (Oct. 2014)
☐ City of Spokane Resolution #2014-0070 (7-7-14)

6. Recreation

Ecology did not study or analyze recreational use of the Spokane River, nor did it study recreational flows. Scientific methods for studying recreational flows are well-developed and in common use for dam relicensing and other purposes.[33] Avista Corp. undertook a whitewater flow study in 2004 that Ecology could have used to evaluate flows.

American Whitewater recently conducted a Spokane River recreational flow survey and received more than 70 responses.[34] Copies of the survey responses and summaries are attached.

The Centennial Trail runs for 37 miles adjacent to the Spokane River, from Deep Creek to the state line. Even limited car counter data at parking lots shows that the trail facilitates an enormous amount of non-motorized enjoyment of the Spokane River. The Spokane River also runs through Riverside State Park, one of Washington's largest parks.[35]

Attachments

- ☐ Confluence Research & Consulting, Memo re Ecology's instream flow recommendations for the Lower Spokane River (11-4-14)
- ☐ Avista Louis-Berger Whitewater Paddling Study (2004)
- ☐ AWW Recreation Flow Survey Responses All (Nov. 2014)
- ☐ AWW Recreation Flow Survey Responses All (Nov. 2014) (excel file)
- ☐ AWW Recreation Flow Survey Responses Summary (Nov. 2014)
- ☐ AWW Recreation Flow Survey Individual Responses (Delaney, Egesdal, Wooten)
- ☐ Paul Neddo, WA State Parks, Centennial Trail – Car Counters (May-October 2014)
- ☐ Spokane River KOPs Recreation Use Images, CD No. 2

7. Aesthetics/Scenic Beauty

The Spokane River is widely appreciated for its scenic beauty, especially as it flows out of the Spokane Falls and through the 11-mile reach between Monroe dam and the Nine Mile reservoir. This reach includes the Spokane Gorge and Riverside State Park and the adjacent Centennial Trail.[36]

Ecology conducted no analysis of the relationship between instream flows and the Spokane River's aesthetic and scenic values.[37]

CELP and Sierra Club conducted a photographic study in July-August of 2014. We selected 37 "key observation points" (KOPs) between Monroe dam and Nine Mile reservoir and photographed at those points on five different occasions, at the flows of 2800/2500/2000/1500/1000 cubic feet per second (cfs).[3

A major new residential/commercial development, Kendall Yards ("Urban by Nature") is being built adjacent to the first mile of the River below Monroe dam.[39]

Attachments

- ☐ Spokane River KOPs Atlas of Images (Nov. 2014) on CD No. 2
- o Online at http://www.celp.org/pdf/Spokane_River_KOPs_Atlas.pdf
- ☐ Spokane River KOPs Images database (185 photos) on CD No. 2
- ☐ Spokane_River_KOPS - 2500 vs 1000 (Summary).pdf on CD No. 2
- o Online at http://www.celp.org/pdf/Spokane_River_KOPS--2500,1000.pdf
- ☐ Olmstead Report, Spokane River
- ☐ Kendall Yards Illustrative Site Plan (Greenstone Corp. 12-2909)
- ☐ Naylor painting, Spokane River Gorge

8. Water Quality

There are seven permitted sewage and industrial treatment plants discharging effluent to the Spokane River, in addition to multiple stormwater and combined stormwater-sewage outfalls. The instream flows proposed in this rule implicate the ability of the river to absorb and dilute effluent. This issue has not beer adequately studied.[40]

9. Spokane Falls

The Spokane River rule should adopt instream flows for the Spokane Falls reach of the Spokane River. The Spokane Falls are located in Riverfront Park, which receives 2.2 million visitors per year and is the #1 tourist attraction in the region. On November 4, 2014, Spokane voters overwhelmingly approved Spokane Prop 2, a $64.3 million bond program to renovate the Park pursuant to the June 2014 Riverfront Park Masterplan.[41]

In 2009, the Federal Energy Regulatory Commission (FERC) approved a new license for the Avista dams on the Spokane River. The license includes 401 Certification-based conditions requiring Avista to maintain flows in the Upper Falls of 325 cfs during the day and 100 cfs at night, and in the Lower Falls of 200 cfs during the day and 100 cfs at night. These conditions were derived from a settlement agreement between Avista, the Center for Environmental Law & Policy, and Sierra Club. Subsequent renovations to the bed of the Falls resulted in amendment of the 401 Certification flows. These flows are managed via control gates on Upper Falls Dam.[42]

Attachments

☐ Riverfront Park Master Plan (June 2014)

☐ Avista 401 Certification aesthetic flow conditions, CELP-Sierra Club-Avista settlement agreement, and control gate photo

10. Climate Change

Climate change will affect the timing and availability of the water resources of the Spokane River and associated groundwater. Ecology did not adequately analyze the impacts of climate change on Spokane River instream flows, and may not have analyzed such impacts at all.[43]

Attachments

☐ State of Wash. Executive Order 09-05, Washington's Leadership on Climate Change (5-21-09)

☐ Xin Jin and Venkataramana Sridhar, Impacts of Climate Change on Hydrology and Water Resources in the Boise and Spokane River Basins (Boise State Univ. ScholarWorks, 4-12-12)

☐ Tung Nguyen and Heather Baxter, The Spokane River: Low Flow Trends & Modeling Under a Changing Environment (WISDM, 6-10-14)

☐ Lara Whitely Binder, Climate Change and the Columbia Basin: Implications for Water Use (UW Climate Impacts Group, 10-21-14)

☐ Marketa Elsner, et al, Implications of 21st Century Climate Change for the Hydrology of Washington State, Chapter 3: Hydrology & Water Resources: Washington State (2009).

11. Interstate Water Allocation

Allocation of the waters of the Spokane River and SVRP Aquifer between Idaho and Washington is a coming controversy. Idaho has issued or accepted claims for nearly 1,000 cfs in water rights over the past century. Since September 2001, the Idaho Department of Water Resources has issued 901 licenses, decrees or permits with a total diversion rate of 189.16 cfs, in Basin 95 – which comprises most (but not all) of the watershed.

Water pumped from the SVRP aquifer in Idaho depletes flow in the Spokane River in Washington. This physical phenomenon has been thoroughly studied and documented in US Geological Survey reports. An inventory of those reports is attached and these reports are incorporated herein by reference, and can be found on the USGS website at http://wa.water.usgs.gov/projects/svrp/publications.htm.[44]

Attachments

☐ IDWR water right summary report for Basin 95 (2001-2014)

☐ IDWR water right database (2001-2014)
☐ SVRP Aquifer Atlas (2009)
☐ USGS publications list for SVRP Aquifer studies (downloaded from web 11-6-14)

12. Error Messages
The Department of Ecology's on-line comment response system was inconsistent. Messages and comments may have been lost.[45]

Attachments
☐ Error Message for Ecology Spokane River rule on-line comment form, 11/7/14
☐ Error Message, same, 11/2/14

Thank you for the opportunity to provide comments.

Rachael Paschal Osborn
On behalf of the Center for Environmental Law & Policy & Sierra Club Upper Columbia River Group

Center for Environmental Law & Policy (Pascal Osborn, Rachael)

Thank you. My name is Rachel Paschal Osborn, and I represent the Center for Environmental Law & Policy. Written comments will be coming from our organization as well. The concerns I want to express tonight are primarily related to instream flows, the proposed flows for summer and late fall in the proposed rule. The purpose of an instream flow rule is to allocate water between the river and future water rights,[H1] and already, there's more than a 1,000 cfs of water rights that have been issued for the Spokane River in Idaho and Washington, including inchoate rights that have not yet been exercised in the future for the flow for the river.[H2]

River flows that are not protected by rule are available for allocation and out-stream for many uses, so it's very important that we protect flows to the level that are really necessary for all uses, particularly as set forth in the statute, the government instream flow rule making process.[H3]

If you look at the curves that we saw tonight, even 50 percent exceeds flows, versus the proposed rule, a very large amount of water is available -- appears to be available for out-of-stream water rights,[H4] and because this rule fails to protect, in particular, important habitat, health organization members do not, at this point, support adoption of this rule. We would prefer that you not adopt the current rule, rather than adopt the current rule and issue water rights.[H5]

The summer and fall flows are justified based on several studies that were mentioned, so there are a couple of points I would like to make about that. First, I find this is an imperfect tool for determining appropriate flows in a river the size of the Spokane, especially through smaller labeled streams. The only data I hear is based on theoretical curves with some habitat data that was collected, and both curves don't reflect the actual habitat requirements for Redband trout in the river. Redband are very important species to protect the flows.[H6]

It also says nothing about the inanimate species that will being returning to the Spokane at some point in the future. It won't be in our lifetime, but we should be thinking about our children and grandchildren when we adopt this rule.[H7]

The flows fail to follow also the scientific method that is used by Ecology on the west side, and so the Spokane River is receiving special attention as usual.[H8] The proposals also do not protect recreational and navigational use of the rivers, as required by law, RCW 9.54.020, Section 3 is pretty clear, that we've got to

look at those uses,[H9] and I will submit to you that higher flows that are necessary for boating, particularly in that ridge below the Upriver Dam will not hurt fish. The fish are doing fine out there with the higher flows that exist now.[H10]

The flows also do not protect the aesthetics of the river.[H11] The proposals also do not protect Washington's interests vis-à-vis the State of Idaho. All the water that's left unprotected in the river is available for Idaho to allocate through its groundwater permitting program.[H12]

Regarding the re-opener, and this is a comment to the presentation that was given tonight, I do not agree that information about climate change and anadromous fisheries is not available. Like recreation, recreational flows, like aesthetics, Ecology just did not study it.[H13]

And then a final point on the rule, we of course, disagree with the removal of the requirement for (inaudible) which is inconsistent with the rules that are adopted all through the state. Once again, the Spokane River gets special treatment,[H14] and also is something a waterman should patrol that would actually bring us into the 21st Century.[H15]

Once this rule is adopted, Ecology will begin to issue water rights that will drive down flows to the mountains.[H16] For that reason, we will not support the rule.[H17]

Center for Environmental Law & Policy (Syrewicze, Emilee)

To whom it may concern,
This appeal is intended to be a public comment opposing the adoption of the Spokane River Instream Flow Rules as contained in 173-557.

Please do not adopt the Spokane River instream flow rule as it is.[1] The proposed rule fails to protect flows that are needed for fish.[2] The protection of our river wildlife is an absolutely integral part of our natural economy.[3] In addition, the agency has failed to study flows needed or recreation, aesthetics and water quality.[4] The agency did not consider all economic impacts, including impacts on local businesses such as outfitters and gear shops.[5] If measures need to be instated, let them be based on the most current research and data driven outcomes.[6] The Spokane River is a beautiful river, worth protecting.[7]

Thank you so much for your consideration.
Kind Regards,
Emilee Syrewicze, JD

Cervenka, Aimee

Thank you for drafting a rule for the Spokane River. This is a step in the right direction.[1] However, the proposed flows are way too low.[2] Experts with independent organizations such as Sierra Club are recommending a flow of 2,500 cubic feet per second during summer months as a flow that will protect fish, boaters, and businesses that depend on the river.[3] Washington State should make sure to protect the Spokane River in when water is allocated between Washington and Idaho: the proposed flow would be a major giveaway of water to Idaho.[4]

Citizens' Alliance for Property Rights (Alia, Cindy)

Dear Fellow Washingtonians November 4, 2014

The Washington State Department of Ecology has determined to pass a rule change onto the Citizens of this state with the creation of an In Stream Flow Rule for the Spokane River and Spokane Valley Rathdrum Prairie: Chapter 173-557 WAC Water Resources Management Program (WRMP) for the Spokane River

and Spokane Valley Rathdrum Prairie (SVRP) Aquifer and amendment to WAC 173-555-010. The provided DOE documentation has been provided on this website:

http://www.ecy.wa.gov/programs/wr/rules/557-docs.html

CAPR has reviewed these documents and finds it is important to share our findings.

Ecology is relying on the precautionary principal even though it has had over 40 years to conduct the studies that would be necessary to understand the ground and surface water resources of Eastern Washington.[1] This is a MAJOR rule making and there are a great many impacts from this proposed rule, including the reduction of property values throughout the affect area and impacts to municipal water suppliers, and will provide determents to growth and planning in the WRIA. It will heavily impact agriculture and industry. This proposed rule would impact 1,000s of citizens and a minimum of over 10,000 square miles.[2] Water reductions, restrictions, and mitigation are not attempted to be clearly and specifically codified by the DOE documentation.[3]

CAPR takes issue with Ecology having determined that an EIS is not required which is inconsistent with the SEPA codes. The provided SEPA is simply an inadequate and inappropriate SEPA Checklist. This checklist is not intended for rule making purposes and is therefore misleading to the public and lacking in the required science for this type of action. CAPR believes that the Department of Ecology is required to provide a complete SEPA as well as a complete EIS detailing the impact of the proposed WACs to the Environment, the People in this WRIA,[4] and detailed Economic Impacts.[5] It is incorrect to ask for the required Public Comment without providing this important information to the Public to study. The Public comment cannot be complete or accurate without this information.[6] There are many errors in the SEPA checklist, but comments on those errors would require several pages, and would not apply, as a SEPA checklist is the wrong vehicle for a determination of non-significance.[7] However a close look at the checklist would provide insight into the sophomoric preparation done by the DOE for this major rule change and it is clear that RCW 34.05 and its many provisions was entirely disregarded in DOE decision making.

Ecology must be forced to prepare an EIS and provide detailed, peer reviewed and current science.[8] The DOE has not provided the level of scientific study to justify placing any restrictions on water rights in this area.[9] Ecology should be sanctioned until the agency provides the necessary studies conducted and prepares a complete SEPA, and detailed EIS that also addresses the cost benefit analysis, cumulative effects, and the economic impacts that will be realized if this rule is adopted.[10]

Furthermore it is clear that if this provided SEPA checklist is used for rulemaking, the DOE is putting the state at risk for several lawsuits.[11] This direct quote from page 26 is one serious example of the flawed preparation the DOE has conducted. "There has been concern raised about possible conflict between implementation of this rule, if adopted, and implementation of requirements under the State Water Pollution Control Act, Chapter 90.48 RCW. And the federal Clean Water Act. The need to ensure compliance with water quality standards or discharge permit requirements may compel removal of waste water or storm water discharges to the Spokane River, potentially reducing stream flow in the river."

This statement alone should cause concern over the lack of a complete SEPA and EIS.[12] Any activity related to the above quote would most certainly have a significant impact on the environment, people, and economics of the WRIA.[13]

Cindy Alia, Citizens' Alliance for Property Rights

Clark, Jerry

Dear Director Belton: The proposed flow rule of only 850 cubic feet per second (cfs) is dangerous in many ways[1] and should either be raised to at least 2500 cfs or eliminated altogether.[2] Particularly in the summer, the River is an important recreational attraction not only to people of the area, but also many visitors who contribute to the economy. Such a low flow level would interfere with the enjoyment of those who find it a source of relief and recreation.[3] It is also hard to believe that it would not harm the fish and wildlife that depend on the River for survival.[4] Further, it would surely affect in a negative way other rivers and streams in the region.[5] I do not live in Eastern Washington, but I have family and friends who do. The Spokane River is part of what makes the area an attractive place to want to spend a vacation and visit relatives.[6] I hope you will give serious consideration to my recommendation that the proposed rule be dramatically changed to save the River and address the interests of those who depend on it, including fish & wildlife.[7] Alternatively, you might consider dropping the flow rule altogether.[8] Jerry Clark

Cornelius, Scotty

Dear Mrs. Wessel,

I am disturbed by the proposal for such low minimum flows for the Spokane River. When I am in Spokane, viewing the Spokane River is always exciting and fascinating. With the proposed minimum flows the visual appeal of such a wonderful feature of eastern Washington will be significantly diminished.[1]

Additionally my wife, Diane, and I have canoed on the Spokane River a number of times. We have canoed in June at 10,000 cfs and had a wonderful and challenging experience. Now I see by early June the minimum flow will 1,000 cfs or less for the remainder of the season. June and July are the prime months for enjoying the Spokane River in canoes, rafts and kayaks. ;

I ask you not to degrade the recreational value of the Spokane River; let the river flow freely at its historical levels.[2]

Sincerely, Scotty Cornelius

Crafton, Laura

Hello,

I know these are pasted in but it is worded so well I decided to go with it.

(1) Thank the Department of Ecology for drafting a rule for the Spokane River,[1] but note that the proposed flows are way too low.[2]

(2) Recommend a flow of 2,500 cubic feet per second during summer months as a flow that will protect fish, boaters, and businesses that depend on the river (the state is proposing a mere 850 cfs).[3]

(3) Washington State needs to protect the Spokane River in when water is allocated between Washington and Idaho: the proposed flow is a major giveaway of water to Idaho.[4]

Thanks,

Laura Crafton

Croskey, Taylor

My name is Taylor Croskey. I'm a guide for the Silver Bow Fly Shop, as well a graduate student in fisheries at Eastern Washington University. I think one thing that someone hasn't touched on is the temperature, temperature being a very dependent thing on trout populations and other things.[H1] That 850 flow value you're proposing, if that temperature increases, the population in the last five years in the upper section

of the river has dropped drastically.

I think with climate change and everything else, that temperature value is going to be the biggest deterrent factor in the trout populations, and you proposed an 850 flow value, that temperature will increase substantially, and those populations in the upper river, especially much of the aquifer, will have a large an impact on that.[H2] And Redband trout have a critical number, if you go above that, those trout populations will no longer exist there very much longer, especially in those low value temperatures.[H3] Thank you.

Darilek, Marilyn

As a long-time resident of Spokane, I care about the health of our river & the watershed environment.[1] Please increase the summertime flow to 2500 feet per second not only for the aesthetic value but also for fish & other aquatic life that depend on adequate amounts of cool water.[2] We had several groups of out-of-state visitors this summer - all of them commented on the intrinsic value of the river to our city and surrounding communities.[3]

Thank you!

Marilyn Darilek

DeLateur, Marc

I was recently made aware of this proposal by the Sierra Club, which makes note that a very low volume o inflow has been slated for the Spokane River under this proposal, to the tune of 850 cfs,[1] and that the measures, if passed, give Spokanites far less protection than other watersheds in Washington. I'd like to know why that is, exactly, and if you don't have a good reason, I suggest you amend this proposal to give Spokane protections that are consistent with all other water protections throughout the State of Washington.[2] Water is life, after all, and I take threats to my well-being very seriously.[3] Please read the blog located at http://naiads.wordpress.com/ for a detailed explanation of the concerns that all informed Spokanites should have about the proposal as it currently stands, and ignore whatever percentage of our population that might be.[4] Just as a small number of very wealthy people can create massive imbalances in society, a small number of people with intellectual acuity can restore it[5]. Sincerely,Marc DeLateur

Dunphy, David

Department of Ecology,

I'm writing you in concern about the proposed stream flows for the Spokane river.[1] I encourage the department to undertake a more comprehensive review to find the optimal flow to protect recreation and fish habitat on the river.[2] This should also take in account the water used on the Idaho side of the border.[3] When living in spokane the river was source of wonderful recreation and renewal; I hope the new stream flow rules will provide this for future generations of people and wildlife.[4]

David

Egesdal, Vicki

I disagree with the proposed minimum instream flow for the Spokane River. It is not acceptable for recreational use[1] nor does it offer acceptable aesthetics.[2] I don't believe it meets the habitat needs for wildlife, not even the only two fish species that were considered.[3]

I am a rafter and help organize the Upriver Scrub held on the last Saturday of September. Vollunteers take their rafts on the river picking up garbage and other debris. See attached photo. At the proposed flows we

wouldn't be able to put boats on the water.[4]

I request that more information be gathered before setting the minimum flow level. The study done so far is not complete.[5]

Enviroscience Group (Lambert, Jeff)

Dear Ms. Wessel, Thank you for the opportunity to comment on the proposed stream instream flow rule of 850 cfs. I request the flows be studied for fish habitat and recreation activities such as paddling.[1] I recommend that fish studies be done and a flow selected that enhances the fisheries in the Spokane River especially the red band trout.[2] The scenic beauty of the River is degraded when flows are lower than 2000 cfs.[3] Maintaining a higher flow level may have impacts on the lake level in Coeur d'Alene Lake.[4] i hope that the Dept of Ecology advocates for a flow level that benefits Spokane and not waterfront owners in Idaho.[5] Thanks, Jeff Lambert

Fackenthall, Ann

It is imperative that the water mitigation plan be in place prior to enacting the revised instream flow rules within Chapter 173-557 WAC.[1]

Mapping of the acquifer boundary changes are also a problem. The well logs shown on Plate 1 of report 2007-5041 show no well logs within the Stevens Co. Boundary.[2]

Fair, John

The proposed instream flow minimums are too low to support river recreation during the summer

months.[1] The counter-proposal in many of these public comments of a 2,500 cfs minimum flow is a much better target to keep river recreation feasible throughout the year.[2]

FLOW Adventures (Wilmot, Jon)

The flow level that the Department of Ecology has chosen does not permit adequate water for safe recreational use through the Bowl & Pitcher and Devil's Toenail rapids in Riverside state park.[1] It also does not supply enough water for the aesthetic views of those using one of our largest state parks and Spokane's water jewel.[2] The more acceptable low flow level would be between 3000 to 3500 CFS as most regular users and outfitters would say.[3]

The small business impact statement definitely did not consider Outfitters on this section of river. Our business provides local jobs, recreational opportunity to the local community and tourism by showcasing the river. My business was never approached by those writing this statement or the Department of Ecology. The flow of 850 cfs would have a negative impact on my business and the experience of local tourists.[4]

Ann, I read your statement about small business impact on the river. I believe the impact of a min. flow of 850 on the Lower Spokane would definitely impact my business as a river outfitter on the Spokane river. Department of Ecology did not consider the 5 commercial companies or the two universities that use this stretch of water in their small business impact satement.[5] In my opinion, water rights with the state of Idaho will become a huge issue in years to come.[6] The department of ecology is setting the river flows way to low. I don't understand where or how you chose 850 CFS?[7] A more realistic level would be around 3500.[8]

Thanks, Jon Wilmot Owner FLOW Adventures

"There are two kinds of adventurers: those who go truly hoping to find adventure and those who go secretly hoping they won't." Rabindranath Tagore[9]

Gallaher, Pam

Dear Ms. Wessel -

I had the pleasure of rafting the Spokane River twice this summer for the first time in years. The first trip was at the end of June. With water levels dropping, ours was to be the last trip on that stretch of the river for the summer. This despite the fact that there were two more months of hot summer weather ahead of us.

The second was with my entire family just two weeks later. We rafted a stretch closer to town but even then the river was so low the outfitters were not sure how much longer they would be able to safely float the river.

I was happy to hear that the Department of Ecology is working on Instream Flow Rules to ensure enough water to keep the Spokane River a raftable, swimmable, fishable river year round. Unfortunately, the recommended summer level will be below where it was when I was on the river this year, meaning that it will not keep the Spokane River raftable.

Please reconsider the flow rates to protect the future of our river.[1]

Sincerely,

Pam Gallaher
Spokane Valley, WA

Garvey, Lydia

The proposed flows are unacceptable.[1]

It is imperative to study flows for recreation and scenic beauty.[2]

Fish studies must be tailored to the Spokane's unique habitat and redband trout species.[3]

This rule has negative interstate water allocation consequences[4]

I very much care about the Spokane River, Washington's instream flow program, and the future of our rivers.[5]

Your attention to this most urgent matter would be much appreciated by all present & future generations of all species.[6]

Thank you
Lydia Garvey
Public Health Nurse

Gold, Raelene

Re: Chapter173-557 WAC – Water Resources Management Program for the Spokane River and Spokane Valley Rathdrum Prairie Aquifer and amendment to WAC 173-555-010.

As a frequent visitor to Spokane attending conventions, conferences and visiting relatives, I have been delighted by the beautiful downtown area embracing the Spokane River and the spectacular views of Upper and Lower Spokane Falls. Riverside State Park and the Centennial Trail clearly are a great magnet for visitors as are the restaurants and hotels near the beautiful river. This is especially true in the sweltering summertime when the river is a magnet for tourists and residents alike.[1]

It was extremely disappointing and disillusioning to see the Department of Ecology proposed minimum instream flows levels set at such minimal levels, far below what is recorded in historic hydrographs.[2] You state your aim is to: “protect and preserve water in streams for instream resources including fish, wildlife, recreational uses, wastewater management and hydropower.” However, your true aim as stated is to: “use the rule as a regulatory flow threshold to determine whether there is water to withdraw for new use while still protecting fish and other instream resources.”[3] You also note “A clean and flowing river is good for the environment and good for our economy.”[4]

I don’t find here any explanation of how you arrived at these low levels, especially the abysmal summertime level of 850 cfs in the downriver reach and the 500 cfs at Greenacres. You need to explain how you arrived at your figures.[5] This is especially important if this is to be a model for setting of minimum instream flows for other rivers in our state.[6] You also need to do studies to determine the impacts of these proposed levels to fish, wildlife, recreation, wastewater management and hydropower. Also, what will be the impact on the Spokane Valley Rathdrum Prairie Aquifer that supplies the City of Spokane with all its drinking water?[7] Also, what will be the overall economic impact to existing enterprises and business that capitalize on a robust Spokane River?[8]

What is appalling about your proposal, is in the guise of taking a positive action towards achieving your

stated goals, you are actually using it as a subterfuge to help new development at the expense of all the other interests.[9]

I therefore urge you to revise your proposed rule for instream flows for the Spokane River; especially the June 16-September 30th summer flows to higher than 1000cfs[10] based on more thorough studies of its impacts.[11] Also, I urge a moratorium on all new water right permits until a statewide inventory of our water resources is completed. You cannot continue to give out water rights without knowledge of the available water.[12]

It is important that the people of Washington have confidence in their Department of Ecology Water Resource Program's aim to measure up its mission and not allow itself to be pressured by a powerful few.[13]

Thank you for reading my comments.

Sincerely, Raelene Gold

Goodner, Tom

The Department of Ecology is proposing summer season flows that do not have sound biological basis to protect redband trout, the Spokane River's native wild fish.[1] They need to base any decision on sound studies as what flows are needed to maintain and improve fish habitat.[2]

The Department of Ecology completely failed to study recreational flow, despite the Spokane River's tremendous popularity with boaters. There are new boat access points on the river and more planned which will translate to more use of the river for all forms of recreation. These studies are needed as well.[3]

Idaho can take all water not claimed under the proposed Washington's flow rule. Ecology needs to assess the interstate allocation implications of its flow rule.[4]

Grider, Chuck

Dear Department of Ecology,

I am writing about the proposed minimum river flows for the Spokane River. My cousin fishes and plays on the Spokane regularly but says that this proposal would eliminate his ability to navigate the river in his boat.[1] I too have floated the Spokane and found flows under 2000cfs to be hazardous to my equipment and simply no fun. 2500cfs is the minimum fun level where my equipment and safe navigability make the trip relaxed and enjoyable.[2] The proposed flow of 850cfs is dysfunctional for boating and unacceptable.[3]

I would like my children to enjoy the beauty of the Spokane River when they are old enough to do so safely.[4] Warm summertime flows at 2500 cfs make boating the Spokane River a family friendly recreational activity.[5] Lower flows would make the river even warmer which would be harmful to the fish including the redband trout.[6]

Please make concessions to the recreational opportunities and fish habitat as you continue with this process.[7]

Thank you,
Chuck Grider

Holmquist, Gunnar

Dear Department Of Ecology,

I have lived on the shore of the Spokane River for 20 years, just a few hundred feet downstream from the Monroe Street dam and Avista power station in downtown Spokane. I walk the river's edge nearly every day of the year. There are osprey in the Spring and Summer and bald eagles in the Fall and Winter, there are herons, kingfishers and many other species of birds, there are otters all year, and many other mammals that now use the river corridor as their primary habitat and food source, and there are the thousands of species of fish, reptiles, amphibians, insects, macroinvertebrates, plants, fungi, and algae that totally rely on the health of this riparian ecosystem, all of which is dependent on the quantity of water flow and the natural timing of that flow. Now you are faced with determining the fate of this ecosystem, which will be more unstable as climate temperatures continue to increase for decades to come.[1]

Historically, the fate of water flows everywhere has been determined by the power and influence of corporate users and withdrawers of river water. Avista in particular has maintained great fortune by dominating the decision process locally. But the river doesn't belong to corporations and users. The river has rights itself, to thrive and maintain its balanced system of interdependence of all these living species that must have adequate flows, and proper timing of those flows. If the water itself "belongs" to anyone i belongs to the people and communities of the area, which must act as stewards, as guardians, for its welfare. Please change the process on how our rivers get managed. Corporations bleed resources to thei absolute limits, without concern for ecosystem species interdependence, without long term vision, without concern for climate. It's like they don't care about their grandchildren. Just look anywhere on Earth; they overfish the oceans, they clearcut the forests, the pitmine the land, they spill oil, they frack water supplies, they pollute all, especially rivers. The only sensible response to this endless onslaught on Nature and our home is the most conservative choice in decision making, as in the present concern of how much water should flow through the Spokane watershed.[2] Do the right thing for your grandchildren and choose the highest possible flows, 2-3,000 cfs, not the lowest and most suitable for Avista Power and future "users".[3]

Sincerely,
Gunnar Holmquist, MD
Spokane, Washington

Huron Valley Software Consulting (Lahey, Karen)

This rule does not go far enough to protect our water rights in the Spokane River. Please do not give away our water to Idaho.[1]

Ibbetson, Timothy

Please accept these comments and questions below, and list them as public comment, with anticipated answers to said comments and questions, relating to the Spokane In Stream Flow Rule Making, proposed changes on Chapter 173-555 WAC and proposed Chapter 173-557 WAC.

Chapter 173-555 WAC

WATER RESOURCES PROGRAM IN THE LITTLE SPOKANE RIVER BASIN, WRIA 55

DOE: New water use from the Little Spokane River, its tributaries, and the shallow aquifer associated with the Little Spokane River and its tributaries shall be regulated under chapter 173-555 WAC;

Comments: Is the referred shallow aquifer really a shallow aquifer or is it unsaturated zone preferential flow? What studies suggest that base flow is from a shallow unconfined aquifer? Does this mean that the deeper confined aquifer is not affected by this WAC? Please provide sources of scientific studies that indicate the Little Spokane river base flow is ground water and not other subsurface flow such as unsaturated zone flow.[1]

DOE: New water use from the Little Spokane River, its tributaries, and the shallow aquifer associated with the Little Spokane River and its tributaries shall be regulated under chapter 173-555 WAC, and New water use from the SVRP aquifer shall be regulated under chapter 173-557 WAC.

Comments: How is it determined when the areas in the Little Spokane River are using water from the Spokane Valley Rathdrum Prairie Aquifer?[2] What is the difference between Chapter 173-555 WAC and Chapter 173-557 WAC?[3] What scientific studies (documented) suggest that there is only one unconfined aquifer in this area and that there are no confined aquifers in this area?[4] What are the seismic controls on the aquifer?[5] What are the recharge rates and what are the actual withdrawal rates for this aquifer?[6] What pump test have been conducted in the vicinity of the Spokane River that shows a reduction in base flow when the aquifer is pumped heavily? Ecology has not proven that the base flow is actually the same ground water that is being utilized from exempt water wells and agricultural wells (and municipal wells)?[7]

Preliminary Draft for Public Comment – Ecology is requesting input from affected stakeholders and the public on this preliminary draft rule language. We will not prepare written responses to the input we receive on this early version of the rule. We will prepare written responses to the comments we receive after the proposed rule language is filed with the State Code Reviser.

Chapter 173-557 WAC - Water Resource Management Program for the Spokane River and Spokane Valley Rathdrum Prairie (SVRP) Aquifer

DOE text and corresponding comments:
DOE: (2) The purposes of this rule are to:
(a) Establish instream flow levels necessary to protect wildlife, fish, scenic, aesthetic, recreation, water quality and other environmental values, navigational values, and stock watering requirements;
(b) Meet water resource management objectives of the Spokane area watershed plans adopted under RCW 90.82; to protect existing water rights; and

Comments: Who prepared these plans and who adopted them? Were the citizens who actually use wells included in developing these plans?[8] How are existing water rights determined? Are these based on rights that are still valid? Water rights are lost if not used in 5 years. Where is the documentation verifying all of the water rights are actually active? Does this include surface water and ground water and are all rights for both actually active (is the proof that the water rights are being used to their maximum allotments?[9]

DOE: (b) Meet water resource management objectives of the Spokane area watershed plans adopted under RCW 90.82; to protect existing water rights; and

Comments: How do ground water withdrawals impact the Spokane River. What studies have been conducted that demonstrate that the ground water withdrawals from wells impact the flow of the Spokane River[10] and what studies have been conducted that have proven that all base flow in the Spokane River is ground water base flow instead of unsaturated zone flow or a combination of

unsaturated zone flow?[11] Why are the proposed restrictions proposed year around instead of only when the river flow is base flow?[12]

DOE: (3) In enacting this rule, ecology uses the Middle Spokane Water Resource Inventory Area (WRIA 57) and Lower Spokane Water Resource Inventory Area (WRIA 54) watershed plans as the framework for making future water resource decisions for the Spokane River and SVRP Aquifer, as stated in RCW 90.82.130.

Comments: What does this have to do with ground water? Ground water is not necessarily limited to a surface water "drainage basin".[13]

DOE: (a) The plan recommendations were approved by the Spokane area watershed planning units. The joint watershed plan for WRIA 57 and the Little Spokane watershed (WRIA 55, which is not included in this rule) was adopted by Spokane County, Stevens County, and Pend Oreille County commissioners on January 31, 2006. The WRIA 54 watershed plan was adopted by Spokane County, Lincoln County, and Stevens County commissioners on October 22, 2009.

Comments: Who are these planning units from 2006, and 2009. This can be changed and it should. These planning units, (if the County chooses to plan) should include actual geologists and hydrogeologists , and citizens who are actually dependent on the water resources (those who are affected by the plan(s)) Were these unit decisions clearly understood without the use of facilitators and was it clear that decisions made at the time could possibly impact rule-making in 2014?[14]

DOE: (b) In accordance with RCW 90.82.130(4), in developing this chapter ecology has relied on watershed plan recommendations as a primary consideration in determining the public interest in water resource management for the Spokane River.

Comments: What was stated in these plans and how does this address ground water use or availability.[15] How many people in Spokane County, Stevens County, and Pend Oreille County want to have their water rights denied or curtailed?[16] How many want to meter their ground water[17] or have to conduct ground water studies before they can develop their property?[18]

4) This rule sets forth ecology's policies to guide the protection, use, and management of Spokane River basin surface water and the SVRP aquifer. It protects existing water rights, establishes instream flows, and sets forth a program for the management and administration of future water allocation and use.

Comments: The methods used to determine instream flow (the amount of water required for fish) are not based on science and have changed significantly over time to no longer apply specifically to fish. Ecology calls these water resource management rules now.[19] This has nothing to do with the connectivity of surface water to ground water, it only determines how much water is required for fish (even this is unscientific). It is unclear how Ecology links ground water withdrawals from wells to "the volume of water" removed as base flow in a river, or how they correlate water use for each well and how this effects the surface water flow (or volume, such as lakes and ponds). There are no scientific studies that Ecology lists for the SVRP that would provide this information.[20]

Ecology lists four "scientific methods" it uses to determine instream flow: Instream Flow Incremental Methodology (IFIM) / RHABSIM is a black box model that uses unknown methods to determine how much water is required for each fish (minimum flow). This is not based on survival of the fish, it is based on

something else that is unclear (this is what a black box does, the methods used are unknown). It is unclear how the amount of water required for each fish is determined.[21] The other methods used (which are also unscientific and are most commonly used are:

Toe width (supposedly conducted by biologists which is simply measuring the toe (where the bank meets the bottom on both sides). This is unscientific and is the most common method Ecology uses.[22]

Wetted Width (Wetted Perimeter)

The wetted perimeter is the portion of the channel that is "wet." The method assumes a connection between reducing wetted width and the loss of fish habitat. It involves measuring from water's edge to water's edge over a number of site visits[23]

Hatfield and Bruce

Hatfield and Bruce developed a series of equations to estimate the stream flow that maximizes the weighted usable area (WUA) based on previous IFIM studies, for up to four life stages of certain salmonids (such as salmon and trout). This method can be done entirely from the office; no field work is required. The user looks up the yearly average stream flow, longitude and latitude for the river, and enters these into equations on a calculator or computer

None of these methods meet BAS requirements and they do not provide a correlation between ground water and surface water. This is based on a lot of assumptions, estimates, and does not provide a real correlation to water supply and fish needs. Also, it does not consider seasonal variations and assumes that surface water features always have optimal water supplies and that fish cannot survive if a surface water feature has periods of very low flow or goes dry. It also does not factor in that many "streams" are actually agricultural drainage ditches or ephemeral drainage systems that are not fish habitats.[24]

DOE: WAC 173-557-020 – Applicability. (1) This rule applies to the mainstem of the Spokane River and all surface and groundwaters within that portion of Spokane County, Washington inside the boundary of the Spokane Valley Rathdrum Prairie Aquifer, as identified in U.S. Geological Survey Scientific Investigations Report 2007-5041. The map provided in WAC 173-557-110 is for informational purposes only. Hydrologic evidence of the SVRP aquifer determines applicability of this rule.

Comments: This assumes this is one continuous aquifer with no structural controls. It also assumes that this aquifer can actually be defined from other aquifers in this area.[25] Also, this is only one study for a very large area and this study does not directly correlate how ground water withdrawals affect stream flow (or other surface water) nor does it provide any information on the source of the base flow for the river or other surface water features, it assumes all base flow is ground water however, it is very likely that much if not all of the base flow is actually unsaturated zone flow. This is unknown unless studies are conducted. Ecology has had 42 years to conduct studies and only references one study in this rule with a total of four studies actually having been conducted, all of which rely on older studies except parts of the gravity study that was conducted to determine the depth to bedrock.[26]

DOE: (2) This rule does not supersede the instream flow rule of the Little Spokane River (Chapter 173-555 WAC), except where a proposed withdrawal is from waters in direct hydraulic continuity

with the SVRP Aquifer as determined by ecology:

Comments: How will this be determined? There is one study referenced and this study will not provide this information. Additionally, the one study referenced indicates there are two aquifers in the Little Spokane River drainage area and one is confined and obviously does not provide base flow to the Little Spokane River. How is this addressed in Chapter 173-555 WAC)?[27]

DOE: (4) Changes to or transfers of existing rights are addressed in WAC 173-557-070.

Comments: Where is the data for all existing senior water rights and the certifications that all of these rights are active? If a water right is not used in 5 years it no longer exists. Also, are all of the water rights being used each year? Are any water rights (volume) not being used every year for the last 5 years?[28]

New Section WAC 173-557-030 – Definitions.

DOE: "Consumptive use" means use of water that diminishes the volume or quality of the water source.

Comments: Does this include point sources (municipal storm water systems)? How about City, County, and State roads and Highways that impact water quality? How is the volume of water diminished? Where does the water go? The law of conservation of mass indicates that the volume of water (mass) in a closed system cannot be lost. The earth is a closed system.[29]

DOE: "Hydraulically connected" means saturated conditions exist that allow water to move between surface water and groundwater, or between groundwater sources.

Comments: If saturated conditions are present in the bed of a river, water is not moving down. This means that ground water is present in the bed of the river. Saturated conditions are impervious, similar to trying to fill a glass that is completely full of water. This is an unscientific definition.[30] Ground water aquifers are saturated, however ground water is recharged by unsaturated zone flow. It is very possible that much if not all of the recharge to the Spokane and Little Spokane River and the tributaries is actually unsaturated zone flow. This is not saturated by definition (the pressure is less than atmospheric).[31]

DOE: "Mitigate" or "Mitigated" means actions taken to offset adverse impacts by future water appropriations to senior water rights, including the instream flow levels set in WAC 173-557-050.

Comments: Where is the data on the senior water rights and the data that shows that these water rights have been used in the last 5 years. For large water rights, are these rights being completely used each year for the last 5 years?[32] What are the levels set in WAC 173-557-050?[33] How does mitigation make more water available? This is scientifically impossible.[34] What science is used to measure ground water use from wells to base flow in a stream, in other words how can this be measured?[35] Most residential wells will drain to a onsite septic system, which means that 98% of the domestic water use will be infiltrated beneath the ground surface to the ground water aquifer or to unsaturated zone flow in the same area the ground water was removed.[36] Municipal water is exported to areas, collected in municipal sewer systems (often combined sewer systems) and is removed from the area to be directly discharged into a river, lake, (or in areas bounding marine

waters, into the marine waters), the water is not returned to the aquifer where it was produced from. If municipal water supplies were removed only from the river and returned to the river, the actual loss would be less and the impact to ground water supplies would be reduced.[37]

DOE: "Stream management unit" means a stream segment, reach, or tributary used to describe the area to which a particular use, action, or instream flow level applies. Each of these units contains a control station. A map of the control stations is included in this chapter (WAC 173-557-110).

Comments: How is this correlated to water use in an area, especially ground water?[38] If science based studies were conducted, produced, and peer reviewed, Where are those studies supplied to the public?[39] How do stream gages provide information on ground water?[40] How does this differentiate between ground water base flow and unsaturated zone flow?[41]

DOE: "SVRP Aquifer" means the Spokane Valley Rathdrum Prairie Aquifer. "U.S. Geologic Survey Scientific Investigations Report 2007-5041" refers to the Hydrogeologic Framework and Ground Water Budget of the Spokane Rathdrum Prairie Aquifer, Spokane County, Washington, and Bonner and Kootenai Counties, Idaho; U.S. Geologic Survey Scientific Investigations Report 2007-5041 by Kahle, S.C., and Bartolino, J.R., 2007.

Comments: This is the only scientific document used to support this rule, however, this 60 page report is insufficient to provide the information necessary to identify the characteristics of the aquifer(s), the structure of the aquifer, or to provide any information on well production impacts on base flow. This study did not focus on the base flow to streams, including the Spokane River, the actual ground water withdrawals, the amount of unsaturated zone flow that provides base flow to seasonal and perennial streams, or the amount of snow melt that provides base flow via unsaturated zone flow.[42]

The mountain ranges to the north and east of Spokane would be the primary source of recharge to the ground water aquifer and this area is very large, with the actual area being uncertain because the report focuses more on the relatively small lakes (compared to the large recharge area) although the actual recharge rates to the ground water aquifer are unknown. There is nothing in this report that would provide scientifically useful information to determine how water well use could potentially impact perennial stream flow (base flow) in the Spokane River.[43]

The only recent geophysical studies conducted in this area was a basic gravity study conducted by John S. Oldow and Kenneth F. Sprenke in 2006. The primary purpose of this study was to provide more information on the depth to bedrock, it was not a ground water study. There are limited seismic studies conduct, but most of these limited studies were conducted in the 1960s.[44]

None of the studies conducted to date (other than the gravity studies) rely on new field studies, such as comprehensive seismic, microgravity, electromagnetic, very low frequency, or the installation of wells to test the aquifer characteristics. The structural geology of the SVRP aquifer is not discussed in the publication Ecology refers to nor is the structural geology of the recharge area.[45]

Regardless, the use of this single paper is insufficient to provide the information necessary to determine the actual ground water resources of the SVRP aquifer, how much ground water (compared to unsaturated zone flow) actually provides base flow to the perennial and seasonal streams (rivers are large streams), or what impacts ground water withdrawals will have on this base flow.[46] Additionally, the science related to actual instream flow volumes is severely lacking.[47]

WAC 173-557-050 – Instream Flows

DOE: The instream flows established in this chapter are based on detailed habitat studies of the Spokane River conducted for watershed planning and other purposes, and the recommendations of the Watershed Management Plan for Water Resources Inventory Area WRIA 57 – Middle Spokane River and WRIA 54 – Lower Spokane Watershed Plan.

Comments: Who conducted these studies? Is there a listing of these studies?[48] How were members of the "planning unit" selected? Is there an Ecology appointed facilitator for this "planning unit"? http://www.spokanecounty.org/wqmp/projects/ASP/WhosIn.asp[49]

How are the is stream flow cfs calculated? How can it be ignored the cfs will never be the same every year?[50]

DOE: WAC 173-557-060 – Future new uses of water

Instream flows established in this rule are water rights and will be protected from impairment by any new water rights commenced after the effective date of this chapter within the area regulated under this chapter, including new permit-exempt groundwater withdrawals.

Comments: How was this determined? What science is involved?[51] How do these become water rights?[52] How is the base flow (assuming the flow rates are actually accurate) correlated to ground water withdrawals and why would ground water withdrawals need to be regulated during the periods of high flow?[53]

DOE: (2) Based on the hydrogeology of the aquifer as described in U.S. Geologic Survey Scientific Investigations Report 2007-5041, ecology determines that surface water in the Spokane River and groundwater within the SVRP Aquifer are hydraulically connected. New groundwater withdrawals from the SVRP Aquifer will be managed to protect the instream flows established in this rule.

Comments: This is one study and does not provide the information necessary to regulate ground water withdrawals.[54] There is no correlation related to the effects of ground water use from wells to the base flow in the perennial and seasonal streams in this area.[55] Additionally, it is unclear how much of the base flow is ground water and how much is unsaturated zone flow.[56]

What studies have been conducted to determine that reducing ground water withdrawals from wells increases base flow to perennial and seasonal streams?[57] How has mitigation increased the base flow?[58]

DOE: (3) Within the area regulated under this rule, public water suppliers are the primary sources of water for new uses. If water is not available from a public water system, the consumptive use impacts to surface water from new permit-exempt groundwater withdrawals must be mitigated when stream flow is below the instream flows established in this rule. Ecology has placed water into the Trust Water Right Program (chapter 90.42 RCW) to mitigate for new permit-exempt groundwater withdrawals when water from a public water system is not available in a timely and reasonable manner. Users of new permit-exempt groundwater withdrawals shall also be required to meter their withdrawals in accordance with subsection (5), below.

Comments: What is consumptive use if the water is not consumed and is returned to the aquifer?[59]

How much ground water is removed by the wells and how does this affect base flow to the perennial and seasonal streams? How are these calculations made?[60] What are the senior water rights? How many of these rights are actually valid[61] and how do fish and wildlife obtain water rights and how do the dams obtain water rights?[62] How does Ecology calculate the "consumption" of ground water relative to base flow and impacts to base flow?[63]

Ecology should have more than one scientific study to base this requirement (metering) on, especially since this study provides no information on how water well use would impact perennial and seasonal stream base flow.[64] What is the purpose of metering or limiting ground water withdrawals?[65] Is there a direct correlation between ground water withdrawals and reduced base flow and if so, where are these scientific studies. The reverse is true, is there a correlation between increased base flow when ground water withdrawals are restricted? Where are the scientific studies that document this?[66]

Where are the scientific studies that prove that all of the base flow in all of the seasonal and perennial streams is ground water and is not unsaturated zone flow or a combination of ground water and unsaturated zone flow.[67] How many wells in this area produce unsaturated zone flow?[68]

DOE: (4) Water right permits authorized after the effective date of this rule will be conditioned to prevent impairment of instream flows established in this rule.

Comments: Does this mean all wells, even those that are located miles from the Spokane River? How will these wells impact the base flow in the Spokane River?[69]

DOE: (5) All future new surface and groundwater appropriations, other than rainwater collection, shall measure withdrawals.

(a) Water meters must meet specifications available through ecology.

(b) Water meters must be read and reported in accordance with chapter 173-173 WAC or as directed by ecology.

Comments: No one actually knows or has proven how much ground water is available, where is the recharge, how much, how much ground water is being "permanently removed" by "exempt water wells"? How much is actually providing base flow to the river compared to unsaturated zone flow?[70] What structural controls are present in the the SVRP aquifer?[71]

There is inadequate scientific study to make a blanket determination that all wells in the SVRP are impacting seasonal and perennial stream base flow (or that all new wells will impact the base flow).[72]

How is the use of private "exempt" wells more of an impact than using water from a municipal water supply?[73] However, the impact must be demonstrated scientifically and this has not been done. Ecology has not discussed how the information in one scientific paper provides the Department of the information necessary to impose these restrictions.[74]

The sentence in 5.b needs to be edited to redact the phrase “or as directed by ecology”. Either these are going to be codified rules of law, or they are going to be directives. Directives have no place in a representative republic.[75]

DOE: New Section

WAC 173-557-070 - Changes and transfers of existing water rights
No changes to, or transfers of, existing surface and groundwater rights in the area covered under this rule shall hereafter be granted if they conflict with the protection of the instream flow levels established in this chapter. Any change or transfer proposal can be approved only if there is a finding that existing rights, including the instream flows established in this chapter, will not be impaired.

Comments: Why? These are existing rights that are used to determine "how much water" is available. How would an exchange or transfer of a water right change the amount of water Ecology has "calculated" is available? There would be impacts if the transfer was from an existing water right that is being used, however, if this right has not been used for five years, it no longer exists and Ecology should not count this "senior" water right. Also, a change could include a reduction in a water right for mitigation purposes, such as reducing an agricultural water right to allow a manufacturing facility to have access to water. How is this determined? Considering there is no science to determine how ground water withdrawals affect the instream flow.[76]

DOE: WAC 173-557-080 - Compliance and enforcement

Ecology shall enforce this rule in accordance with chapters 90.03.and 90.44 RCW, and any other applicable laws and rules.

Comments: And these rules, should they become law should be compliant with all current laws regarding rule-making process,[77] and should be backed by peer reviewed science that has been made available to the public, especially those within this particular WRIA.[78] All pertinent documents have not been made available to the public, especially a complete SEPA, and an EIS. The public has a right to see these missing documents and rule making should include the documents. Comment period should not be closed before these documents have been produced, and ample time allowed for public review and comment.[79]

DOE: New Section

WAC 173-557-090 - Appeals

All final written decisions of Ecology pertaining to water right permits, regulatory orders, and related water right decisions made pursuant to this rule are subject to appeal to the pollution control hearings board in accordance with chapter 43.21B RCW.

Comments: DOE is concerned that the conflict that will arise should this rule making process become law. The proposed law will conflict with the State Water Polution Control Act and the Federal Clean Water Act. The fear is that the compliance with water quality standards, and/or discharge permit requirements may compel removal of waste and/or stormwater discharges to the Spokane River, which is part of what the DOE is relying on for in stream flow.[80]

This is what should cause DOE to seriously consider the impacts to the environment and to the people of this WRIA, and should compel the DOE to do an exacting and peer reviewed scientific study on the impacts to the environment, people, and economic impacts.[81] A Project of these proportions requires a complete and accurate SEPA, and a complete and accurate EIS, which have not been produced by DOE.[82]

DOE: New Section

WAC 173-557-100 - Regulation review

Ecology, after consultation with local, tribal, and state governments, may initiate a review, and if necessary amend this chapter, following the procedures of chapter 34.05 RCW, if significant new information becomes available, a significant change in conditions occurs, or statutory changes are enacted that are determined by the department to require review of this rule.

Comments: Public comment should be a part of this according to 34.05 RCW. The public should have all available completed documents, and ample time to review and comment on those documents.[83]

DOE: New Section

WAC 173-557-110 - Map of the rule area with control points

In administering this chapter, hydrologic evidence of the aquifer as defined in WAC 173-557-020(1) determines applicability. The map in Figure 1, below, generally reflects the boundary of the aquifer and is provided for informational purposes only.

Figure 1 - Spokane River and Spokane Valley Rathdrum Prairie (SVRP) Aquifer – rule area and control stations

Comments: This is based on limited studies, assumes there are no structural controls, assumes the aquifer is homogeneous, there are no confined or leaky confined aquifers present, and assumes that there are no isolated segments in this aquifer and that there are no fractured bedrock aquifers. This map is based heavily on interpretations with minimal data. I am unaware of any actual mapping of the aquifer, especially geophysical studies that are conducted specifically to identify ground water resources and characteristics of the aquifer(s).[84]

Timothy Ibbetson

Idaho Conservation League (Drunheller, Susan)

RE: ICL Comments on the Draft Rule; Water Resources Management Program for the Spokane River and Spokane Valley Rathdrum Prairie (SVRP) Aquifer

Dear Ms. Wessel,

Thank you for the opportunity to comment on the proposed in-stream minimum flow rule for the Spokane River. Since 1973, the Idaho Conservation League has been Idaho's voice for clean water, clean air and wilderness—values that are the foundation for Idaho's extraordinary quality of life. The Idaho Conservation League works to protect these values through public education, outreach, advocacy and policy development. As Idaho's largest state-based conservation organization, we represent over 25,000 supporters, many of whom have a deep personal interest in maintaining clean and healthy waterways and aquifers to support human health, recreation, wildlife and fisheries.

We are pleased that the Department of Ecology is exploring the issue of minimum stream flows for the Spokane River. As the Inland Northwest grows, and water becomes less reliable due to climate change, it's inevitable that our water resources will be strained by the many demands on them. Setting a

minimum instream flow is a smart way to protect the habitat that rivers provide and to provide certainty to people and businesses that depend on the river.

Moreover, because of the interplay between the aquifer and river levels, establishing a minimum in-stream flow for the Spokane River can both protect the beneficial uses of the river downstream while creating incentives to conserve water that will help protect the greater resource the Rathdrum Prairie Aquifer for the benefit of the entire region.[1]

As currently proposed, our primary concern is that the proposed minimum summer flows are too low. We do not believe 850 cfs is sufficient to protect redband trout and other fisheries, or the interests of summer recreationists and the numerous recreation based businesses that provide services to them.[2] It's always a concern when codifying an instream flow that the flow amount is seen as the maximum flow necessary to sustain fisheries and other beneficial uses, when, in fact, it is the minimum flow necessary. Across the West, water users commonly use codified instream flows as justification to consistently drop the river to that flow as opposed to recognizing that the minimum flow is actually a worst case scenario.[3]

Especially with these points in mind, we urge you to conduct additional studies to determine the appropriate flows inclusive of fisheries and recreation,[4] and to adopt a more conservative minimum flow, such as 80 percent of the exceedance curve for the Spokane gauge.[5]

Thank you for this opportunity to comment. If you have any questions, feel free to contact me at (208) 265-9565.

Regards,

Susan Drumheller NorthIdaho AssociateIdaho Conservation League

Inland Empire Paper (Krapas, Douglas P.)

Dear Ms. Wessel:

Please accept this comment letter on behalf of Inland Empire Paper Company (IEP). IEP appreciates the opportunity to comment on the proposed Spokane River Instream Flow Rule.

Introduction

IEP is concerned about how the proposed rule will impact water quality obligations that may require significant reductions or even elimination of treated wastewater discharges from its Millwood facility. IEP faces two significant water quality challenges to address nutrient loading and PCB concentrations.

The 2011 NPDES permit issued to IEP, Waste Discharge Permit WA0000825, Attachment 1, contains very stringent final effluent limits for total phosphorus, ammonia and CBOD. IEP has been in the process for many years to identify all known and available treatment technologies to meet these limits. It has been understood by Ecology and IEP that there are no currently available treatment technologies to meet the final mass loading limits in the permit.

The reduction of flows through conservation and reclamation of wastewater is specifically addressed in the 2010 Spokane River and Lake Spokane Dissolved Oxygen Total Maximum Daily Load (TMDL). The Managed Implementation Plan from the TMDL is attached as Attachment 2. IEP has accordingly planned on water conservation and significant reuse and reclamation of wastewater to reduce its discharge to a level that will meet the final mass loading limits in its permit.[1]

The Spokane River is also under scrutiny to reduce PCB loadings to the river. The NPDES permit requires IEP to develop PCB best management practices and to participate in the Spokane River Regional Toxics Task Force (SRRTTF), Attachment 1, Special Conditions S6 and S7. The SRRTTF must make measurable progress toward meeting applicable water quality criteria for PCBs. If reasonable progress is not made by the SRRTTF, Ecology must evaluate the need to prepare a TMDL for PCBs. Attachment 1, Condition S7. Ecology stated in the Spokane River PCB Source Assessment 2003-2007, Attachment 3, that IEP and other NPDES permit holders on the river would have to remove between 97% and 99% of the PCB concentrations in their effluent to meet the Spokane Tribe of Indians Human Health Criteria, Attachment 3, at 100. It is entirely possible that IEP may eventually have to cease all surface water discharges of its treated wastewater and noncontact cooling water in order to meet the Spokane Tribe criterion for PCB.[2]

Under the draft rule, WAC 173-557-070, IEP could be severely penalized or even prohibited from discontinuing its current surface water discharges leaving it with no ability to meet potential water quality obligations. This is likely the situation where the instream flow for the Spokane River at Spokane from July 16 through September 30 is set at 850 cfs, a flow that reflects the 50th percentile of historic flows. At leas half of the time any change or transfer of the IEP water right that would reduce flows is likely to cause an impairment of the proposed instream flows. IEP raised these concerns to Ecology in its comment letter on the preliminary draft instream flow rule. Ecology has not responded to that letter or addressed these concerns in the draft rule or in the accompanying rule making materials.[3]

Proposed Rule Language

IEP suggests the following language be added to the rule to support the need to reduce and potential need to eliminate discharges for water quality purposes. The Spokane River Instream Flow Rule should also be clear that a change or transfer of an existing right to meet water quality standards will not be considered an impairment of the instream flows established by the chapter.[4]

IEP requests that a separate section in the rule provide a clear exclusion from the instream flows for wate quality permit discharges together with a clear exemption for the reduction or elimination of such flows to limitations on changes and transfers of existing water rights as provided in the draft rule:
WAC 173-557-XXX Reduction and Elimination of Certain Discharges to Surface Water. Discharges to the Spokane River authorized under a water quality permit are not subject to the instream flows established i this chapter and any reduction or elimination of such discharges shall not constitute an impairment of the instream flows established under this chapter and are not subject to the provisions of WAC 173-557-070 regarding changes and transfers of existing rights.[5]

Analysis

Ecology must adopt this or a similar provision to meet its obligations in adopting a new instream flow rule Under Washington law, Ecology must demonstrate that water is available for the proposed instream flow and that establishing the instream flow will not be detrimental to public welfare.[6] Ecology should not treat effluent from the IEP mill as available to the purposes of the instream flow for the Spokane River. This is the effect of the rule where the 50th percentile of historic flows is reserved for the instream flow rule during the summer months.[7] It would also be contrary to the public welfare and public interest for Ecology to establish a new water right in the instream flow rule that could in any way undermine or reduce the flexibility currently available to meet very stringent water quality obligations.[8]

Ecology is required to make findings on the availability of water as well as the public welfare and public interest that support the proposed instream flows. The failure of Ecology to make specific findings on the availability and public welfare in the context of water quality issues is inconsistent with the ruling in Swinomish Tribal community v. Ecology, 178 Wn.2d 571, 311 P.3d 6 (2013). In Swinomish, the court

repeatedly stated that a minimum instream flow set by rule is a water right with a priority date as of the effective date of the rule. 178 Wn.2d at 584. The court specifically found that "minimum flow rights established by rule are treated as other rights." Before enacting the rule Ecology must affirmatively find (1) that water is available, (2) for a beneficial use, and that (3) an appropriation will not impair existing rights, or (4) be detrimental to the public welfare. 178 Wn.2d at 589 (citing Postema, 142 Wn.2d at 79, and RCW 90.03.290(3)).[9]

At the very least Ecology must determine the proposed minimum instream flows are in the public interest. This is expressly required in RCW 90.48.010. That section calls for the protection of wildlife, recreational and aesthetic values "whenever it appears to be in the public interest." See 178 Wn.2d at 592.[10]

The consideration of public welfare under RCW 90.03.290(3), as well as the public interest under RCW 90.22.010, requires Ecology to consider the unique water quality challenges in the Spokane River.[11] Ecology should include specific terms in the rule that fully accommodate and support the water quality objectives for the Spokane River. This can be accomplished by establishing a clear exclusion of water permit discharge flows from the rule and an exclusion from the change and transfer of use provisions in the rule for any reduction or elimination of the water quality permit discharges necessary to meet water quality standards.[12]

Providing IEP this protection under the rule will further the public welfare and public interest by supporting the highest water quality possible in the Spokane River while having no real impact on the proposed instream flows. IEP currently discharges approximately seven million gallons of water per day. If completely removed from the river this would amount to slightly more than one percent of the proposed summer flow of 850 cfs. This is an insignificant impact that should be addressed in the final rule.[13]

I appreciate your time in considering these comments and invite Ecology staff to contact me for further information and clarification.

Sincerely,

Douglas P. Krapas
Environmental Manager

International Union for Conservation (McQuarrie, Patrick)

Thank you very much. My name is Patrick McQuarrie. And I'm representing what was formally known as IUCN, International Union for Conservation. I have two comments on the process. First, I would like to thank the Department of Ecology for coming here and having this open forum. I think it's very important. I also applaud you on the efforts. I think this is an important step in preserving the integrity of the Spokane River, and in particular, using a community based approach to actually issue those goals.[H1]

I have two comments regarding the process that you're undertaking. The first one is the process by which you're setting the minimum instream flow is based on the two species of fish that were studied, and we talked about it on the break. I would like to see more information on the species present in the river system, how these different species were included in the process. Even if they weren't used to make the rule, it would be good to see a more thorough inventory of the ecological system that we're, you know, endeavoring to protect.[H2] That's the first comment.

The second comment is that it seems, from my perspective, that other beneficial uses weren't included in setting this minimum instream flow. I think it's been mentioned, recreation as well. So it would be beneficial to include those other uses in setting the minimum instream flow, as this would be a useful

process for other uses, as well as the fish.[H3] So that's my comment. Thank you.

Kistler, Claude

I am very concerned about the Department of Ecology instream summer flow recommendations (850 fcs) for the Spokane River. This flow level is insufficient for a fishing, swimming and boating in the river.[1] The Spokane River deserves flow recommendations that truly protect our river.[2] I urge you to dialogue with the Spokane Chapter of Trout Unlimited and Spokane River Keeper to address this critical issue.[3]
Respectfully, Claude Kistler

Kop Construction Co Inc (Kopczynski, Chris)

Ann, I am writing in protest of the proposed "in stream flow rule" base flows for the Spokane River. The proposed flows for June 16th to September 30th of 850cfs are far, far too low.[1] I have lived in Spokane fo sixty-six years, and have seen these water flows diminish every year. I live right on Latah Creek, which flows into the Spokane River on the West side of Spokane. The demand for water usage from Latah has practically dried up the water flow in summer months, so it is virtually a trickle of Spring water. Historically, this is a far cry from just ninety years ago when Chinook salmon used to spawn in both the Spokane River and Latah Creek. I know the future demand for water is only going to increase, but for the planets sake, we are going the wrong direction!![2] The proposed low flow of 850cfs for summer months in the Spokane River is the opposite of where we, as a planet, should be heading.[3] Keeping a viable waterway not only for ecological values is most important. Fisherman and recreational users create jobs too![4] Hopefully the Washington Department of Ecology will reconsider this decision.[5] Chris Kopczynski
President Kop Construction Co. Inc.

Laegreid, Peter

The Spokane River is one of Washington's most important rivers.[1] During hot summer months, thousands of people turn to the river for relief and recreation.[2] Fish and wildlife depend on this river: water is life.[3]

Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers statewide.[4] The Department of Ecology failed to analyze flows needed for recreational use of the river.[5] The proposed flow does not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[6]

By low-balling the flow, Washington State is effectively giving away the river to Idaho the upstream state that will claim all water not protected by Washington's flow rule.[7]

For the Spokane River, no flow rule is better than a bad rule. I ask that you either set the summertime low flow at the protective level of 2,500 cfs, or withdraw the rule altogether.[8]

As goes the Spokane Rivers, so goes the other rivers of Washington State.[9] Please take steps to protect this important river.[10]

Lands Council (Peterson, Mike)

Dear Department of Ecology,

The Lands Council, a not-for-profit conservation organization based in Spokane, Washington, appreciates the opportunity to comment on the draft proposed instream flow rule for the Spokane River. Establishing minimum instream flows is important for the future of the fishery on the Spokane River, particularly as a warming climate may change the snowpack and runoff.[1]

Ecology has proposed the following base (or low) flows for a future Spokane River:

- October 1 – March 31st – 1700 cfs (cubic feet per second)
- April 1st - June 15th – 6500 cfs
- June 16th to September 30 – 850 cfs

These flows do not refect what the Spokane River historically had as flows, and could create huge problems if junior water rights were given based on them, particularly during the June 16 to September period.[2]

There may be a simple solution, which is based on the average flows that come into Lake Coeur d'Alene. Add the average daily flows into Lake Coeur d'Alene, which are almost all the North and South Fork Coeur d'Alene and St Joe Rivers. This would put the flows at Barker Road at 3500 in late June, around 2000 in mid July, and nearly 1000 cfs in mid August and about 900 at the end of August. Another 350 cfs or so flows into the river from the aquifer by the time it hits downtown, depending on month. However, that additional water from the aquifer could change if more water is withdrawn from the aquifer by either Idaho or Washington, so it is reasonable to build in a safety margin. We recommend that the base (minimum) instream flows should be the average USGS measured combined flows of the St. Joe (Fig 1) and Coeur d'Alene (Fig 2) combined, plus an additional 10% as a safety margin, throughout the year.

Figure 1

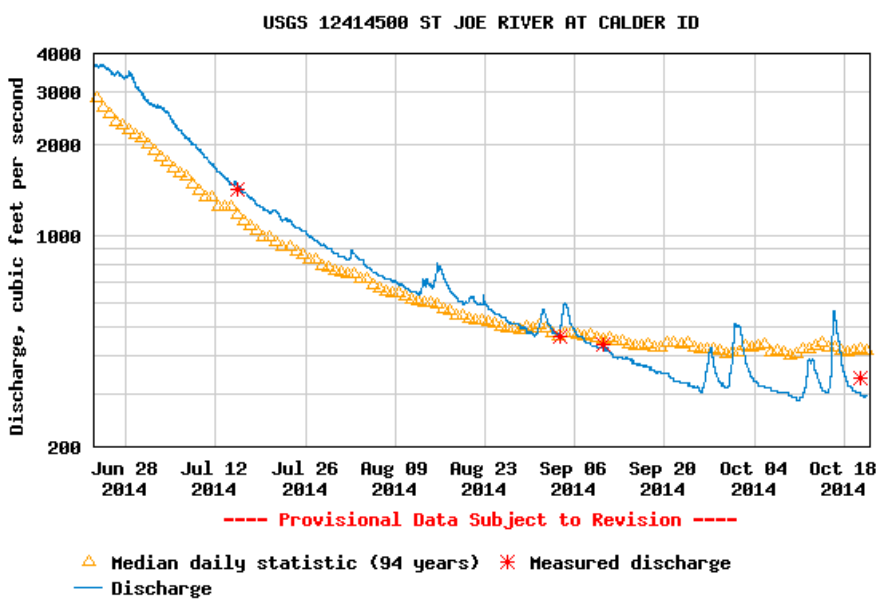


Figure 2

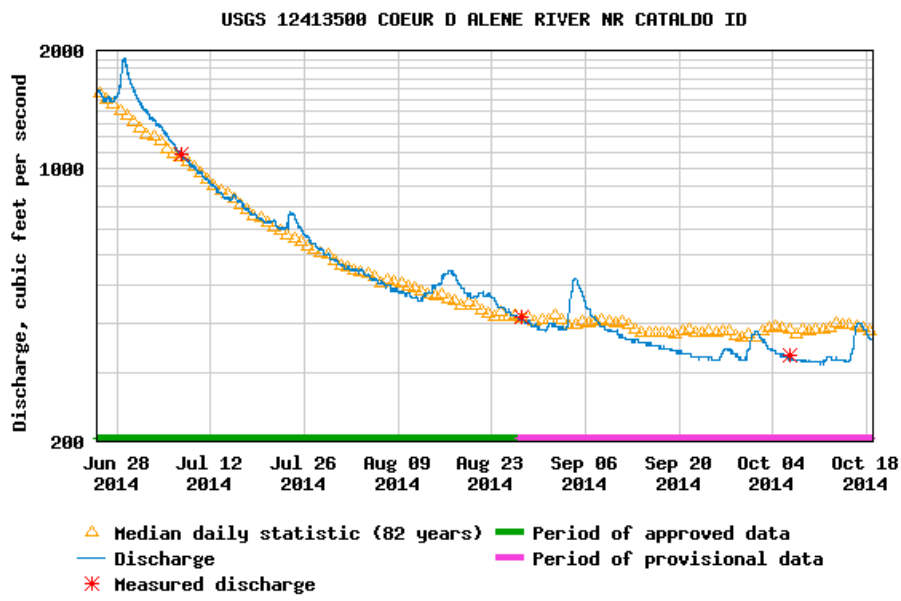


Figure 3 – Post Falls Dam controlled flows at downtown Spokane:

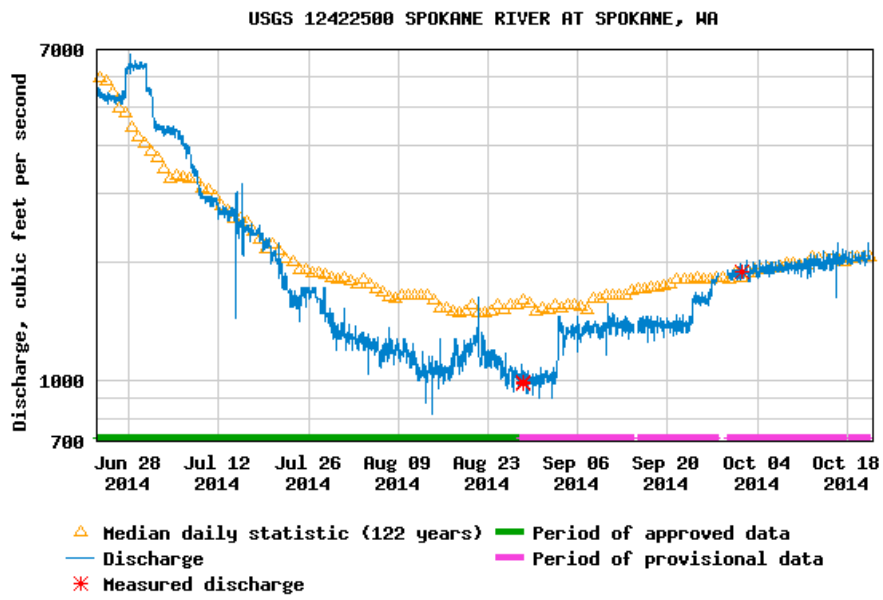


Figure 3 shows the USGS flows measured in the Post Falls dam controlled river. The flows in downtown Spokane averaged over the past 122 years match our recommendation fairly closely. Since Lake Coeur d'Alene stores a substantial quantity of spring runoff, an instream flow that matches our recommendation is very achievable, and unlikely to have an impact on lake levels.[3]

If a base flow was set that matched our recommendations, it would still not help those rafting the lower Spokane River in much of August. Although inflatable kayaks can make it through the Devils Toenails at 1500 cfs, it is very difficult for rafts below 2500 cfs. It would be worth studying whether a daytime release in August, that would improve rafting in the lower Spokane River, would be biologically and economically feasible. Included in this study would be the benefits of having this extra release go over the lower and upper falls in downtown Spokane, which is a major tourist attraction that benefits from higher flows.[4]

Thank you for the opportunity to provide comments,

Mike Peterson
Executive Director

Lands Council (Parrish, Amanda)

Hello Ann,

I'm writing to tell you that I do not believe 850 cfs in the Spokane River during the summer is sufficient for river health, recreation, or fishing.[1] As the watershed program director of The Lands Council, I have spent most of my time working toward restoring the Spokane River and its surrounding watersheds. I do not wish to see its water over-utilized because of this low in-stream flow requirement.[2] In the summer I often float the Spokane River in my spare time, and do not believe 850 cfs is adequate for this either.[3]

Please reconsider this decision.

Thank you for your consideration,

-AP.

Amanda Parrish
Watershed Program Director
The Lands Council

Law Offices of Andrea K Rodgers Harris

To Whom It May Concern,

We are writing to express our grave disappointment with Ecology's decision to put profits over people and wildlife in its proposed insream flow rule for the Spokane River.[1] As drafted, the instream flow rule fails to protect instream flows deemed biologically necessary to support a thriving wild fish population.[2] In addition, Ecology failed to even assess what flows are appropriate for recreation and aesthetic purposes, in direct violation of the law.[3] An "economically viable" Spokane River does not require taking water out of the river to be put to use by private corporations. Rather, countless studies confirm that true sustainable economic vitality needs to be measured in a holistic manner and the economic value of instream flows for people and fish is a critical component of that analysis.[4]

The objective of the Clean Water Act ("CWA") "is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). Congress declared that "it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983 . . . ." 33 U.S.C. § 1251(a)(2). To facilitate the objectives of the CWA, Section 303 provides that states are to adopt site-specific water quality standards, subject to the review and approval of the Environmental Protection Agency ("EPA").

The State of Washington developed its own water quality standards, as permitted under the Clean Water Act, 33 U.S.C. §1313, and in so doing the Washington State Legislature stated that "[i]t is declared to be the public policy of the state of Washington to maintain the highest possible standards to insure the purity of all waters of the state consistent with public health and enjoyment thereof, …" In furtherance of state policy and to implement the Clean Water Act, Ecology promulgated water quality standards for surface water that consist of designated beneficial uses of state water, narrative and numeric criteria for conventional pollutants and toxics, and an anti-degradation policy. Ecology is the state agency charged with protecting and enforcing state water quality standards.

The state water quality standards consist of three independent parts: (1) designated uses of each water body; (2) water quality criteria for the waters based upon the designated use, 33 U.S.C. § 1313(c)(2)(A); and (3) an anti-degradation policy. 33 U.S.C. § 1313(4)(B). The anti-degradation policy requires "that state [water quality] standards be sufficient to maintain existing beneficial uses of navigable waters, preventing their further degradation." PUD No. 1 of Jefferson County v. WA Dep't of Ecology, 511 U.S. 700, 705 (1994). At a minimum, a state's anti-degradation policy must ensure that "existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." 40 C.F.R. § 131.12. Pursuant to these three independent sources of authority under the CWA,, Ecology adopted water quality standards applicable to all waters of the state, as discussed below, including the Spokane River. Chapter WAC. 173-201A; WAC 173-201A-602(1).[5]

Ecology is required to protect aesthetic values when drafting its instream flow rule for the Spokane River. The Pollution Control Hearings Board has specified that "aesthetic enjoyment can be through sight, smell, touch, and taste and is also a form of recreation." CELP et al v. Ecology et al., PCHB No. 12-082 (Findings of Fact, Conclusions of Law & Final Order) (As Amended Upon Reconsideration) (Aug. 30, 2013) at 25. Under the Washington state water quality standards, aesthetic uses of state waters including the Spokane River are protected in several ways. Aesthetic uses are certainly protected by the narrative criterion that requires that "aesthetic values shall not be impaired by the presence of materials or their effects, excluding those of natural origin, which offend the senses of sight, smell, touch or taste." WAC 173-201A-260(2)(b). However, this is by no means the only provision within state law that protects aesthetic uses of water.[6]

Designated uses of state waters include: "salmonid spawning, rearing and migration; primary contact recreation; domestic, industrial, and agricultural stock watering; wildlife habitat; harvesting; commerce and navigation, boating; and aesthetic values." WAC 173-201A-600(1) (emphasis added). "Aesthetic values" constitute a "general criteria" for "recreational use," which is "designated for protection in fresh surface waters of the state." WAC 173-201A-200(2)(a)(ii). Aesthetic uses also constitute an independent, and separate "designated use" to be protected by state water quality laws. WAC 173-201A-200(4). Thus, aesthetics are both a "designated use" and a "general criteria" and demand protection as such. Jefferson County, 511 U.S. at 714 (quoting 33 U.S.C. § 1313(c)(2)(A) ("a water quality standard must 'consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses.' "). Ecology is authorized to "take all action necessary" to secure to the state the benefits and to meet the requirements of the CWA. RCW 90.48.260.[7]

Washington's Water Resources Act, Ch. 90.54 RCW, also protects aesthetic values in state waters. Beneficial uses of state waters are defined to include "preservation of environmental and aesthetic values" (RCW 90.54.020(1)), and "perennial rivers of the state shall be retained with base flows necessary to provide for preservation of aesthetic and other environmental values." RCW 90.54.020(3)(a). The Washington Supreme Court specifically identified these laws as "other appropriate requirement(s) of state law" under Clean Water Act Section 401(d) that support the imposition of instream flows to protect designated uses of state water bodies. Dept. of Ecology v. PUD No. 1 of Jefferson County, 121 Wash.2d 179, 189-92, 849 P.2d 646 (1993), aff'd on other grounds, PUD No. 1 of Jefferson County v. Ecology, 511 U.S. 700 (1994).[8]

Washington's anti-degradation regulations provide a third, independent basis for Ecology's authority and obligation to mandate instream flows that protect aesthetic and recreational uses. See WAC 173-201A-300. The state's anti-degradation policy mandates that "[e]xisting and designated uses must be maintained and protected. No degradation may be allowed that would interfere with, or become

injurious to, existing or designated uses, except as provided for in this chapter." WAC 173-201A-310(1). The function of the anti-degradation policy is "to provide protection against activities which, even though they may meet specific water quality and sediment standards, may nevertheless have the effect of degrading water or sediment quality to such a degree that other beneficial uses of an affected water body suffer adverse impacts, thereby calling into question the overall sustainability of those uses." Friends of Cowlitz v. City of Tacoma, PCHB No. 02-022, at *4 (December 13, 2002) (quoting Marine Environmental Consortium v. Ecology, PCHB 96-257 (1998)).[9]

In addition to the state's anti-degradation policy, Washington law affirms that "sufficient lowering of the water quantity in a body of water could destroy all of its designated uses, [like] recreation." Jefferson County, 511 U.S. at 719; see also WAC 173-201A-200. "Recreational use" is a characteristic use designated under the state's water quality classification scheme and is described as encompassing "aesthetic enjoyment." WAC 173-201A-030(5)(b)(v). A "state may impose minimum instream flow conditions as part of 401 water quality certifications where necessary to enforce a designated use and conform to state and federal anti-degradation policies." Pend Oreille County, 146 Wash.2d at 811. In Snoqualmie Tribe v. WA Dep't of Ecology, the plaintiffs asserted rights to minimum instream flows based on cultural and spiritual interests. The Pollution Control Hearings Board found court that "aesthetic enjoyment, which is a characteristic use, includes enjoyment of beauty," and that "the tribe's interest is in much more than the beauty of the falls." Snoqualmie Tribe, 2004 WL 763071, at *15 (April 7, 2004). The Board also confirmed that Washington statutes and regulations codify a concrete basis to protect interests in aesthetics. Id. Thus, Ecology's authority to set instream flows extends to consideration and protection of recreational enjoyment and aesthetic beauty.[10]

In its proposed instream flow rule for the Spokane River, Ecology failed to study what flows protect aesthetic and recreational interests,[11] let alone implement its ample legal authority to protect present and future generations' rights to a Spokane River that has ample instream flows. That is unacceptable. Please withdraw the proposed Spokane River instream flow rule and create a rule that protects the beautiful Spokane River for generations to come.[12]

Sincerely,
s/ Andrea K. Rodgers s/ Charles M. Tebbutt

Lawrence, Christopher

I care about the future of the Spokane River[1] and that 850 cfs during the summertime is not enough water for the future of a fishable, swimmable, boat-able Spokane River.[2] This recommended summer flow of 850cfs gives away the future of our river to the forces of rampant over-consumption.[3] The authority and purpose of the instream flow rule is to protect ecological values, aesthetic values and recreational values for future generations of river-users. This has never been so important as it is in an age of global climate change.[4]

The Spokane River and our community deserve flow recommendations that truly protect the future of our river. You must do better.[5]

Christopher Lawrence

League of Women Voters, Spokane (Murphy, Ann)

Re: Chapter173-557 WAC – Water Resources Management Program for the
Spokane River and Spokane Valley Rathdrum Prairie Aquifer and amendment to
WAC 173-555-010.

The League of Women Voters of the Spokane Area (LWVSA) has concerns about Ecology's proposed minimum instream flows for the Spokane River as detrimental to the River.[1]

The Spokane River is central to and at the heart of the City of Spokane and surrounding area.[2] It is important to not only consider what the minimum instream flows mean to the fish in the river, but also to others who use the river.[3] The Spokane River is also of great importance for wildlife, recreation in and along the river (The Centennial Trail), and area economics.[4] The river is central to Spokane's Riverfront Park for which citizens just approved a $63 million bond for park improvements.[5] In addition, the Spokane River commingles with the Spokane Valley/Rathdrum Prairie Aquifer – designated a sole source of drinking water in Spokane.[6]

The League of Women Voters of Washington has long-standing studies and positions on the Columbia River Basin that support comprehensive basin-wide planning, based on an inventory of basin water resources including ground and surface water sources, viable water rights and current use and projected future needs.[7] In addition, the League's comments on the Columbia River Treaty Review supported the inclusion of an ecosystem functioning to reestablish a more natural flow that would benefit fish and wildlife.[8]

While we applaud the Department of Ecology's efforts to set an instream flow rule for the Spokane River and the Spokane Valley Aquifer to "protect and preserve water in streams for instream resources including fish, wildlife, recreational uses, wastewater management and hydropower."[9] However, you also indicate that you "will use the rule as a regulatory flow threshold to determine whether there is water to withdraw for new uses while still protecting fish and other instream resources."[10] You also note "A clean and flowing river is good for the environment and good for our economy."[11]

However, the LWVSA has deep concern that Ecology's proposed minimum flows actually undermine and contradict your stated purposes, and the best interests of the Spokane community.[12] Your proposed summer minimum flows of 850 cfs in the Spokane River and 500cfs at Greenacres are at the bottom of the summer historic lows in hydrograph USGS 12422500 Spokane River 2009 to 2014. This low level of summer flow would negatively impact the aesthetic draw of the river. Recreational uses such as whitewater boating and hiking near the river, and fish and wildlife would be negatively affected.[13]

It is important to note that according to Streamflow Trends in the Spokane River and Tributaries, Spokane Valley/Rathdrum Prairie, Idaho and Washington, United States Geological Survey, Scientific Investigations Report 2005-5005, low instream flows are trending downward. This appears to be changing slightly following Avista's Post Falls Dam license renewal. But a continued evaluation would be important.[14]

A dewatered Spokane River would certainly degrade the Spokane downtown experience and therefore, the economy as well as the environment.[15] Also, low flows over Upper and Lower Spokane Falls would take away from the power of the falls, which is an important tourist destination site and downtown focal point.[16] In our view, instream flows should replicate the natural shape of the hydrograph to sustain the natural functioning of the river.[17]

Through history the Spokane River was first of great importance and a sacred place for our native populations. The river has experienced degradation from being treated badly by early settlement and is slowing being restored through efforts from Expo '74 to current-day efforts. The City of Spokane continues to improve the clean-up of discharges into the river.[18]

We therefore urge you to revise your proposed rule for instream flows for the Spokane River, especially the June 16-September 30 summer flows to higher cfs.[19]

Thank you for considering our comments.

Ann Murphy, President
League of Women Voters of the Spokane Area

League of Women Voters, Spokane (Abel, Kim)

Re: Chapter173-557 WAC – Water Resources Management Program for the Spokane River and Spokane Valley Rathdrum Prairie Aquifer and amendment to WAC 173-555-010.

The League of Women Voters of Washington has long-standing studies and positions on the Columbia River Basin that support comprehensive basin-wide planning, based on an inventory of basin water resources including ground and surface water sources, viable water rights and current use and projected future needs.[20] The LWVWA also supports the establishment and maintenance of minimum instream flows on all rivers in the State.[21] In addition, the LWVWA's comments on the Columbia River Treaty Review, supported the inclusion of ecosystem functioning to reestablish a more natural flow that would benefit fish and wildlife.[22]

The LWVWA applauds the Department of Ecology's efforts to set an instream flow rule for the Spokane River and the Spokane Valley Aquifer to "protect and preserve water in streams for instream resources including fish, wildlife, recreational uses, wastewater management and hydropower."[23] However, you also indicate that you "will use the rule as a regulatory flow threshold to determine whether there is water to withdraw for new uses while still protecting fish and other instream resources."[24] You also note "A clean and flowing river is good for the environment and good for our economy."[25]

However, the LWVWA has deep concern that your proposed minimum flows actually undermine and contradict your stated purposes.[26]

Your proposed summer minimum flows of 850 cfs in the Spokane River and 500cfs at Greenacres are at the bottom of the summer historic lows in hydrograph USGS 12422500 Spokane River, 2009 to 2014. This low level of summer flow would certainly negatively impact the aesthetic draw of the river; recreation uses such as whitewater boating and hiking near the river, fish, and wildlife would be negatively affected.[27]

Photos of the river at flows of 1000cfs and below clearly show a diminished and less scenic river.[28] A dewatered Spokane River would certainly degrade the Spokane downtown experience including Riverside State Park and nearby businesses that capitalize on a robust river. Also, low flows over Upper and Lower Spokane Falls would certainly take away from the power of the falls, which is an important tourist destination site.[29] In our view, instream flows should replicate the natural shape of the hydrograph to sustain the natural functioning of the river.[30]

We believe you have not adequately studied the negative environmental and economic impacts of your proposed rule, which would seriously degrade the river rather than protect it.[31] Your aim appears to be to divert more water from the river enabling you to give out new water rights to new development interests.[32]

We therefore urge you to revise your proposed rule for instream flows for the Spokane River; especially the June 16-September 30th summer flows to higher than 1000cfs.[33]

Thanks you for considering our comments.

Kim Abel, President
League of Women Voters of Washington

Mace, Samantha

Dear Ms. Wessel,

I want to submit comments on the proposed flow rules for the Spokane River.

I frequently fish and boat the Spokane River, esp. the stretch below Monroe Street and down through West Central and on in to Riverside Park. It is one of the best urban assets Spokane has.[1]

I'm extremely concerned about the low flows proposed for summer; it's not nearly enough flows to support recreational boating's, healthy conditions for native redband trout,[2] not to mention the aesthetic values.[3] We need much more water allocated for the river. The low level proposed by DOE is, frankly, shocking.[4]

Most disturbing is the poor position it will put WA State in when it comes time to negotiate with Idaho over water rights. Why would we want to leave so much water out there for grabs? We need to allocate and defend as much water as possible for the Spokane River.[5]

In addition, I find the economic analysis provided in the DOE documents very insufficient. Recreational fishing and boating and the economic benefits it generates aren't even allocated. We have several local businesses that guide and provide equipment for fishing and boating.[6] And the fishing and boating is a special quality of life asset for our town that is generating economic and civic benefits by making our city an attractive and special place to live.[7]

I urge Dept. of Ecology to change direction and advocate for flows much, much higher, based on enhancing our native fish populations and benefiting recreation activities.[8]

Sincerely,
--
Samantha Mace

Mackrow, Paula

The Dept of Ecology proposes to adopt an instream flow rule of 850 cfs for the Spokane River summer months

As a concerned citizen I am writing to note that that from simple photo comparison of recent flows in the Spokane River, it is clear this is a potential degradation of water quality. Such degradation is incompatible with the current laws of the State of Washington.[1] Ecology needs to undertake studies to determine the optimal flows for fish and recreation.[2] Ecology must also assess how the instream flow rule will affect future interstate allocation with Idaho.[3]

Problem 1: The Department of Ecology is proposing summer season flows that do not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[4]

Problem 2: The Department of Ecology completely failed to study recreational flows, despite the Spokane River's tremendous popularity with boaters. These studies are needed![5]

Problem 3: Idaho to take all water not claimed in Washington's flow rule. Ecology needs to assess the interstate allocation implications of its flow rule.[6]

The Dept. of Ecology staff need realize the proposed flows are unacceptable to the citizens of the State.[7]

These flow numbers were created without adequate study of multiple factors including:
* Recreation and scenic values.
* Spokane's unique habitat and redband trout species.[8]
* This rule has interstate water allocation consequences - what are they? Will Idaho be able to take unallocated river flow?[9]

I care about the Spokane River, Washington's instream flow program, and the future of our rivers.[10] As a long term participant in water allocation schemes and strategies, I have seen the lack of Ecology's concern for best available science and adequate consideration of of the value of water in the stream vs withdrawal for private development purposes.[11] Once again this proposal is indecent, ill considered and not in the interests of the people of the State of Washington.[12]

Thank you for your consideration, Paula Mackrow

MacLeod, Norman

To whom it may concern:

Please accept the following as my comments on the proposed New Chapter 173-557 WAC and the proposed Amendment to WAC 173-555-010 concerning the Spokane River mainstem and the Little Spokane River.

RCW 34.05.328 (1)(b) requires you to analyze alternatives to rule making and the consequences of not adopting the rule. Proposed WAC 173-557-010 includes language responsive to RCW 34.05.328 (1)(a), but does not include language responsive to RCW 34.05.328 (1)(b). Proposed WAC 173-557-010 fails to comply with the plain language mandate of RCW 34.05.328 (1)(b).[1]

RCW 34.05.328 (1)(d) requires you to determine that the probable benefits of the rule are greater than the probable costs. Your probable benefit numbers are artificially inflated, while your probable cost numbers are seriously understated. You failed to include the opportunity cost represented by agricultural activities and other businesses that will not be able to locate within the proposed rule's regulated area. You have failed to adequately comply with RCW 34.05.328 (1)(d).[2]

The cost-benefit analysis includes mention of alternatives that were considered, but these were not alternatives to rule making because they would have to be implemented by rule.

The cost-benefit and least burdensome alternative analyses document leaves out many reasonable alternatives that should be evaluated. Therefore, the analyses are incomplete. Because you have not included a diverse group of reasonable alternatives, you lack sufficient basis for declaring the proposed rule to be the least burdensome alternative. You have failed to fully comply with RCW 34.05.328 (1)(e).[3]

RCW 34.05.328 (1)(i) mandates that you coordinate the proposed rule, to the maximum extent practicable, with other federal, state, and local laws applicable to the same activity or subject matter. You have not presented evidence that you have performed such coordination, nor that you have coordinated with local governments to ascertain what laws, rules, or regulations they may have that have application for the same goals and objectives as the proposed rule. In order to perform this coordination,

you would need to contact each local government within the area affected by the proposed rule. This would include the government of each county in the affected area, each municipality in the affected area, and each smaller government entity (junior taxing districts) having responsibility for water supply within those jurisdictions.

In order to coordinate your proposal with other federal, state, and local laws, you need to be able to access those laws. In the case of junior taxing districts, such as irrigation districts, you would need to contact those entities for access to the necessary information.

There does not appear to be any evidence in your publicly available information for this proposal that you have contacted many of these entities. Several of them have passed legislation that applies to the activity and subject matter of the proposed rule. Unless you have obtained those legislative documents, and coordinated them with the proposed rule you have failed to comply with RCW 34.05.328 (1)(i).[4]

On September 10, 2014, the Department of Ecology issued a determination of non- significance for the proposed rule. This determination is erroneous because it disregards the fact that there are two components to "environment" in environmental policy law: the natural environment and the human environment. While the proposal may not have significant adverse impacts to the natural environment, it does have profound adverse impacts to the human environment. Therefore, an environmental impact statement, including analysis of alternatives to the proposal's preferred alternative, needs to be prepared in compliance with RCW 43.21C.030 (2)(c).[5]

Your determination of non-significance does not include the information necessary to develop policy that complies with the RCW 43.21C.020 (2)(f) mandate to achieve a balance between the human environment and the natural environment. If you do not have that information in the record, your final decision on whether to adopt the proposal fails to comply with the statute.[6]

You base the proposed rule on the notion that stream base flow is produced from a shallow unconfined aquifer, which would be highly unusual for Washington, where most stream base flow is from unsaturated zone preferential flow. Unsaturated zone preferential flow is not groundwater, nor is it a groundwater aquifer.[7]

None of the studies you list as references provide the information necessary to quantitatively characterize the groundwater resources in the area covered by the proposed rule. You rely heavily on a USGS study whose authors state is incomplete, because no field studies or aquifer testing were conducted, and that more study is required. This does not represent the level of science that can reasonably be defined as best available science.[8]

Your list of scientific references is incomplete. It includes some studies pertinent to the area covered by the proposed rule, but it does not include key references that you are on record as using for other instream flow rules. These include studies and texts on the subject area of instream flows, such as Instream Flows for Riverine Resource Stewardship, or Integrated Approaches to Riverine Stewardship, both published by the Instream Flow Council. (You most certainly have access to these two particular texts . . . WDFW's Hal Beecher is one of the authors.)

Your list also lacks references that comprehensively describe the hydrogeologic processes and structures that provide water for stream flow, and evidence of which of those processes are providing water for stream flow for the specific areas covered by this proposed rule.[9]

Without reasonable access to this information, the neither the lay nor the professional public cannot readily

determine whether the threats to species and ecosystems actually exist to the degree you assert, nor can they determine whether the proposed rule is the most reasonable and necessary approach to take.

Without ready access to the information you have used to support and justify the proposed rule, members of the public cannot identify whether you have considered contrasting or contradictory scientific information pertinent to this proposal that they may be aware of, so that they could submit that information for your consideration.[10]

You have not identified which of the listed studies have been published in a peer reviewed journal, which studies have been peer reviewed but not published, which studies have not been peer reviewed, nor which references should not be considered scientific information, such as the Instream Flow Recommendations Memorandum for WRIA Planning Units 54 and 55/57, WRIA 54/57 Spokane River Instream Flow Workgroup. Members of the public are unable to reasonably ascertain the quality of the science you use to justify and support the proposed rule without this information.[11]

RCW 34.05.328 (2) mandates that you must place in the rule-making file documentation of sufficient quantity and quality as to persuade a reasonable person that the determinations are justified. You have failed to comply with the plain- language mandate of RCW 34.05.328 (2).[12]

My comments focus on areas that most commenters are not likely to have already incorporated into their input for your consideration. I have heard the concerns of many people who live in the area that will be affected by this proposed rule, and am certain that many of them will be covering other areas of concern that I share.

I would like to observe that this proposal contains deficiencies in process and science that we have seen repeated to various degrees in WRIA after WRIA over the years. I am deeply concerned that with all of the experience you have had in setting instream flows, you continue to be seriously deficient in complying with the mandates contained in statutes such as RCW 34.05, Washington's Administrative Procedures Act. The lack of improvement in how you work with scientific information over time is also troubling to me, and speaks to a need for greater legislative oversight for this program.

These continuing deficiencies, occurring despite volumes of public comment, other correspondence, and time spent in meetings and hearings, add up to my strong perception of arbitrary capriciousness on your part in establishing instream flows and setting them in rule, to the great detriment of the human environment for the citizens of the State of Washington.

I believe the deficiencies of this proposed rule rise to a level that brings the proposed rule to a point where it is legally indefensible.[13] Therefore, your most prudent course of action at this time is to withdraw the proposal as administratively deficient and not justified or supportable by the scientific information considered to date.[14]

Thank you for your time and consideration of my comments.

Norman MacLeod

Markwardt, D D

Dear Persons:

Scientists have determined that 2,500 is the minimum flow necessary for the Spokane River to sustain viable aquatic life and recreational opportunities for Eastern Washington residents.[1] Scientists that have

been educated in marine biology and fisheries are more knowledgeable than politicians in determining the necessities of aquatic life.[2] Please enforce the 2,500 minimum flow as recommended by our scientific advisers.[3]

Dr. D. D. Markwardt, Spokane

May, Kimbo

The proposed flows for the Spokane River appears to be set drastically low and well below what is historically recognized even since dams were placed on the river. The flows the EPA is recommending are too low for several reasons.[1]

1. HABITAT. The summer proposed flow will stress an already embattled wild, distinctive, trout population and force them to retreat into vulnerable concentrations in aquifer recharge areas.[2] The flow proposed will cause water in much of the river to experience a drastically warmer temperature than nature intended. Fish without access to recharge areas will be threatened and invasive, warm water species will get an unintended benefit. I have personally experienced this trend with the current flows and it is alarming.[3]

2. RECREATION, SAFETY, LITTER. These flows are too low for the many uses of the river in summer months. Boaters and floaters use this river a lot in the summer.[4] It seems to be ever increasing too. More river users are utilizing the river outside of the summer months. Part of the draw has been the realization that this recreational resource is not a long drive away and is beautiful in the river corridor![5]

This has both positive and negative impacts. Lots of users means more people begin to appreciate and share concern for keeping it clean and useful. It also means people who do not always share those feelings may create more trash.[6] Either way the low flow can actually be more dangerous than a higher flow. This is because the rock structure along much of the river includes basalt and well worn boulders. This river is one of the most slippery anywhere I have been and I have stood in many. Most casual, recreational floating is done in flimsy water craft and inner tubes. Many of these people do not wear appropriate footwear to deal with the slippery rock or sharp basalt. The low flow exposes more large rocks (which I have observed wrapping canoes and rafts and popping flimsy craft) and shallow, un-floatable sections. This leaves people slipping and falling in the rocks.[7] Abandoned and damaged craft litter the shoreline and depths as flows change. Beverage, containers and coolers are also abandoned as survival takes precedence. Footwear and beer cans are the top items found littered in the river way. While this is a human problem it is not going away. Some of it can be mitigated by a higher flow which will leave more obvious routes.[8] It will also allow more water borne invertebrate habitat.[9]

3. AESTHETICS. It has been a long standing issue and one that people in the area felt strong enough about to enact policy to have water spilling over the falls in downtown Spokane to enhance the beautiful image and tourism of the area for an economic benefit. It is a marquis signature of Spokane.[10]

4. ECOLOGICAL and FUTURE IMPACT. Last but perhaps most importantly, no studies have been done to actually understand the impact of such low flows over time on the natural ecosystem. Yes, nature can and does deal with occasional, drastic fluctuations but this is a lasting document which will change things for the foreseeable future. It seems ridiculous not to know what that is going to potentially do.[11] As well we all know growth is likely and use of water may out strip supply. Further this is a bi-state river and industrial as well as residential use is pulling from the water supply upstream. Everyone seems to think we have a limitless supply but it is becoming more evident that is not the case. We might do well to start changing our water guzzling habits now. Leaving more flow now may help us change our behavior and leave a little room for adjusting later.[12]

Rivers are at there best flowing natal and wild as intended. They are almost an organism with a life cycle and maturation process that does lots of earth work. While this may not always be the way things are, the less we impact them the more they work for us. If we are going to legislate a life of a river a balance flow hinging in favor of the natural side seems the best option.[13]

McKay, Mariah

Dear Ms. Wessel,

I am writing to offer comment on the recent draft instream flow minimums for the Spokane River. In short, I believe the proposed levels are irresponsibly low.[1] Our community in Spokane needs the Department of Ecology's help in holding ourselves to a higher standard.

Spokane has some of the highest water consumption rates per person in the state and we can do much better to preserve higher flows in our river. In Spokane people waste thousands of gallons over-watering lawns in the summer, washing vehicles and filling and emptying personal pools on a regular basis.

Our water is artificially cheap and our population has been given no real financial incentive to preserve water resources. Pressures on water use will only increase as our population grows, weather gets hotter, and commercial interests are invited to take further and further advantage of our artificially "cheap and available" water supply.[2]

Insects and plants need more river habitat to survive and stabilize their populations, not less.[3] Please urge the Ecology to reconsider in favor of much higher minimum flow standards.[4]

Thank you,
Mariah

McRoberts, James

Dear Ms Wessel, please do not adopt the current proposed rule[1] and consider the following points:

Problem 1: The Department of Ecology is proposing summer season flows that do not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[2]

Problem 2: The Department of Ecology completely failed to study recreational flows, despite the Spokane River's tremendous popularity with boaters. These studies are needed![3]

Problem 3: Idaho to take all water not claimed in Washington's flow rule. Ecology needs to assess the interstate allocation implications of its flow rule.[4]

James C. McRoberts

Monthie, David

In order to be consistent with state law and what I believe to be in the Spokane watershed plan, you should include in your identification of potential new sources the use of reclaimed water for purposes authorized under state law, and should require evaluation of their availability before issuing new permits, or allowing new uses, for nonpotable purposes.[1] Dave Monthie

"Whether we and our politicians know it or not, Nature is party to all our deals and decisions, and she has more votes, a longer memory and a sterner sense of justice than we do." Wendell Berry[2]

Dear Ann:

The following are my comments as an individual and as a Board member of the Center for Environmental Law and Policy (CELP) with regard to the proposed Instream Flow Rule for the Spokane River

General

Do not adopt the proposed rule as is,[3] for the following reasons:

(1) The proposed flows do not adequately protect fish, and in particular, do not provide flows that will ensure healthy populations of listed species under the federal Endangered Species Act (ESA).[4]

(2) The proposed rule, and accompanying technical documents, do not adequately analyze or protect other instream flow values as required by RCW 90.54.020(3)(a). These specifically include recreational and aesthetic uses. As the PCHB recently found in the Enloe Dam case, Ecology must adequately address these issues in its analyses before taking actions that may allow reductions in flows to levels insufficient to support these uses and values.[5]

(3) The economic analysis documents do not adequately address potential impacts on businesses (e.g., recreational and fishing) that would be affected by the rule's proposed reductions in flows.[6]

(4) There is dearth of standards against which Ecology is evaluating its proposed flows. In order to adequately assess the flows, Ecology must have some standards. In particular, the approach towards setting flows for the Spokane River is inconsistent with what members of the Rural Water Supply workgroup, in a presentation by Ecology staff, were the standards being used by Ecology to set instream flows by rule.[7] In the absence of any standards, or consistent statewide approach, Ecology's proposed flows are arguably aribtrary.[8]

In particular, I have the following additional comments/questions:

(5) In the purpose section (-010), the proposed rule says that it is intended to set flows in order to protect stockwatering. Stockwatering is a beneficial use of water, but is not a use enumerated in RCW 90.54.020(3)(a) as a use to be protected in the instream flow setting.[9]

(6) I applaud the apparent recognition in the same section of the interrelationship between surface water diversions and groundwater withdrawals-- including exempt wells--as RCW 90.54.020(9) requires. I should note that in a recent filing in the Hirst case, the Attorney General's office's brief does not appear to recognize the obligation on the part of permit-issuing governments to recognize this interrelationship.[10]

(7) I question language in the following definitions: (a) is "saturated" an element of hydraulic connection; I do not think so;[11] (b)as mentioned above, protection of stockwatering is not an element of instream flow protection in RCW 90.54.020(3)(a);[12] (c) mitigation should say "fully offset;"[13] (d) the definition of permit-exempt well should include recognition of it being subject to enforcement, but being subject to enforcement is not an element of the definition;[14] and (e) similarly, I would question whether the definition of "withdrawal" should include "beneficial use;" a withdrawal is a withdrawal, irrespective of whether it is being put to a beneficial use recognized by the state.[15]

(8) In -060(3), with regard to supplies from municipal water suppliers, the rule should include language from the Municipal Water Law, and adopt a standard of timely and reasonable delivery of supply. In fact, the rule should consider directly referencing those provisions of the Municipal Water Law, and the duty to serve.[16]

(9) In -060(4), I would question the limitation to "consumptive" impacts as a trigger for curtailment or mitigation. Any non-consumptive uses that create impairment should also be subject to the same actions.[17]

(10) -070 should include a direct reference to statutory requirements re changes and transfers, rather than paraphrasing them.[18]

Economic analysis (benefit cost, and least burdensome)

I am no economist, but want to note a couple of items that aren't identified in the draft Rule, yet are incorporated into the economic analysis, as follows:

(11) On page 10, the document states that Ecology is planning on acquiring a water right that can be used for mitigation of some new exempt wells. Please cite the statutory obligation that Ecology believes requires it to acquire mitigation, and why for this rule Ecology plans to use statewide taxpayer money to provide mitigation, rather than requiring the proposed new user to find/acquire that mitigation (e.g., Dungeness, Walla Walla).[19]

(12) On page 13, there is no economic analysis of recreational and aesthetic benefits--simply an assertion that they will be protected. At a minimum, the analysis needs to include a description of differences in these benefits between other possible instream flow levels.[20]

(13) The "least burdensome" analysis, starting on page 13, provides very little data or information, and simply makes general assertions. For instance, it states that recreational users prefer a variety of flow levels, without documenting that assertion, or discussing specific flow levels that were considered. This is not the kind of analysis that chapter 34.05 contemplated in rulemaking.[21]

(14) Similarly, the analysis notes at the end that new water right permit holders will be required to meter their withdrawals, but permit-exempt wells will not. There is no economic analysis for this, and no explanation.[22] In surface water bodies as constrained as the Spokane River, and the interconnected Spokane-Rathdrum Aquifer, all users should be documenting their uses both for enforcement and management reasons.[23]

Please feel free to contact me if you have any further questions. David Monthie

“Whether we and our politicians know it or not, Nature is party to all our deals and decisions, and she has more votes, a longer memory and a sterner sense of justice than we do.” – Wendell Berry[24]

Moore, Kari

Even lower flow than 2500 cfs? In the summer? 850 cfs? Wow- it's interesting that we want to encourage people to use and take care of the river, yet if there's no water flowing, how can that happen?[1] I have enjoyed kayaking the Spokane river for the past 3 years. In fact a group of my kayaking friends and I run it 4 -5 times a week during the summer! We also make a point to pick up garbage and do other things like cover graffiti to help keep our river beautiful. If there's no water in the river, there's no kayaking to be had, which will make us VERY sad little paddlers![2] Please keep more water flowing so we can continue to

enjoy this great gem that is in the middle of our city.[3] Thank you, Kari Moore

Morrison, Harvey

Thank you. My name is Harvey Morrison. I wish to commend the Department of Ecology for its attempt to set minimum flow rules for the Spokane River, and I thank them for the opportunity for this public commenting. I sincerely hope that this process works as intended to protect the river and the aquifer and the functioning ecological systems that they support.[H1] I am neither a hydrologist, nor a biologist, but I have serious concerns that the flows under consideration are substantially too low, and are based on incomplete and flawed and an arbitrary analysis.[H2]

In setting this rule, the guiding principle should be first to do no harm. Rather than setting flow rules at the lowest minimal levels, they should be set at the highest and the most conservative minimal levels.[H3]

The proposed seasonal flows should be based on historic hydrology of the river before the influence of extensive aquifer pumping. I believe that analysis on that basis will yield minimal flows substantially higher than those proposed. The flow data that was used for the proposed rule is based on data compiled before 2008. I don't know that using more current data will make any difference, but I do know that the understanding for the protection s of the impacts to our weather and water supplies with climate change have advanced substantially during those intervening six years.[H4]

In modeling the availability of water in the future years, climate change must be one of the factors applied to any analysis.[H5] In setting the proposed optimal minimum flows, Redband trout and white fish were the narrow focus of attention. I appreciate this focus, as these are the only two species of fish native to the river. However, there are 300 species of fish, and beyond those, species of invertebrates that make the Spokane River eco system. Any science-based flow policy needs to consider the impacts of all of these aquatic species, as well as the land-based wildlife dependent on a healthy river environment.[H6]

Furthermore, nothing in the flow analysis considered responding to the river flows needed to augment potential return of anadromous fish in the Spokane watershed. [H7]

I am concerned about the possibility of water exports and/or off channel storage of the seasonal flows that exceed the minimums. With the growing urgent need for water in other regions of our country, I believe it's only a matter of time before the politicians will be coming after our Northwest water system.[H8]

If the minimal flow rule is to be used as leverage in negotiations with Idaho over water, then setting the flows at a proposed level puts Washington at a tactical disadvantage.[H9] In summary, I believe that the seasonal minimal flows proposed by Ecology will jeopardize the Spokane River eco system, impact the aesthetic and recreational use of the river, and expose our region to the known and unforeseen risks.[H10] Thank you for your attention.

Nelson, Dan

Recreational boating, rafting and angling are huge economic drivers in Washington State and the Spokane River area is a vital part of that.[1] Even more importantly, the Spokane River" for the time being" an important native fishery.[2]

The Department of Ecology proposed summer season flows do not have a sound biological basis to protec redband trout, the Spokane River's signature wild fish.[3] For this reason alone, the proposal needs to be scrapped and started anew with a focus on SCIENCE.[4]

As for recreational river needs, the Department of Ecology completely failed to study recreational flows,

despite the Spokane River's tremendous popularity with boaters. These studies are needed![5] Recreation is one of the largest economic drivers in the state and ECY's proposal is basically hamstringing the economy.

Dump this plan and start fresh to develop a proposal based on sound science and rational thought.[7]

NW Whitewater Association (Delaney, Paul)

Dear Ms. Wessel:

I am writing on behalf of the membership of the Northwest Whitewater Association to vehemently oppose and demand a reassessment of DOE's proposed 850 cfs inflow for the Spokane River.[1] The NWA is a regional rafting club founded in 1989 that promotes river running, river safety, river access and conservation efforts.

You may sense a tone of anger in my letter and I will assure you this is not at all personal. I am, however, incensed that DOE NEVER made an effort at outreach to discuss this with ANY of those, like NWA, who use the Spokane River for fun year-around, or those businesses like ROW and Flow Adventures who, through their taxes, help fund DOE's existence.

NWA has been around for 25 years and there is a long line of outfitters who also have been in business for years, and years, as well. We've had agency personnel on floats on the river in the past so they knew how to reach ALL of us.[2]

NWA wants Ecology to protect high flows in the river of 3,000 cfs, to allow us and others to safely navigate the river in areas such at the Devil's Toenail.[3] A flow of 850 cfs is completely laughable, for boating[4] and I presume fish would laugh — or cry if they do — at this ridiculous and purely arbitrary number at which DOE has apparently arrived.[5]

I wonder if agency staff who came up with that flow number have seen the Devil's Toenail at 850? Or did they just number-crunch and rely on what appears to be absolutely farcical "science?"[6]

In closing, Ecology MUST not adopt the current proposed flow, begin the process again, and DO IT CORRECTLY, instead. You MUST revisit the assessment phase of this process to include the many, many, many people who recreationally and professionally use this river.[7]

Our organization spends upwards to 300 or more river user days each year as we conduct regular weekly floats involving multiple boats from May through July each year. This restrictive flow will CERTAINLY curtail this activity.[8]

I have learned a great deal in the past several months since this issue was brought to our attention. Among those lessons is a basic understanding of Washington State law, specifically, the Minimum Flow Act and Water Resources Act, which require protection of recreational and navigational use of Washington's rivers.[9]

I welcome any questions your agency might have and I especially look forward as to how NWA can assist in doing this process right in order to serve ALL river users.[10]

Best regards,

Paul Delaney

President/Co-Founder NWA

Paul Delaney. I will get down to further details later. I am a cofounder and current president, forever, it seems of the Northwest Whitewater Association. I've been running the river for, oh, about 35 years now, and I guess, you know, I don't want to get into the RCWs and everything else in this, but I just want to speak from a serious rafter's recreational standpoint.

I've run the river somewhere in the neighborhood of 400 times, I think, far less than my friend Pat Harbine, but he's just a tad bit older than I am. I've run the river from as high as 40,000 cubic feet per second down to probably about what the suggested 850 flow is, and knowing that 850 flow, I can speak for myself, and I know the members of our white water club will be -- are definitely opposed to the implementation of that minimal flow that you're talking right now, and it just doesn't -- it doesn't work.[H1]

From a minimum standpoint, I have to concur with Bruce in talking in terms of about 2,000 or 2,500. You know, you get a -- you can get a, you know, sportsman's special raft down the river at, you know, 1,000, but if you're going to have true recreation, you know, as we, you know, recreate on the river with rafting, which, by the way, has grown tremendously in the last ten years, with a huge influx of private and commercial uses of this river.

And Pat touched on the prime months of the year, June, July, and August as being, you know, the time when people get on the water here, and, you know, we've got to have a minimum of 2,000, or 2,500, or as Bruce said, 3,000 would be the minimum we would be looking at to really safely and -- to enjoy the river.[H2]

In the 25 years that our white water club has been in business, we've had no -- nobody contact us regarding any flows, so, you know, hopefully in the future, as this goes forward, we will be on your list of experts who know the river intimately at all levels and know every stretch of the river to, you know, be some real eyes on what is needed on the river, and I will leave it at that.[H3] Thank you much.

Osborn, Cal

Dear Director Bellon,

My wife and I are avid kayakers and love to hike and camp in the outdoors. The Spokane River is one of Washington's most important rivers.[1] During hot summer months, thousands of people turn to the river for relief and recreation.[2] Fish and wildlife depend on this river: water is life.[3]

Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers statewide.[4] The Department of Ecology failed to analyze flows needed for recreational use of the river.[5] The proposed flow does not have a sound biological basis to protect red-band trout, the Spokane River's signature wild fish.[6]

By low-balling the flow, Washington State is effectively giving away the river to Idaho the upstream state that will claim all water not protected by Washington's flow rule.[7]

For the Spokane River, no flow rule is better than a bad rule. I ask that you either set the summertime low flow at the protective level of 2,500 cfs, or withdraw the rule altogether.[8]

As goes the Spokane Rivers, so goes the other rivers of Washington State.[9] Please take steps to protect this important river.[10]

Cal Osborn

Osborn, Rachael

I just attempted to use the on-line comment system and rec'd an error message that is attached as a pdf. Again, please call me first thing in the morning.

Also, please add this message to the rule-making record.

Thanks,

~ Rachael Osborn

From: Rachael Osborn [mailto:rdpaschal@earthlink.net]
Sent: Sunday, November 02, 2014 6:14 PM
To: 'ann.wessel@ecy.wa.gov'; 'cand461@ecy.wa.gov'
Subject: Urgent - Spokane River rule comment form
Importance: High

Ann & Chris:

A large number of people will be sending you comments this week regarding the Spokane River rule. At your request, we are directing people to the on-line comment form. However, as noted in an e-mail you just received from John Townsell, the form is not working.

It is essential that people who want to comment on the rule be able to do so successfully and without difficulty. I would like to discuss with you tomorrow morning (Monday, 11/3/14) whether CELP and other groups should cease asking their members to use the on-line form for commenting. It is simply unacceptable that public comments might be lost due to technical difficulties.

I appreciate your immediate attention to this matter. Please call me when you receive this e-mail.[2]

Best,

~ Rachael Osborn 509-954-5641

The Washington State Water Resources Act of 1971: Perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values. (RCW 90.54.020)

Ostby, Bjorn

As an avid fisherman and floater on the Spokane River, I am strongly against the decreased minimum flow on the Spokane River.[1] As it stands, the flows already lead to fairly high summertime temperatures, which has an adverse effect on the native resident Redband trout populations.[2] Hey minimum flow of 850 CFS would lead to even higher temperatures, a greater concentration of fish in less holding water, and a waterway that becomes very difficult to navigate. For the benefit of the fish in the river and for the users of the river I am urging you to think twice about decreasing the minimum flow of the Spokane River.[3] Thank you.

Out there Monthly (Knowles, Derrick & Shallan)

Dear Department of Ecology,

We are writing as outdoor recreation supported business owners to comment on the current rule making process relating to flows in the Spokane River (Water Resources Management Program for the Spokane River and Spokane Valley Rathdrum Prairie (SVRP) Aquifer (Spokane River WRMP) and amendment to WAC 173-555-010).

We own Out There Monthly magazine, a Spokane-based outdoor recreation publication with a monthly circulation of 25,000 in the greater Spokane region. Out There Monthly serves up to 75,000 people each month with outdoor recreation related articles, news, and stories, ranging from whitewater rafting, paddling, swimming and fly-fishing to hiking, mountain biking, cycling on the Centennial Trail and other outdoor adventure sports, many of which take place in and along the Spokane River. Our readers, and the success of our business, depend on adequate flows that make recreation on the Spokane River possible and enjoyable year round.

In addition, many of the advertisers that support our business depend on a healthy Spokane River with higher flows that support longer whitewater rafting seasons, quality fishing and floating, and an enjoyable experience for swimmers and other recreationists using trails along the shore.[1] The economic impact of outdoor recreation to Spokane has grown tremendously in recent years and needs to be taken more seriously in this process.[2] We urge Ecology to do a proper study of recreational uses in and along the Spokane River, including talking to the businesses and recreation enthusiasts who have much to gain or lose based on the outcome of this process, before making a final, critical decision on river flows.[3] Many river-based recreation activities that are exploding, like SUP river surfing, guided rafting and floating trips, and SUP river running, require higher flows that need to be taken into consideration.[4]

We appreciate the fact that you're considering minimum instream flow standards for the Spokane River, but the limited studies conducted thus far do not satisfy the requirements, including giving more consideration to the growing use of the river by commercial and private outdoor recreation interests. We support another take at this process that gives recreational uses of the river the proper consideration. The "Small Business Economic Impact" did not even consider non-consumptive users such as those businesses that provide recreational opportunities for the public.[5] Final instream flow standards should give serious consideration to the flows necessary for whitewater rafting and floating outfitters to continue offering their services through the summer, as well as flows needed for other river users like SUP river surfers, kayakers, and tubers to enjoy those activities. In particular, many holes and waves that river surfers and kayakers use are only available within specific flow level ranges.

In conclusion, we urge you to go back to the drawing board and follow a more rigorous and comprehensive process that gives the proper consideration to outdoor recreation. Your own rules say you must consider recreation and navigability, so at a minimum, you need to do that.[6] 850 cfs is a non-starter for outdoor recreation and the businesses this growing segment of our local economy supports.[7]

Thank you for the opportunity to comment.

Sincerely,

Derrick and Shallan Knowles, Publishers

Parker, Steve

Hello there, Please consider maintaining a minimum flow of 2000-2500 for this river throughout as much of the year as possible.[1] This river has fantastic recreational opportunity.[2] Thanks, Steve Parker

Parks, Leonard

I'm opposed to any reduction of instream flows in the Spokane river below the existing rate.[1] The native Redband trout is a resource and contributor to biological diversity in this area.[2] The river is also a resource that provides kayakers with recreation in close proximity to Spokane.[3] In short, the river is a key factor in the quality of life to all who live in and visit Spokane.[4]

The over allocation of rivers through out the west, and the resultant negative impacts on those rivers, is well documented.[5]

Future growth and development in this region isn't worth the negative impacts it has on the river and aquifer. Save our river![6]

Pascal Osborn, Rachael

To the Washington Department of Ecology

These are my personal comments on the Spokane River rule.

I live in the West Central neighborhood of Spokane, and walk along the north shore of the Spokane River between the Monroe dam and TJ Meenach bridge most days of the year, usually on the Centennial Trail. I also frequently walk the river in Riverside State Park on a south-side trail between Bowl & Pitcher and Devil's Toenail.

The Spokane is an exquisitely beautiful river as it runs through the Spokane Gorge and through the state park. It is geologically unique, and much of this reach is free flowing.[1]

My primary use and appreciation of the Spokane River is of its scenic qualities. Those qualities very much include how much water is flowing in the river. The river in the reach between Monroe dam and Nine Mile pool is exceptionally beautiful when it runs between 2,500 and 3,500 cfs. At these flows, riparian vegetation emerges at the edges and on the willow-strewn sandbars, and at the confluence of Hangman Creek. The river looks full, but not overflowing or flooding.[2] Peering down from the Westlink pedestrian bridge at these flows we often see fish in the river. Many people are boating, especially when the weather is hot (as in July-August of 2014). Many people are fishing.[3]

I have walked this stretch of the Spokane River for 15 years, since I moved to my home in 1999. Every year, I observe the flows drop during late summer. I often look at USGS gage information on the web, showing instantaneous flows at the Spokane gage. As the flows drop below 2500 cfs, the rocks emerge, pools are created and isolated, and fewer people are boating.[4] Fishing, however, doesn't change much, presumably because the fish become easier to catch as they are crowded into smaller spaces – something I worry about.[5]

I am troubled that the proposed flows for the Spokane River will not protect these many instream uses.[6] One can observe that 850 cfs is an extremely low flow for the river, and does not look healthy.[7]

I've included a photo of the river that I took during my walk this evening, during sunset. The flow is approximately 2100 cfs. You can see the outline of rocks along the shoreline. You can also see the wild beauty of the river, just one mile from downtown Spokane.[8]

Beyond my concerns for the aesthetic values, I know the Spokane River is a critical ecological resource. Sandra Postel and Brian Richter have said it well in their book "Rivers for Life – Managing Water for People and Nature":

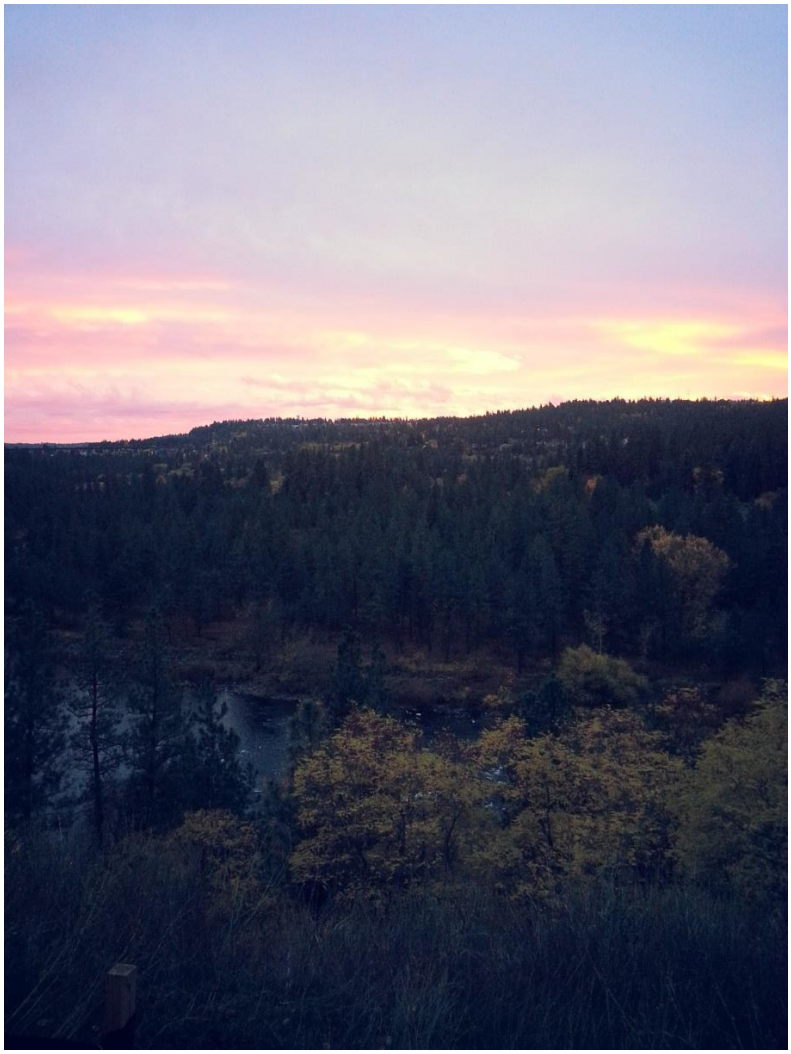
"We need and value rivers for a host of reasons – some spiritual, some aesthetic, some practical. Yet only

recently has scientific understanding of what constitutes a healthy river enabled us to grasp just how critical intact rivers are to the functioning of the natural world around us. Rivers are more than conduits for water. They are complex systems that do complicated work. They include not just the water flowing in their channels, but the food webs and nutrient cycles that operate within their beds and banks, the pools and wetlands that form on their floodplains, the sediment loads they carry, the rich deltas they form near their terminus, and even parts of the coastal or inland seas into which they empty. Along with their physical structures, river systems include countless plant and animal species that together keep them healthy and functioning."[9]

The Spokane River provides an enormous array of social, economic and ecological benefits to our community, which the draft instream flow rule does not respect. I ask that you please study all of the values of the Spokane River for all of the people and species and processes that depend on it.[10]

Thank you for the opportunity to provide comments.

~ Rachael Paschal Osborn



Paxson, M C

Dear Director, Washington State Department of Ecology Bellon,

The Spokane River is one of Washington's most important rivers.[1] During hot summer months, thousands of people turn to the river for relief and recreation.[2] Fish and wildlife depend on this river: water is life.[3]

Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers statewide.[4] The Department of Ecology failed to analyze flows needed for recreational use of the river.[5] The proposed flow does not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[6]

By low-balling the flow, Washington State is effectively giving away the river to Idaho the upstream state that will claim all water not protected by Washington's flow rule.[7]

For the Spokane River, no flow rule is better than a bad rule. I ask that you either set the summertime low flow at the protective level of 2,500 cfs, or withdraw the rule altogether.[8]

As goes the Spokane Rivers, so goes the other rivers of Washington State.[9] Please take steps to protect this important river.[10]

Sincerely,

Ms. M. C. Paxson

Peak 7 Adventures (Beacham, Becky)

Hello,

My name is Becky, and I am the rafting coordinator for Peak 7 Adventures. Our goal is to provide experiences for youth labeled 'at-risk' that will challenge them to realize their greater potential.

Our main rafting season is April through the first week of June, but we also provide float trips and canoe trips on the Little Spokane River through August.

As you plan for the future, please consider our programs: if the water level of the Spokane River drops below 2,000 cfs in the summer months, we will not be able to serve the youth of Spokane via our water activities.[1]

Thank you for your consideration,

--Becky

Peak 7 Adventures (Nycum, Alex)

Hi, my name is Alex Nycum. I'm here representing Peak 7 Adventures. We've been rafting on the Spokane River since 2006, and we serve inner city youth through rafting tours and outdoor adventures, and just wanted to throw in my two cents, but it's kind of been said already.

Our ideal rafting water flow is 10,000 cfs to 18,000, and normally we raft between April and May because that's the only time when the river is high enough. Our lowest minimum that we will raft at is between five and six thousand and we normally aren't able to use it when the weather is nice enough out. So we're normally rafting when it's cold and snowing. So that's my two cents.[H1] Thank you.

Peterson, Kerry

I urge the Department of Ecology to not adopt the currently proposed rule, and instead undertake studies

to determine the optimal flows for fish and recreation.[1] It is necessary, but not sufficient, that proposed flows be sustainable.[2] Including a factor of safety or margin of error related to changing climate impacts on water resources is prudent.[3]

As a professional engineer specializing in water resources, I care about the Spokane River. As a recreational angler, I care about the Spokane River.[4]

Proposed summer season flows do not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[5]

The Department of Ecology completely failed to study recreational flows, despite the Spokane River's tremendous popularity with boaters. These studies are needed![6]

Ecology must also assess how the instream flow rule will affect future interstate allocation with Idaho. Idaho will take all water not claimed in Washington's flow rule. Ecology needs to assess the interstate allocation implications of its flow rule.[7] Again, biological and recreational bases for instream flow need to be considered.[8]

This opportunity to protect Washington's sovereign waters should not be squandered. Georgia and Florida recently ended up in the nation's supreme court asking for adjudication. We do not want to follow that path which allows harm to Washington.[9]

This proposal fails to give the Spokane River the real protections that it needs. The proposed instream flow rule for the Spokane River lacks basic scientific analysis and is completely inadequate to protect this much loved river.[10]

I urge the dismissal of the proposed rule.[11]

Sincerely,

Kerry Peterson

Pringle, Bruce

Dear Director, Washington State Department of Ecology Bellon,

The Spokane River is one of Washington's most important rivers.[1] During hot summer months, thousands of people turn to the river for relief and recreation.[2] Fish and wildlife depend on this river: water is life.[3]

Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers statewide.[4] The Department of Ecology failed to analyze flows needed for recreational use of the river.[5] The proposed flow does not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[6]

By low-balling the flow, Washington State is effectively giving away the river to Idaho the upstream state that will claim all water not protected by Washington's flow rule.[7]

For the Spokane River, no flow rule is better than a bad rule. I ask that you either set the summertime low flow at the protective level of 2,500 cfs, or withdraw the rule altogether.[8]

As goes the Spokane Rivers, so goes the other rivers of Washington State.[9] Please take steps to protect

this important river.[10]

Sincerely,

Dr. Bruce Pringle

Reed, Jake

Just wanted to put my 2 cents in on the proposed plan for the Spokane river flows. I am a avid whitewater kayaker who frequently uses the Spokane river for recreational purposes year round. I use the upper Spokane from Harvard to Mirabeau as well as the lower portion of the river from the TJ Menach bridge to Plese flats.[1] As far as the flows on the lower Spokane I feel that the proposed flow of 850 cfs is much to low.[2] In a small kayak I feel 1200 cfs is about as little volume of water needed to get through certain spots of the river. As far as larger vessels like rafts and catamarans probably need closer to 2000-2500 cfs to safely navigate the river. The spring time brings us some great whitewater when the river is 20,000-30,000 cfs as well![3] I feel like the proposed plan would be very detrimental to the entire whitewater community, and could potentially ruin one of the greatest assets we have in this region which is right in our back yard.[4] I hope there will be lots of thought put into this decision with the input from all parties that will be affected. I believe there can be a compromise to make the right decision for everyone.[5]

Thank you for your time. Jake Reed Spokane Valley

Roast House (Bernardo, Deborah Di)

Ann,

Just a moment to share my concern about the proposed 'use' changes for the Spokane River. Again, and as always, supporting unsustainable growth to support limited individuals earnings is trumping our diminishing natural resource - in this case - our non replaceable water.[1]

The Dept of Ecology does not have sound biological basis to protect whats left of our wild fish run. We have already decimated the salmon runs from the river without much thought or caring. Dont allow this to happen yet again.[2]

Roehl, Renee

The proposed flows are unacceptable. The proposed flows are way too low.[1] Recommend a flow of 2,500 cubic feet per second during summer months as a flow that will protect fish, boaters, and businesses that depend on the river (the state is proposing a mere 850 cfs).[2]

ROW Adventures (Peter Grubb)

Dear People,

I am writing to comment on the current rule making process relating to flows in the Spokane River. Specifically:

Water Resources Management Program for the Spokane River and Spokane Valley Rathdrum Prairie (SVRP) Aquifer (Spokane River WRMP) and amendment to WAC 173-555-010

My company, ROW Adventures, has a downtown Spokane location that we established in order to offer float trips on the Spokane River. For the past seven years we have been taking between 1200-2000 people on the river each season. We are one of roughly five businesses that depend on good flows in the Spokane River.

In the years that we have been running trips and tours on the Spokane River, we have enjoyed the spring run off with flows as high as 25,000 cfs. We have had a few years when flows did not drop below 3000 cfs until mid-July or even later. These years in particular have been great for business as they allow us to continue taking our guests through Riverside State Park and the thrilling rapids of the Bowl and Pitcher and the Devil's Toenail.[1]

We commend the DOE for considering minimum instream flow standards for the Spokane River. It's high time that the value of water left in a river is recognized. Clearly the instream flow rule making purpose appreciates this by identifying the various needs and considerations for instream flow.[2]

Unfortunately, the limited studies conducted thus far do not satisfy the requirements of your own rules that say: WAC 173-557-010 The "authority and purpose" of the instream flow rule-making is designed to: "protect and preserve fish, wildlife, scenic, aesthetic, recreational, water quality, and other environmental values; navigational values; and stock watering requirements"

Clearly there are several concerns.

1) It seems that the Department of Ecology failed to do a thorough study of the various elements that should be considered prior to arriving at a conclusion of a proposed minimum flow. Specifically, the biology of fish was considered, but nothing else. [3]

2) Considerations for recreation: Thousands of Spokane's citizens enjoy the river for fishing, tubing, kayaking, canoeing, rafting and for its aesthetic and scenic values. Yet these people were not consulted nor was their enjoyment of the river considered. Specifically, the DOE did not reach out to the huge community of people that use the Spokane River corridor for recreation purposes. There are private associations of rafters, the Spokane Canoe and Kayak Club, local fishing groups, etc. and none of these were contacted. Nor was there any contact with businesses who depend on the river flows in order to operate our businesses. There are at least five companies that offer rafting trips, kayak tours, tubing trips and other activities and none of these were consulted. We are an important part of the economic fabric of the Spokane community and should have been consulted.[4]

Tourism, as everyone knows, is key to the economic health of our region and recreational activities such as floating the Spokane River are one of the most unique tourist attractions the region has. This simply underscores the need for the DOE to follow its own mandate and study minimum flows specifically with recreational considerations in mind.[5]

3) Specifically related to tourism is economics. Yet, the "Small Business Economic Impact" did not even consider non-consumptive users such as those businesses that provide recreational opportunities for the public.

This study claims: "Small businesses, local governments, and others, were involved in watershed planning region wide. Small business (water purveyors and users) were also briefed by Ecology staff in numerous public forums during development of the rule language." Here Ecology admits that their idea of concerned small businesses are only "water purveyors and users" and one can only assume that a "user" means a consumptive user. How myopic indeed!

This is further made clear where the study says: Ecology has determined that water purveyors are the only know(n) businesses that would be affected by the rule and required to comply with the rule. Clearly Ecology has not been out to see the thousands of people that pay outfitters to float on the river,

and without sufficient flows, we cannot provide that service. Thus the study is flawed because in fact water purveyors are not the only businesses that would be affected.[6]

The study also states: "All currently established businesses using an established water right are not required to comply with the proposed rule. Essentially this proposed rule has little or no impact on small or any other business. All current businesses already operating under an established water right are not affected."

This is absolutely false. If river flows dropped to the proposed 850 cfs on June 15th, as the proposed rule would allow, it would be devastating for our business, our employees and our economic health. How could the author of this study completely omit consideration for non- consumptive businesses? The concluding paragraph says: Ecology expects no net job impacts to come from this proposed rule. Again, this is certainly not true for my business, nor the other recreation-service companies that currently operate on the Spokane River. We employ guides, drivers, support staff, office staff and others to provide the services we offer and run our business.[7]

Ecology needs to start completely over in this Small Business Economic Impact to create a study that has any credibility.[8]

4) Considering navigational values: This is also identified as one of the purposes of instream flow rule-making, yet was not considered at all. For rafters, a flow of at least 3000 cfs is needed to make navigation of the rapids known as the "Bowl and Pitcher" and "Devil's Toenail" relatively easy to navigate. When flows drop below 3000 cfs the Devil's Toenail becomes very difficult and too rocky for inflatable crafts larger than about 16'. Once it gets to around 2500 cfs it becomes passable only for the very skilled and/or small craft.[9] Some would say that any flow below 3000 cfs is too low for safe navigation. Consideration for public safety should be a factor in the study.[10]

5) Fish science: The studies done appear to have only considered some generic data and did not specifically study the Spokane River.[11] Flows of 850 cfs would be lower flows than the natural flow regime would be on many years, and under your proposal, would be started much earlier than natural flows currently occur.[12] Lower flows would stress fish, force them into smaller pool areas and be detrimental to their health.[13] Spokane River specific studies are needed.[14]

6) Following a natural flow regime is important: The proposal shows a very unnatural flow process where on a certain day in the spring it's all of a sudden acceptable to drop the river's flow to 850 cfs. This isn't good for riparian zones, wildlife, nor recreationists. If the river flow is going to be diverted it should follow the pattern of nature. As is said "It's not nice to mess with Mother Nature!" Currently the proposal shows a minimum required flow 6500 cfs from April 1 to June 15 while historically the river would typically reach flows of 20,000-30,000 during this time, and often peak higher than this. Then capriciously, on June 16th the flow could drop to 850 cfs. In one day! Surely this makes no sense and needs to be modified.[15]

In conclusion, I urge you to go back to the drawing board and follow a process that considers more than some dumb-downed fish biology. Again, your own rules say you must consider recreation and navigability, so at a minimum you need to do that.[16] The idea of a minimum flow of only 850 cfs is absurd.[17] As your own report shows, prior to 1940 the river didn't drop below 1200 cfs. Since that time there have still been many years when a minimum flow of 850 cfs is never reached, so to set this flow artificially is not sound science, nor logical.[18]

I appreciate the opportunity to comment.

Sincerely,
Peter Grubb, President
ROW Adventures * ROW Adventure Center * ROW Fishing Adventures

Rush, Richard

Please adopt an in-stream flow rule that: 1) ensures healthy fish (particularly redband trout) populations[1] and 2) provides year-round recreational opportunities.[2] A positve margin of error (+15%) should also be added to the minimum instream flow to ensure the above goals are met.[3]

Rust, Nancy

Chris Anderson suggested I email you because the form rejected my zip code of 98101. Here is what I tried to send: I have seen the pictures from Celp that show how low the water flow is in the summer. I understand that your proposed rule will have a flow even lower than that. I urge you to adopt a rule that will provide enough water for both fish and recreation.[1] Nancy Rust

Rutherford, Jim

Dear Ms Wessel,

The Spokane river is lifeblood of our area and if the water flow is too restricted it will kill fish and wipeout much of the progress we have made with reclaiming this incredible natural resource.[1] This river needs protecting, much more than Avista does.[2] Please work to keep the minimum over 2500 cfps. It's a river, not an irrigation ditch.[3]

Thank you, Jim Rutherford

Salem Lutheran Church (Andrews, Liv)

As a newer resident to Spokane, I have fallen in love with the city's beautiful river. To let its flow drop as far down as proposed levels suggest would injure not only wildlife but also the identity of this place. We find our selves in these waters as people of this town.[1] We ask you keep the waters of the Spokane at high, healthy levels. Everyone will benefit.[2] Thank you, Pastor Liv Larson Andrews Salem Lutheran Church Spokane, Washington

Schafer, Daniel

Ms. Wessel, I am an active whitewater boater living in Spokane and I am concerned about river flows both from a boating and aesthetic viewpoint.[1] I am most concerned that the Department of Ecology did not involve the boating community in it's study of, and recommendation for ongoing river flows. This is an oversight that must be addressed before any permanent decisions are made for our river.[2] Thank you for your attention to this matter. Daniel J Schaffer

Scherer, Arthur

Please consider reevaluating this rule.[1] For fish health, recreational use, and to help mitigate Idaho uprive water use, I favor keeping the minimum April, May ,June flow higher than 10,000 cfs and the July, Aug, Sept minimum flow between 900 and 1200 cfs as possible depending on the various controlling factors.[2]

Schnell, Dan

Thank You, I forgot to include my flow preferences, I feel the absolute lowest flow would be 1,000 CFS, I would like to see 2,500 CFS. I feel that lower flow levels would have an impact on residences and visitor's perception of Spokane.[1]

Feedback- The proposed summer river flow for of 850cfs appears to be too low.[2] Thank-you Dan Schnell

Scholtz, Allan T

Dear Evaluators:

From what I can tell, the IFIM study on the Spokane River used standardized habitat data (curves) that has been published for rainbow (redband) trout and mountain whitefish, which they then incorporated to calculate weighted usable area. I think that this is the case but can't actually tell because they did not cite the appropriate papers and instead relied on a WDFW/WDOE catch all document. I further assume that the WDFW/WDOE document relied on previously published data for RBT and MWF. If this assumption is correct then I think that the IFIM doesn't hold up very well because the habitat in the Spokane River is unlike most rivers in which you find RBT and MWF (upon which the standardized habitat curves are based). The IFIM guidelines state that when this occurs using the standardized curve for a species may no work well and they recommend that data be collected to assess the habitat utilization by each target species in the river in question. I have been involved in two IFIM studies and in both of them we collected habitat information about all target species so we would not have to use the published standard habitat curves, rather we used curves that were specific to the river that we were studying. This apparently was not done in the Spokane River IFIM because no appendices of data were attached that suggested that these types of data had been collected. Thus, I think that the results of this IFIM may be misleading. I recommend that RBT and MWF focal point data be collected for an adequate sample of each life stage (n = 50 - 100 for each life stage would provide sufficient data to make reasonable curves) and the IFIM (PHABSIM) be re-run using target species habitat curves that have been constructed for the area of the Spokane River that the IFIM is covering to recalculate the weighted usable area (WUA).[1] Thank you for this opportunity to comment.

Allan T. Scholz, Ph.D.
Professor of Biology
Eastern Washington University

Schultz, Jule

Thank you for the opportunity to comment on instream flow rule for the Spokane River. The Spokane River is the lifeblood of our community, supporting jobs, recreation, and aesthetic and natural values.[1]

The proposed June 16th-September 30th flow of 850 cfs is too low to support the needs of the Spokane River.[2] Those flows are too low to boat in the Spokane River.[3] Allowing flows below 1500 cfs would negatively affect our whitewater and fishing economy, the recreationalists that depend on the river, and the aesthetic values that the community depends on.[4]

Please consider raising the June 16th-September 30th flows to 1500-1800 cfs.[5]
Thanks
Jule Schultz

Sierra Club (Coleman, Timothy)

Dear Director, Washington State Department of Ecology Bellon,

I'm writing to express my views about the magnificent Spokane River.
It's a treasure. When visiting Spokane, my family and I enjoy walking along the river and especially we enjoy the waterfalls.[1]

I understand that DOE is considering setting summertime river flow levels of 850 cfs. this would

significantly reduce river flows, altering waterfalls, river ecology and recreation uses. The Department failed to analyze flows needed for recreational use of the river.[2]

River flows of 850 cfs will lead to increased water temperatures that in all probability could lead to the death of cold water fish and environmental damage to other aquatic species (bugs, amphibians, etc.).[3]

For the Spokane River, no flow rule is better than a bad rule - period.[4]
Washington State is effectively giving away the river to Idaho that will claim all water not protected by Washington's flow rule.[5] I ask that you either set the summertime low flow at the protective level of 2,50 cfs, or withdraw the rule altogether.[6]

The Spokane River is a remarkable river - let's keep it that way.[7]

Sincerely,

Mr. Timothy Coleman

Sierra Club (Conaboy, Mike)

Dear Director, Washington State Department of Ecology Bellon,

Plans look good to me. Too much damn water here in Washington anyway - you Califmorons just wouldn't understand.[1]

Sincerely,

Mike Conaboy

Sierra Club (Donaldson, Jamie)

Dear Director, Washington State Department of Ecology Bellon,

I am a native of Spokane, and I so love and appreciate its great river.
As you know, the Spokane River is one of Washington's most important rivers.[1] During hot summer months, thousands of people turn to the river for relief and recreation.[2] Fish and wildlife depend on this river: water is life.[3]

Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers statewide.[4] The Department of Ecology failed to analyze flows needed for recreational use of the river.[5]
The proposed flow does not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[6]

By low-balling the flow, Washington State is effectively giving away the river to Idaho the upstream state that will claim all water not protected by Washington's flow rule.[7]

For the Spokane River, no flow rule is better than a bad rule. I ask that you either set the summertime low flow at the protective level of 2,500 cfs, or withdraw the rule altogether.[8]

As goes the Spokane Rivers, so goes the other rivers of Washington State.[9] Please take steps to protect this important river.[10]

Sincerely,

Ms. Jamie Donaldson

Sierra Club (Effler, Dean)

Dear Director, Washington State Department of Ecology Bellon,

The Spokane River is one of Washington's most important rivers.[1] During hot summer months, thousands of people turn to the river for relief and recreation.[2] Fish and wildlife depend on this river: water is life.[3]

Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers statewide.[4] The Department of Ecology failed to analyze flows needed for recreational use of the river.[5] The proposed flow does not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[6]

By low-balling the flow, Washington State is effectively giving away the river to Idaho the upstream state that will claim all water not protected by Washington's flow rule.[7]

For the Spokane River, no flow rule is better than a bad rule. I ask that you either set the summertime low flow at the protective level of 2,500 cfs, or withdraw the rule altogether.[8]

As goes the Spokane Rivers, so goes the other rivers of Washington State.[9] Please take steps to protect this important river.[10]

Sincerely,

Dr. Dean Effler

Sierra Club (Glover, Julia)

Dear Director, Washington State Department of Ecology Bellon,

PLEASE DO SOMETHING ABOUT THIS!!!!!! The Spokane River is one of Washington's most important rivers.[1] During hot summer months, thousands of people turn to the river for relief and recreation.[2] Fish and wildlife depend on this river: water is life.[3]

Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers statewide.[4] The Department of Ecology failed to analyze flows needed for recreational use of the river.[5] The proposed flow does not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[6]

By low-balling the flow, Washington State is effectively giving away the river to Idaho the upstream state that will claim all water not protected by Washington's flow rule.[7]

For the Spokane River, no flow rule is better than a bad rule. I ask that you either set the summertime low flow at the protective level of 2,500 cfs, or withdraw the rule altogether.[8]

As goes the Spokane Rivers, so goes the other rivers of Washington State.[9] Please take steps to protect this important river.[10]

Sincerely,

Ms. Julia Glover

Sierra Club (Lanz, James)

Dear Director, Washington State Department of Ecology Bellon,

As an avid outdoors person, recreational kayaker, hiker & birder, I am very concerned about Dept of Ecology setting an inadequate stream flow for the Spokane River. This river is one of Washington's most important rivers.[1] During hot summer months, thousands of people turn to the river for relief and recreation.[2] Fish and wildlife depend on this river: water is life.[3]

Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers statewide.[4] I believe it would set a dangerous precedent that could adversely affect rivers statewide including those in SW Washington because the Department of Ecology failed to analyze flows needed for recreational use of the river.[5] The proposed flow does not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[6]

By low-balling the flow, Washington State is effectively giving away the river to Idaho the upstream state that will claim all water not protected by Washington's flow rule.[7]

For the Spokane River, no flow rule is better than a bad rule. I ask that you either set the summertime low flow at the protective level of 2,500 cfs, or withdraw the rule altogether.[8]

As goes the Spokane Rivers, so goes the other rivers of Washington State.[9] Please take steps to protect this important river.[10]

Sincerely,

James Lanz

Sierra Club (Lombard, Marny)

Dear Director, Washington State Department of Ecology Bellon, Please, please do not strangle our Spokane River with a summertime flow of 850 cfs. This is unconscionable.[1] The river is a lifeline for wildlife in our region.[2] As well, it is a widely used recreational asset for people -- including many working class citizens of Spokane who cannot afford a cabin at the lake.[3] I walk daily, year-round, by the Spokane River east of Minnehaha Rocks. I see deer along Upriver Drive - they depend on the river for their water. I also see deer swim the river early in the summer, headed for an alfalfa field nearly Felts Field Airport. It's not widely known, but beaver also use the river there. Every year, the resident bald eagles in that area raise young ones. In summer, they are ready to begin hunting. We often see them perched in the Ponderosas overlooking the river. You don't see trout in that stretch, but upstream you do.[4] I understand that the rive must satisfy multiple uses - but 850 cfs is shameful.[5] Documents from your own department (Spokane River Geographic Response Plan) refer to an August/September base flow of approximately 1,750 cfs.[6] Please do the right thing - and protect the Spokane River![7] Sincerely, Marny Lombard

Sierra Club (Lukos, Stravo)

Dear Director, Washington State Department of Ecology Bellon,

The Spokane River is one of Washington's most important rivers.[1] During hot summer months, thousands of people turn to the river for relief and recreation.[2] Fish and wildlife depend on this river: water is life.[3]

Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers

statewide.[4] The Department of Ecology failed to analyze flows needed for recreational use of the river.[5] The proposed flow does not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[6]

By low-balling the flow, Washington State is effectively giving away the river to Idaho the upstream state that will claim all water not protected by Washington's flow rule.[7]

For the Spokane River, no flow rule is better than a bad rule. I ask that you either set the summertime low flow at the protective level of 2,500 cfs, or withdraw the rule altogether.[8]

As goes the Spokane Rivers, so goes the other rivers of Washington State.[9] Please take steps to protect this important river.[10]

Sincerely,

Stravo Lukos

Sierra Club (Martin, Andrew)

Dear Director, Washington State Department of Ecology Bellon,

The Spokane River is one of Washington's most important rivers.[1] During hot summer months, thousands of people turn to the river for relief and recreation.[2] Fish and wildlife depend on this river: water is life.[3]

Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers statewide.[4] The Department of Ecology failed to analyze flows needed for recreational use of the river.[5] The proposed flow does not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[6]

By low-balling the flow, Washington State is effectively giving away the river to Idaho the upstream state that will claim all water not protected by Washington's flow rule.[7]

For the Spokane River, no flow rule is better than a bad rule. I ask that you either set the summertime low flow at the protective level of 2,500 cfs, or withdraw the rule altogether.[8]

As goes the Spokane Rivers, so goes the other rivers of Washington State.[9] Please take steps to protect this important river.[10] Thank you.

Sincerely,

Mr. Andrew Martin

Sierra Club (Milne, Linda)

Dear Director, Washington State Department of Ecology Bellon,

The Spokane River is one of Washington's most important rivers.[1] During hot summer months, thousands of people turn to the river for relief and recreation.[2] Fish and wildlife depend on this river: water is life.[3]

Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers statewide.[4] The Department of Ecology failed to analyze flows needed for recreational use of the river.[5] The proposed flow does not have a sound biological basis to protect redband trout, the Spokane River's

signature wild fish.[6]

By low-balling the flow, Washington State is effectively giving away the river to Idaho the upstream state that will claim all water not protected by Washington's flow rule.[7]

For the Spokane River, no flow rule is better than a bad rule. I ask that you either set the summertime low flow at the protective level of 2,500 cfs, or withdraw the rule altogether.[8]

As goes the Spokane Rivers, so goes the other rivers of Washington State.[9] Please take steps to protect this important river.[10]

Sincerely,

Ms. Linda Milne

Sierra Club (Nixon, Shirley)

Dear Director, Washington State Department of Ecology Bellon, The Spokane River should be protected with a state flow rule that will prevent summertime flows from dipping below 2500 cfs.[1] The flow regime in the proposed rule is a shocking dereliction of Ecology's duty to protect the public's water resources.[2] I ask that you either set the summertime low flow at the protective level of 2,500 cfs, or withdraw the rule altogether.[3] Please take steps to better protect this and other important rivers throughout Washington.[4]

Sierra Club (Osborn, John)

To whom it may concern: when I submitted my comment (below) through Ecology's website, the response I received was "Error". I've attached a screenshot of the reply from Ecology. Below are my comments. Please include them in the public record on this matter. Thank you.

November 7, 2014

Dear Director Bellon,

Thank you for the opportunity to comment on the Department of Ecology's proposed rule for Spokane River flows. I am a Spokane physician, serve as the Coordinator of Sierra Club's Columbia River Future Project, and am the Board President of the Center for Environmental Law & Policy (CELP).

These comments augment my earlier personal comments at the public hearing on October 22. Both Sierra Club and the Center for Environmental Law & Policy will be submitting comments. I am submitting these comments as an individual who has a long-standing relationship with the Spokane River.

Since moving to Spokane in 1983 to complete my residency training in Internal Medicine at Sacred Heart and Deaconess Medical Centers, I have enjoyed the Spokane River in ways. I've canoed and fly fished the river. But mostly I just love to be next to the river: to look out our home windows and see the river; to see and hear and smell the river; to walk the sidewalks, trails, and Centennial Trail along and above the river; and picnic and walk at Riverside State Park along the river. Sunsets over the Spokane River Gorge can be stunning. As a corridor of wildness winding through a metropolitan community, the Spokane River is integral to life and living here.

People love the Spokane River. Views of the river send up real estate values. The Kendall Yards Development adjacent to the Spokane River Gorge uses the marketing tag line: Urban by Nature.

During my 32 years in Spokane, much of my time has been spent trying to protect and restore the Spokane River – Lake Coeur d'Alene Basin. Starting with wilderness battles over the headwaters of the St. Joe River, we worked for years through the forest planning process and Congressional appropriations to curtail the massive overcutting of watershed forests.[1]

Then came Burlington Northern Railroad's forest liquidation of the "checkerboard" through its logging arm Plum Creek Timber Company that led to our book published in 1995, "Railroads & Clearcuts: Legacy of Congress's 1864 Northern Pacific Railroad Land Grant." During the 1990s and early 2000s, the priority issue in protecting this river and lake basin was working with the Coeur d'Alene Tribe to find remedies for the massive mine wastes polluting the basin, and expanding the Superfund cleanup beyond "the box" in Kellogg, Idaho, to the entire polluted basin.

More recently, my advocacy for the Spokane River has focused on the aquifer and river, including problems with dissolved oxygen, PCBs, and (now) with rule-setting for Spokane River flows.[2]

On May 14, 2014, the Department of Ecology held an open house on its preliminary draft rule for flow. At that public meeting, I engaged with agency staff and asked repeatedly that the agency conduct the necessary studies to make an informed decision about the river's flows. I emphasized that at a minimum the agency needed to complete the necessary studies of recreation use, especially use by boaters.[3]

Recognizing that the Department of Ecology was unlikely to do the necessary work on assessing the appearance of the river at different flows, in July I began the work of identifying key observational points (KOPs) on the downriver reach from the Monroe Street bridge to near where the river flows into the 9 Mile dam pool. During the summer I worked with Tom Soeldner to compile the Spokane River KOP studies. The resulting atlas of Spokane River Key Observational Points and related documents will be submitted separately into the public comment record.[4]

Decisions about rivers may be driven by water politics and those who benefit from extracting and polluting freshwaters, but decisions should be ethically sound. Through my "From Bedside to Streamside" work in ethics, I have encouraged the adaptation of ethical conflicts-resolving models we use in hospitals to conflicts over water. My background in ethics includes in 1985 working with ethicist Johnny Cox to develop the ethics training program for resident physicians at Providence Sacred Heart Medical Center; in 1991, establishing the ethics consultation program for the Spokane VA Medical Center; and in 1997, along with ethics-consultant Rose Mary Volbrecht, co-founding the Regional Ethics Network of Eastern Washington (RENEW) that drafted and piloted Washington State's Physician Orders for Life Sustaining Treatment (POLST).The "Bedside to Streamside" work started with RENEW, and is moving forward through CELP, Sierra Club, and the Columbia Institute for Water Policy.

To resolve ethics conflicts in hospitals or over rivers, the first step is to obtain the basic information for making decisions. If there are conflicts of interest involving agency staff or consultants, then those conflicts need to be disclosed. For the draft Spokane River flow rule, substantial and necessary information is absent, including surveys of river users and necessary inventories of what the river looks like at different locations and different flows. There is no discussion of historical use and flows, and no projection of future use and flows.[5]

Absent also is the necessary discussion of Idaho continuing to issue water rights, the issuance by Washington Dept of Ecology of extensive paper water rights, and the eventual allocation of water between Idaho and Washington that will further deplete river flows.[6] The fisheries analyses are incomplete, flawed, and erroneous in their conclusions.[7]

Economic analyses fail to address the benefits of higher flows for recreation- based businesses and hydropower generation.[8] In failing to provide foundational information necessary for informed decision-making, the proposed rule is ethically unsound.[9]

The next step in resolving ethics conflicts is to assess who is impacted by the decision and determine their preference (the ethical principle of autonomy). Thousands of people use the Spokane River. Flows in the river support recreational uses and businesses. Fish and wildlife depend on the river.[10] More broadly, the decision on Spokane River flow will bind future generations who currently have no voice.[11] And beyond the human constructs, there are matters of stewardship responsibilities for fish and wildlife who are voiceless in human decisions over their habitats.[12] Respecting the needs and preferences of those impacted but who lack decisional-capacity is embodied in the phrase "Common Good" and its corollary, the Public Trust Doctrine. By failing to recognize and respect the many who have a stake in this decision, the proposed Spokane River flow rule is contrary to the Common Good and ethically unsound.[13]

In a third step of ethics analysis, reviewing contextual features is essential. An ethics review includes applicable laws and regulations. For example the Washington State Water Resources Act of 1971 states that perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values.(RCW 90.54.020) Absent necessary studies, the agency is unable to ascertain whether the proposed base flows are adequate to provide for "preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values." Indeed, the failure of the agency to provide the foundational information for informed decision-making has prompted river advocates to provide the necessary studies. In failing to comport with laws that promote stewardship laws, the proposed flow rule is ethically unsound.[14]

In closing, the Spokane River is one of Washington's most important rivers.[15] During hot summer months, thousands of people turn to the river for relief and recreation.[16] Fish and wildlife depend on this river: water is life.[17] Climate change is likely to make the Spokane River more important over time as a source of refuge and recreation.[18]

Setting summertime flows at 850 cfs would be a debacle for the Spokane River[19] -- and set a standard as a state rule that risks rivers statewide.[20] By low-balling the flow, Washington State is effectively giving away the river to Idaho, the upstream state that will claim all water not protected by Washington's flow rule.[21]

For the Spokane River, no flow rule is better than a bad rule.[22] Until such time as the agency is able to make ethically sound decisions for Spokane River flows I ask that you set the summertime low flow at the protective level of at least 2,500 cfs pursuant to the precautionary principle.[23] If not, then I ask that you withdraw the rule altogether.[24]

Please take steps to protect this important river.[25]

John Osborn MD

My name is John Osborn. I'm here representing Sierra Club, and I serve as the director of the Columbia River Future Project for the Washington State Chapter of the Sierra Club.

The Sierra Club currently opposes the draft rule as it's currently set forth.[H1] I wanted to offer a couple of comments here, and we will be submitting written comments as well. The Department of Ecology held a

hearing earlier on a preliminary draft, and I did attend that. It wasn't a hearing, but an open house, and I did talk to state staff about the failure of the agents of Ecology to do the basic inventory work on navigational use of the river and there was no satisfactory answer and there still is not, and I think the explanation provided by state staff was that this was a split phase rule.[H2]

One of the deficiencies of the draft rule is the failure to address aesthetics. So we actually, in the summer went out and did our own aesthetics review and selected about 30 different observational points and photographed those at different flows. We will provide those to the agency, but that's the work that the agency should have done and that citizens should not be doing.[H3]

I had the opportunity to talk to people as they got off the river. Remember those really hot days, those almost 100 degree days on the weekends, and there would be so many people down on the river, and I talked to them and I asked them if I could take photographs and they allowed me to do that. And I said, you know, the rule that the state is now proposing will make it impossible for you to use this river as you are currently using it, and people were very upset. I think people don't understand what this agency is proposing to do, and the impact it will have on our community.[H4]

So one thing I would ask, as I asked before, is will you please provide that navigational inventory because it needs to be done, and I think that it would inform the rule.[H5]

Also, I just left the conference on the Columbia River, and Ecology staff were there, including Randy Piper and Jim Maloti, so they are representing the agency talking – and discussions about the restoring of anadromous fish to the upper basins, but the protection of the Spokane River, it is not reflected in this rule.[H6]

So we have the agency in one venue participating in those sorts of conversations, but it's not reflective in what the agency is doing as it relates to one of the most important tributary rivers to the Columbia, which is the Spokane,[H7] and in the face of climate change, which is also not addressed in this rule, the importance of this cold water and the health of the system is critically important as we look at rising temperatures and the threat of fish populations in the basin. [H8]

This has already been discussed, the issue, and the impending water wars with Idaho are not addressed by this agency, and, in fact, it appears that the agency is advocating the state's position, and has responsibility to protect the waters of this river system for the people of the state. It is -- I think it's -- I would hope that the agency would take a moment to really reflect on its responsibility to protect the river and a shared river basin with the State of Idaho where pumping continues for water residents to use that river. [H9]

And in closing, what I would offer here is that you either should do it right or don't do it. You either should protect the river with a -- provide a flow that's protective of the river and the uses of the river or don't do the rule.[H10] Thank you.

Sierra Club (Peterson, Terrance)

Dear Director, Washington State Department of Ecology Bellon,

The Spokane River is one of Washington's most important rivers.[1] During hot summer months, thousands of people turn to the river for relief and recreation.[2] Fish and wildlife depend on this river: water is life.[3]

Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers statewide.[4] The Department of Ecology failed to analyze flows needed for recreational use of the river.[5]

The proposed flow does not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[6]

By low-balling the flow, Washington State is effectively giving away the river to Idaho the upstream state that will claim all water not protected by Washington's flow rule.[7]

For the Spokane River, no flow rule is better than a bad rule. I ask that you either set the summertime low flow at the protective level of 2,500 cfs, or withdraw the rule altogether.[8]

As goes the Spokane Rivers, so goes the other rivers of Washington State.[9] Please take steps to protect this important river.[10]

Sincerely,

Mr. Terrance Peterson

Sierra Club (Roberts, Lynda)

Director, Washington State Department of Ecology Maia Bellon

Dear Director, Washington State Department of Ecology Bellon,

I hope you are paying attention to the long term problems that will result from this bad decision. It is up to you! The Spokane River is one of Washington's most important rivers.[1] During hot summer months, thousands of people turn to the river for relief and recreation.[2] Fish and wildlife depend on this river: water is life.[3]

Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers statewide.[4] The Department of Ecology failed to analyze flows needed for recreational use of the river.[5] The proposed flow does not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[6]

By low-balling the flow, Washington State is effectively giving away the river to Idaho the upstream state that will claim all water not protected by Washington's flow rule.[7]

For the Spokane River, no flow rule is better than a bad rule. I ask that you either set the summertime low flow at the protective level of 2,500 cfs, or withdraw the rule altogether.[8]

As goes the Spokane Rivers, so goes the other rivers of Washington State.[9] Please take steps to protect this important river.[10]

Sincerely,

Ms. Lynda Roberts

Sierra Club (Sendrey, Robert)

Dear Director, Washington State Department of Ecology Bellon,

The Spokane River is one of Washington's most important rivers.[1] Fish and wildlife depend on this river: water is life.[2] During hot summer months, thousands of people turn to the river for relief and recreation.[3]

Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers statewide.[4] The proposed flow does not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[5] The Department of Ecology failed to analyze flows needed for recreational use of the river.[6]

By low-balling the flow, Washington State is effectively giving away the river to Idaho the upstream state that will claim all water not protected by Washington's flow rule.[7] For the Spokane River, no flow rule is better than a bad rule. I ask that you either set the summertime low flow at the protective level of 2,500 cfs, or withdraw the rule altogether.[8]

As goes the Spokane River, so goes the other rivers of Washington State.[9] Please take steps to protect this important river.[10]

Sincerely,

Mr. Robert Sendrey

Sierra Club (Tardiff, Tracy)

Dear Director, Washington State Department of Ecology Bellon,

Please protect the Spokane River, and do what the Department of Ecology failed to do. Please set the summertime low flow at the 2,500 cfs.
Thank you for protecting the river![1]

Sincerely,

Ms. Tracy Tardiff

Sierra Club (Titone, Julie)

Dear Director, Washington State Department of Ecology Bellon,

For many years, I've enjoyed canoeing on the Spokane River and, when not on the water, soaking up the riverside environment. As a news reporter, I often wrote about the issues of flows and the relationship between ground and surface water, about the impact of mining pollution and phosphorus loading[1]

I agree with the Sierra Club that setting summertime flows at 850 cfs would be a debacle for the Spokane River. [2] Twice that number might be adequate[3] The Department of Ecology failed to analyze flows needed for recreational use of the river.[4] The proposed flow does not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[5]

As goes the Spokane Rivers, so goes the other rivers of Washington State.[6] I enjoy many of them and care about the resource for people and for wildlife. Please take steps to protect this important river.[7]

Sincerely,
Julie Titone

Sharar, Jan

As a middle school, high school and college student from Spokane, I had numerous opportunities to enjoy the Spokane River. I was aware then, back in the 60s and 70s, as I am now, the Spokane River can be a healthier river for humans and other animals if we take the time to make the right decisions and take the

right steps to enhance this beautiful river.[1] To that end, it is necessary to 1/ study flows to support recreation and enhance river beauty,[2] 2/ direct fish studies to better address the unique habitat needs of the redband trout which is imperative to recovery of fish runs in the Upper Columbia River system,[3] and 3/ assess the rules potential impacts to interstate water allocation schemes.[4] Please rethink this rule in its current form and take the time to do it right![5] Most sincerely, Jan Sharar

Solberg, Steve

Allowing the river level to drop as low as 850 cfs will definitely have an impact on the fish population.[1] It will be very detrimental to the native redband trout along with all of the other fish species.[2] That level is just too low, 1000 cfs should be the minimum.[3]

Spickler, Dawn

Dear Ms. Wessel,

I am concerned about the proposed river flow recommendations for the summer months. 850 cfs seems very low to me and could impact the use and quality of the river.[1] Our water resources are precious, to say the least, and need to be monitored carefully.[2]
As our population increases, learning how to share resources is essential. There are many ways businesses and citizens can be educated on how to conserve water use so that the river can continue to support plants, fish and sustain a healthy environment. With all the social media available nowadays communicating the urgency of protecting the environment is easier than in the days of paper mailings.[3]

Please reconsider the recommended river flow for the summer months. Make it safe for the ecology of the river.[4]
Thank you.
Dawn Spickler

Spokane Canoe & Kayak Club (Harbine, Patrick)

My name is Patrick Harbine. I'm a kayaker. I've been boating the Upper Spokane River since 1965, so I know the river well, and I'm representing the Spokane Canoe and Kayak Club. Two of the issues that we've fought for the hardest over the past two years is access to the river, which shrinks each time someone puts up a private property sign, and the other is instream flow. And I understand that the instream flow is set at 1,100 cfs.

The section I'm most concerned about is the most popular section from Arthur Road to Sullivan Road, and in that particular section, 650 cfs is most of the aquifer, so it's an area where you need at least 1,200 cfs of water to successfully run the river between the two bridges.

We did a study with Avista several years ago with a number of kayakers and rafters, and they pretty well gave the idea to Avista that the instream flow should be 1,500 cfs. We know that August and -- July and August are low months and probably can't be met. They compromised with 750 cfs through those summer months, which means somebody in a boat can go out and play on the beach and on the river, but you can't boat through the rapids, and this excludes kayakers, rafters, inner tubers, and if you drop lower than the 500 cfs, there's no river at all.

I'm particularly concerned about not only the instream flow of which would be around 500 cfs, but also the length of time, because as I read the information put out, it says that this will be from June until September, four months out of the year, and the four most popular summer months. And I would like to see the instream flow starting point be higher than 500 cfs because they think it's not enough, not enough for kayakers,[H1] not enough for fish.[H2] Thank you.

Spokane Canoe & Kayak Club (Mrzygod, Lynn)

The Spokane Canoe & Kayak Club supports the concept of establishing instream flow levels necessary to protect wildlife, fish, scenic, aesthetic, RECREATIONAL values, etc. as stated in the proposal.[1] As one of the Spokane River's "user groups" we would recommend an increase in the instream flow rate as measured at the Greenacres (Barker Road) USGS gauge #12420500 from the proposed 500 cfs between June 16 to September 30 to 1200 cfs.[2] Specified cfs are too low to support recreational use of the river to canoes, kayaks, paddle boards and inflatable watercraft. 1200 cfs would open approximately 12 river miles between State Line on the east to Plante's Ferry Park to the west to paddlecraft during the prime summertime river running season, an addition of 107 days. Tens of thousands of "on-water" recreational hours would be gained as a result "opening" the river in the time of the year when temperatures are at their hottest and daylight hours their longest.[3]

Thank you for accepting public comments in your decision making process.

Spokane Canoe & Kayak Club (Olgeirsson, Celene)

Department of Ecology
Re: Lower Spokane Flows

Hi My name is Celene Olgeirsson. I'm a whitewater kayaker and have been a board member of the Spokane Canoe & Kayak Club since 2006. SCKC consists of 160 families who enjoy self propelled water sports. We educate, mentor paddlers of all kinds. Having experienced boaters on the water show others how to dress and behave on the water. Many people get on the Spokane River to enjoy themselves and cool off from hot temperatures. Lower flow levels are more technical and dangerous for people who don't know any better.[4]

To my knowledge no one at DOE contacted anyone at SCKC regarding our usage of the Lower Spokane. We know flows and recreating and feel we could have and should have offered our expertise in the matter.[5]

The Spokane Canoe & Kayak Club wants Ecology to protect high flows in the river – Safe boating flows for everyone is around 2500 cfs.[6] 850 cfs flow from June15 to September 30 is an unacceptable flow and extremely dangerous one for some.[7] By reducing flows to 850 cvs DOE is taking the recreation aspect out of the equation and I believe that is illegal. The State Minimum Flow Act and Water Resources Act require protection of recreational and navigational use of Washington's rivers. We ask that Ecology follows the law.[8]

I ask that you do not adopt the current proposed rule and instead, return to the assessment phase of this process and conduct recreational flow surveys and outreach to SCKC and other boating groups to obtain data and a better understanding of the importance of the Spokane River for boating.[9]

Sincerely,

Celene Olgeirsson
SCKC member
Ps. I'm attaching some fun photos of people enjoying the Lower Spokane River at around 1200 cfs. This flow is extremely technical and only experienced hardshell kayakers can enjoy this level, which leaves out lots of people who cannot enjoy the river unless flows are more like 2500 - 3000 cfs.[10]

Spokane County

Dear Ms. Wessel:

The Board of County Commissioners appreciates the opportunity to provide comment on the proposed rule, Chapter 173-557 WAC, Water Resource Management Program for the Spokane River and Spokane Valley Rathdrum Prairie (SVRP) Aquifer. Spokane County recognizes the value of this proposed rule in:

- preserving instream resources in the Spokane River,
- protecting Washington's interest with respect to existing water rights, and
- addressing regional water management objectives.[1]

These comments supplement the comments previously submitted on June 11, 2014, in response to the Preliminary Draft of the subject proposed rule. We have enclosed is a copy of that correspondence for your convenience. In those comments Spokane County noted ambiguities in the proposed rule with respect to coordination with the currently established rule, Chapter 173-555 WAC Water Resource Management Program for the Little Spokane River. Spokane County also commented on uncertainties noted with respect to the use of individual, domestic wells over the SVRP aquifer, and the proposed water right mitigation program to allow future water use in areas not currently served by municipal water systems.

Spokane County appreciates that the revised proposed rule addresses a portion of the above noted comments. However, ambiguities in the rule still remain. Accordingly, please accept these related comments:

Comment 1:
The geographic area to be governed by the proposed rule (WAC 173-557) overlaps with a geographic area currently governed by the Little Spokane River Instream Flow Rule, WAC 173-555. In the overlapping geographic area the Spokane Valley Rathdrum Prairie (SVRP) aquifer is found in two distinct layers, as described in USGS Scientific Investigations Report 2007-5044. The lower layer of the SVRP aquifer is not connected to the Little Spokane River, while the upper layer is.

The proposed language for WAC 173-557 and the proposed amendment for WAC 173-555 states:
“In the area where chapter 173-555 WAC and chapter 173-557 WAC overlap, the application of each

rule shall be determined as follows:
(1) New water use from the Little Spokane River, its tributaries, and the shallow aquifer associated with the Little Spokane River and its tributaries shall be regulated under this rule (chapter 173-555 WAC).
(2) New water use .from the Spokane Valley Rathdrum Prairie aquifer shall be regulated under chapter 173-557 WAC, Water resource management program for the Spokane River and Spokane Valley Rathdrum Prairie (SVRP) aquifer.

Item 1 above references the "shallow aquifer associated with the Little Spokane River and its tributaries" which according to USGS Scientific Investigations Report 2007-5044 includes the upper layer of the SVRP aquifer. Item 2 references the "Spokane Valley Rathdrum Prairie aquifer" with no distinction between the upper and lower layers. Therefore, the upper layer of the SVRP aquifer associated with the Little Spokane River falls under both items 1 and 2.

If the intention is to regulate all SVRP water by 173-557 WAC, we suggest the following change to item 1 (the proposed change is shown as underline):

1. New water use .from the Little Spokane River, its tributaries, and shallow aquifers associated with the Little Spokane River that are not part o(the SVRP shall be regulated under this rule (chapter 173-555 WAC).

If the intention is to regulate the upper layer of the SVRP aquifer within WRIA 55 by 173-555 WAC and the lower layer of the SVRP aquifer by 173-557 WAC, we suggest the following change to item 2 (the proposed change is shown as underline):

2. New water use from the lower layer of the Spokane Valley Rathdrum Prairie aquifer shall be regulated under chapter 173-557 WAC, Water resource management program for the Spokane River and Spokane Valley Rathdrum Prairie (SVRP) aquifer.[2]

Comment 2:
Under 173-557-020 WAC, the term "direct hydraulic continuity" is used. This term is not defined in the definitions section, and we are not aware of any definitive interpretation of 'direct' versus 'indirect' hydraulic continuity. We suggest including a definition or striking the word 'direct'.[3]

Comment 3:
173-557-060 (3) WAC states: “Within the area regulated under this rule, municipal water suppliers are the primary sources of water for new uses. If water is not available from a municipal water supplier, the consumptive use impacts to surface water from new permit-exempt groundwater withdrawals must be interrupted when stream flow is below the ins/ream flows established in this rule, unless those impacts are mitigated. Mitigation must be achieved through an ecology-approved mitigation plan.”

Spokane County administers the Spokane County Coordinated Water System Plan (CWSP). The CWSP encourages connection to public water systems, though does not require it. In situations where a building permit applicant and the public water supplier cannot agree on the terms of connection to the water system, the building permit applicant may use an individual well. The section above utilizes the phrase, "If water is not available from a municipal water supplier... “Which is ambiguous and could be construed to mean a building permit applicant is required to connect to a municipal water supplier.

This section is potentially in conflict with the Spokane County CWSP. Spokane County suggests deleting the following portion of the above-referenced section:

"Within the area regulated under this rule, municipal water suppliers are the primary sources of water for new uses. If water is not available from a municipal water supplier,"

Alternatively, if deleting the text as described above is not acceptable, the text could be modified as presented below (the proposed change is shown as underline):

"Within the area regulated under this rule, municipal water suppliers are the primary sources of water for new uses. If water is not available in a timely and reasonable manner from a municipal water supplier,"[4]

Comment 4:
Spokane County understands that Ecology has acquired a water right that will be senior to 173-557 WAC, and this water will be utilized to offset new water use from permit exempt wells. We have several questions related to this mitigation strategy:

- How large is the water right, and how many new permit exempt withdrawals will it support?[5]
- Will Ecology develop a programmatic mitigation plan that can be used by subdivision and building permit applicants?[6]
- Without meters, how will water use be tracked and debited against the senior water right?[7]
- How will this process be integrated into Spokane County Building and Planning permitting process?8
- Will the mitigation credit be appurtenant to the parcel and owned by the parcel owner?
- Will the mitigation credit be recorded on the deed?[9]

Spokane County looks forward to coordinating these details with Ecology as this aspect of the proposed rule has significant potential to affect ongoing operations in Spokane County's Building and Planning Department. It is our position that these details, and any others that may arise, must be addressed prior to the effective date of the rule. While we understand the potential for development that will utilize permit exempt wells as a water source within the geographic area of the proposed rule is small, the items identified above are not trivial, and could take some time to put in place. If they are not in place there could be significant delay in processing a permit that proposes to utilize the purchased water right as mitigation for a new permit exempt well.[10]

Comment 5:
Spokane County remains concerned over the effect this proposed rule may have with respect to potential water right impairment claims in the event Spokane County determines that the Spokane County Regional Water Reclamation Facility is unable to meet water quality standards and elects to limit or eliminate discharges to the Spokane River. It is understood this issue is of statewide significance and is not exclusive to this rule.[11]

The comments provided herein are not directed at the intent of the rule, but are concerns related to implementation of the rule. In our view, if these concerns are not addressed the ambiguity may impact land use and permit decision-making processes conducted by Spokane County. Contested land use and permitting decisions often hinge on the interpretation of language in administrative rules, so we look forward to working with you on refining the rule language so that it is clear and concise.[12] Additionally, the development of the mitigation program for new permit exempt wells prior to the effective date of the rule is essential to rule implementation.[13]

Please contact Rob Lindsay in the Utilities Division/Water Resources with respect to the questions posed in Comment 4. Mr. Lindsay will assist in coordination between Ecology and Spokane County Building and Planning staff as appropriate to address our concerns.

Thank you for the opportunity to comment. Very truly yours,
Al French, Chair
Todd Mielke, Vice Chair
Shelly O'Quinn, Commissioner

Spokane Falls Chapter of Trout Unlimited (Morrison, G Harvey)

Dear Ms Wessel,

Following are the comments submitted by the Spokane Falls Chapter of Trout Unlimited (SFTU) regarding the above referenced proposed rule that is intended "to guide the protection, use and management of the Spokane River". SFTU is the local chapter of Trout Unlimited, a national conservation organization whose mission is, "To conserve, protect and restore North America's coldwater fisheries and their watersheds." It is in the context of this mission that we offer our comments.

SFTU commends the Department of Ecology for its intent to set minimum flow rules for the Spokane River:[1] however, we believe that the flows proposed are too low, particularly, the proposed summer flow of 850 cfs.[2] Our concerns are as follows:

River Ecology

Although the methodology of the PHABSIM study sought to set the summer flow level that is a compromise of what is optimal for mountain whitefish and Redband trout, it was silent on the impacts to numerous other species of fish and aquatic macro-invertebrates that are native to the River. No attention in the study was directed to the inter-dependence of these other species to the survival of the whitefish and trout.[3]

Summer flow of 850 cfs as proposed is a compromise of the lowest suitable flow for whitefish and trout. We believe that it is broadly held in the scientific community that higher flows would not be detrimental, and likely beneficial, to those 2 species.[4]

STFU is also concerned that at 850 cfs, the native fish will be forced into smaller refuges where they will be overly concentrated in competing for food and shelter. Also, during those times of stressful concentration, due to low water, high temperatures and limited food, they are more apt to be vulnerable to predation and over fishing.[5]

Anadromous Fish

The return of anadromous salmon and steelhead trout to the upper Columbia and Spokane River watersheds is a topic of much interest to SFTU and many other NGOs, agencies and tribes. Consideration of the spawning and rearing habitat suitable for the return of those fish should be included in the analysis to determine the protected minimum flows.[6]

Recreation/Navigation

The only navigation currently on the Spokane River is associated with recreational floating, paddling and angling. These activities are most utilized during the summer months when the proposed minimums are at the 850 cfs level. At that low level, many more hazards are apparent and the river becomes unsafe and impassable for recreationists.[7]

Climate Change

Little, if any, consideration in the proposed rule addressed the likelihood of climate change and it's influence on the future flows of the River. SFTU understands that speculating on the impact is difficult to project; however, models do exist that tell us that our winters will be warmer and rainy and summers hot and dry.[8] We believe that in this era of uncertainty, the flows need to be protected at the highest minimal rather than the lowest minimal. Better to error on the side of caution.

While nature and a changing hydrograph may reduce flows to or below those in the proposed rule, the River and Aquifer need to be protected as much as possible to prevent over allocation that will reduce flows artificially low.[9]

Timing of the Transitional Flows

Although we support higher flows throughout the annual cycle, we especially believe that the transitions between seasons needs to be gradually stepped rather than the sharp vertical decrease/increase represented on the Appendix B graph. We believe that the stepped transition will be better for all of the native species in adapting to the change in flows.[10]

We also believe that the spring flow should be ramped up starting March 1st and extended until July 1st. This will benefit the Redband trout as they stage and spawn and assure that the fry have an opportunity to find refuge after they emerge from the spawning gravel.[11]

Economic Impact

The Small Business Economic Impact Statement (Publication 14-11-005) only addressed current or future small businesses and their ability to obtain water. The only impact stated was if the businesses "…choose to pursue a change or transfer of an existing water right."

The Impact Statement failed to recognize the impacts on small businesses that provide the services of guided fishing, recreational rafting and kayaking. These businesses will be economically harmed by summer flows of 850 cfs.[12]

Summary

For all of the above stated reasons SFTU respectfully requests that the Department of Ecology re-open the study to determine the most beneficial flows that address the complete, complex Spokane River ecology. All of the aquatic life in the River needs to be a part of the study.[13]

SFTU lacks the expertise to recommend what the minimum flows should be, but we strongly feel that the flows proposed are too low and based on flawed and narrow science.[14]

SFTU supports setting the minimum instream flows as high as can be supported by science to prevent the issuance of additional water rights that drop the River to unsustainable flows and levels. We sincerely doubt that enforcement to" turn off" junior water rights will be implemented without long legal battles.[15]

It will be better to start the rule making process over than to issue a bad rule![16]

Thank you for the opportunity to submit our comments on this important issue to our River and community.

Sincerely,

G. Harvey Morrison
Conservation Chairman
Spokane Falls Chapter of Trout Unlimited

Spokane Falls Trout Unlimited (Hardy, Josh)

Howdy! I think the minimum instream flow level of 850/cfs for the Spokane River is ridiculously low![1]
This river is vital to our area in many ways including tourism, boating and kayaking, fishing, and most importantly, our overall environmental quality![2]
Please consider all the different people who enjoy this river on a daily basis, not to mention the native redband trout population and keep at least 2500/cfs of instream flow in our river![3]
I hope you listen to all of us who care about our Spokane River and keep it flowing![4]
Sincerely, Josh Hardy

Spokane Riverkeeper (White, Jerry Jr)

Subje**ct**: Riverkeeper Comments on Minimum Instream Flow Rule - WAC 173-557

Summary:

The Spokane Riverkeeper appreciates the process of rulemaking that guarantees water in the Spokane River.[1] However, in the face of overconsumption of groundwater that feeds our River, the Riverkeeper feels that the Department of Ecology recommendations do not go far enough in protecting the flow regimes that support healthy aquatic ecosystems and the recreational values of the Spokane River.[2]

- Ecology recommends 1,700cfs (cubic feet per second) between October 1 and March 31. Spokane Riverkeeper recommends 4000cfs.
- Ecology recommends 6,500cfs between April 1 and June 15. Spokane Riverkeeper recommends 8000cfs.
- Ecology recommends 850cfs between June 16 and September 30. Spokane Riverkeeper recommends a flow rule of between 1500cfs and 1800cfs.[3]

To follow are elaborations on this summary.

Background Context:
The Spokane Riverkeeper is a citizens based organization that continues to protect and advocate for the Spokane River using education advocacy and when necessary, litigation to achieve the goal of a fishable, swimmable Spokane River.

These comments are based in the recognition that we simply do not have the science to understand setting flows for healthy ecosystem function. There is an emerging body of evidence that documents the health of urban river ecosystems and the unique variables that affect their function and health.

“Urban streams have been the focus of much research in recent years, but many questions about the mechanisms driving the urban stream syndrome remain unanswered… The key questions address major gaps in our understanding of ecosystem structure and function responses (e.g., what are the sublethal impacts of urbanization on biota?), characteristics of urban stream stressors (e.g., can we identify clusters of co-varying stressors?)” (Wegner, et al, 2009)

Certainly this quote captures the situation with regards to our current lack of understanding of how the Spokane River aquatic ecology functions and how the stresses of hydrologic change, and flow regimes affect the ecology or our urban river and its ecology.[4] We can, however, identify several key elements that

surely affect the Spokane River and create a degree of uncertainty as to its future health and safety.

- The amount of water flowing in the river is an essential component of river health.
- Making adequate flow recommendations is essential to the future maintenance of healthy ecosystems and the future of community connection to the river through recreation.[5]
- The "authority and purpose" of the instream flow rule making is designed to "protect and preserve fish, wildlife, scenic, aesthetic, recreational, water quality, and other environmental values; navigational values; and stock watering requirements" SECTIONWAC 173-557-010.[6]
- Anthropogenic change is creating a great deal of pressure and stress on the aquatic life of the Spokane River for numerous reasons low summer flows being important among them.[7]

Given what we do know, the Spokane Riverkeeper concurs with Hal Beecher, Washington Department of Wildlife Biologist who states in his 2012 Instream Flow Recommendations for the Spokane River, that flow recommendations should be both "protective" and "conservative".

"When there is uncertainty, the state recognizes that any water rights will be issued in perpetuity so instream flows should be protective and conservative. There is no harm to the river from being conservative, but it is hard to undo harm if the instream flows are not protective enough and water is appropriated down to the instream flow" (Beecher, 2012).

It is within this frame, Spokane Riverkeeper delivers the following comments.[8]

Threats and stress on the hydrology/ecosystem

1. Spokane Valley Rathdrum Prairie Aquifer Withdrawals

The first anthropogenic variable that affects appropriate flows is the persistent pumping of Spokane Valley Rathdrum Prairie Aquifer in close proximity to the Spokane River. There are 21 water purveyors within the Spokane Valley and Rathdrum Prairie who collectively run over 122 wells in the Spokane Valley alone. Because the Spokane River is dependent on its interchange with the aquifer, it is particularly vulnerable to losing flow to pumping in close proximity to the Spokane Riverbed.

Hortness and Covert have stated, "The largest impact on the hydrologic system stems from the withdrawa of ground water in both Idaho and Washington mostly for municipal and private water supply.

The average combined withdrawal rate is 317cfs (Hsieh and others, 2007, page 23). The summer peaks of the combined withdrawal generally range from 600 to 800 cfs.

Ground-water pumping impacts surface water systems via declining ground-water levels. Lower ground-water levels cause greater losses in hydraulically connected losing stream reaches and reduced gains in gaining reaches. It is important to remember that ground-water level changes only impact flow in streams where there is saturated hydraulic connection between ground water and the stream." (Ralston and Johnson, 2014).

The lower Spokane River is just such a stream. Additionally, this pumping has a profound effect on the lower Spokane River low flows because as G.S. Johnson et al, states, "In the portion of the aquifer immediately below Trinity Trough, nearly all pumping or recharge effects are concentrated on that specifi river reach because the aquifer is constricted at Trinity Trough and discontinuous at the lower end" (Johnson et al, undated).

Clearly when one looks at the data, historically the river had higher base flows in the earlier 20th century (see Figure 1). The current lower summer flows are very likely function of wells that are very close to the river bed.[9]

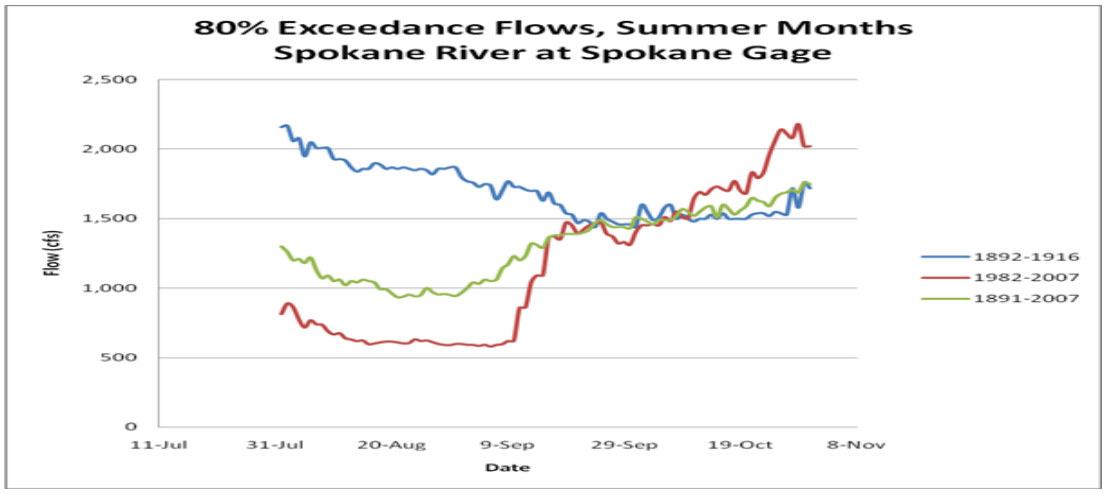


Figure 1. Using 80% exceedance clearly demonstrates the moving baseline between the early 20th century and the latter. To bracket flow rulemaking with late 20th century data is to normalize over-consumption of ground water at the expense of flow in the lower Spokane river and to compromise the ecosystem it supports. (Graph courtesy of John Gross)[10]

2. Over-**co**ns**um**p**tio**n of w**at**er

Similarly, the second anthropogenic variable with implications for Spokane River base flows is the over-consumption of ground water. This is, of course, integrally connected to pumping in close proximity to the river. Statistics now say that ground water is being used at a rate of 3000 gallons per second in the months of July and august, the same season as the lowest River flows. The city of Spokane has some 25 billion gallons of water rights on paper that could be accessed and used, and if population projections are correct, water use is anticipated to increase 37% by 2040. Current and future over-consumption will continue to demand water that originally supplied the river with clean, cold water. This mounting pressure on the Spokane River has major implications for the future viability of the aquatic ecosystems that the river has supported for thousands of years.[11]

Barber and others have shown that the hydrograph the Washington Caucus is using as a model for recommendations is clearly affected by the perception that summer low flows since 1986 are "normal" rather than the resulting crisis of ground water "mining" in the Spokane Valley and Rathdrum Prairie. In a 2011 report the author's state:

"As illustrated… summer low flows at the USGS gage near downtown Spokane …. are often less than 1,000 ft3/s, particularly in the last 40 years. It is this disturbing trend in low flows that raises concerns among water resource agencies. A regression analysis of the minimum annual daily flow data indicates a statistically significant … decrease in low flow between 1900 and 2007. While the rate of decline was steepest from 1900 through 1950…..the downward trends has still continued since that time…..The combined effects of changes in reservoir operations associated with the Post Falls Dam, changes in water use patterns from irrigation of orchards and row crops to suburban residential uses, increases in municipal pumping as the regions' populations has grown and changes in runoff patterns due to climate change… are creating severe low flow conditions that threaten water users and the environment" (Barber et al, 2011).[12]

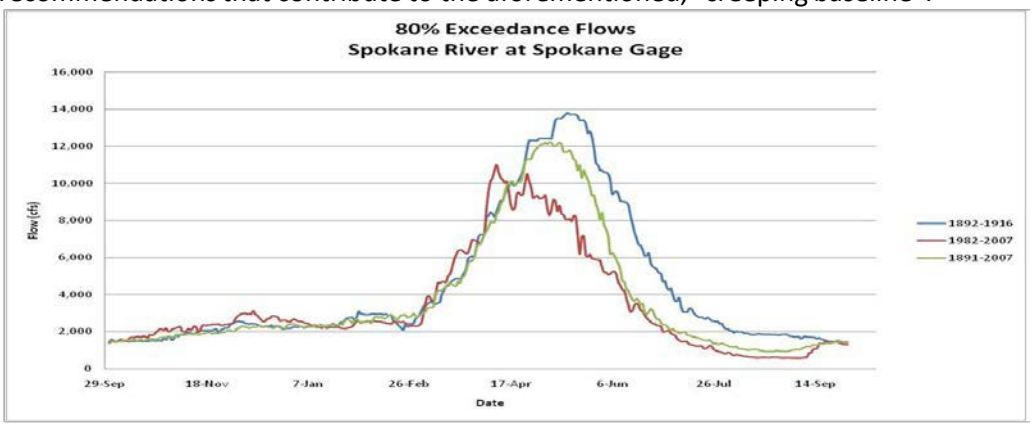
3. Global Climate Change

Third, we are and will continue to face, the loss of both ground and surface water recharge due to the growing impacts on our river from global climate change. In the Climate and Hydrology Datasets for Use in the River Management Joint Operating Committee (RMJOC) Agencies' Longer-Term Planning Studies report compiled by the United Sates Army Corps of Engineers, the U.S. Department of the Interior, Bureau of Reclamation and the Bonneville Power Administration in 2011, trends for the next century are for warmer, wetter winters and dryer, hotter summers. This has profound implications for the ground water and surface water supplies that feed the Spokane River. This report states, "For sub-basins in the Columbia River Basin, the trend from historical to future average annual runoff was found to generally follow the same trend as the average annual precipitation (Figure 8). Monthly runoff patterns are expected to change in the future relative to historical conditions, with warming leading to increased winter-spring runoff and reduced summer runoff. These seasonality changes are due to increased winter rainfall and reduced snowpack, which reduce the snowmelt volume through the summer. Scenario precipitation trends varied geographically within the Columbia River Basin; however, absent any precipitation change, warmer conditions led to increases in evapotranspiration and a reduction in runoff in these scenarios".

The implications of climate change are more stress on water consumption because 1) population growth in our area due to suitable climate and an unliveable southwest 2) Less surface and ground water due to diminished snowpack and more consumption of water due to weather that has extreme heat.[13]

- **Riverkeeper Recommendations for the parameters of setting flows:**

Use all **o**f **th**e hi**st**ori**ca**l f**lo**w **d**a**ta**: The Spokane Riverkeeper believes that the Ecology should incorporate the early 20th century hydrograph that is not degraded by over- pumping, close proximity pumping and over consumption for the model of recommended low flows. First, the State Caucus's reliance on a Spokane River hydrograph that spans the years 1986 and 2008 contributes to a flow recommendations that contribute to the aforementioned, "creeping baseline".[14]



80% exceedance flows graph (Graph courtesy of John Gross)[15]

Do n**o**t use a po**s**t-1986, **1**00% ex**ce**e**da**n**c**e **c**urv**e**: The Spokane Riverkeeper believes that following a base flow regime rule set at 100% exceedance flows (for years after 1986) is flawed as it is neither "conservative" nor "protective" of aquatic habitats and ecosystems. These recommendations threaten to codify a "new normal" in which the Spokane River is degraded by insufficient summer base flows and much of its biological and recreational integrity is allowed to disappear.[16]

Again, within the context of global climate change (coupled with over-consumption), instream flows

should be set to protect the ecological and aesthetic values of the river rather than rely on norms that potentially tilt the management of the Spokane River minimum flows towards protecting the over –consumption and miss- management of the Spokane River. Using a higher exceedance curve corrects for the depletion that the river has experienced after 1986 due to a trend of over-pumping. This "conservative" approach is designed to meet the above mentioned "authority and purpose" of the instream flow rule making.[17]

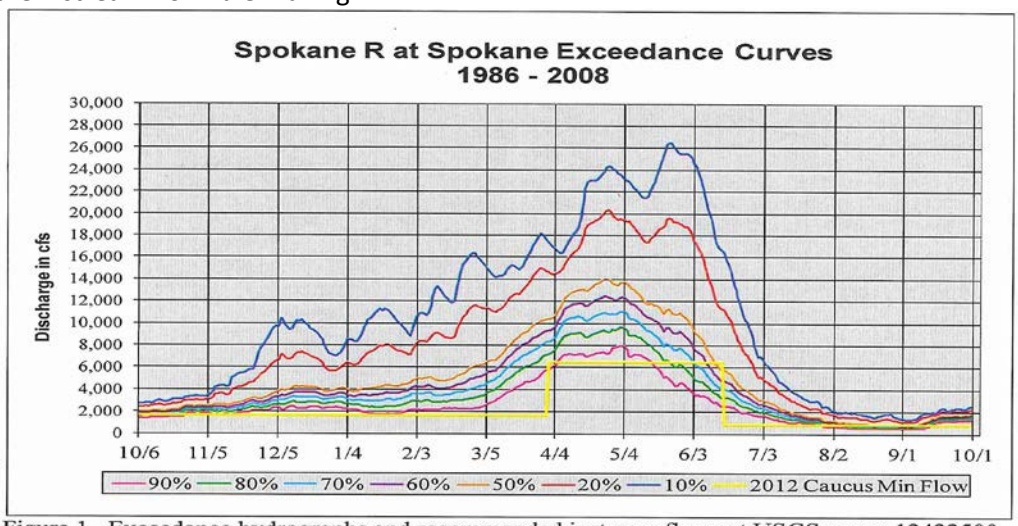


Figure 1. Exceedance hydrographs and recommended instream flows at USGS gauge 12422500 (Spokane River at Spokane).

[18]

Regul**at**e fl**o**ws **for th**e **ent**ire e**co**sy**stem**: The fisheries science that suggests that a low flow of 850cfs is a good compromise between optimal mountain whitefish and redband trout habitat quality and quantity (WUA - Weighted Usable Area) is suspect. Washington Caucus/WDFW have reported that flows that are optimal for redbands reach their maximum at 1900cfs (Beecher, 2009). That higher summer flows are not optimal for mountain whitefish may be a red hearing that detracts from setting flows which are more protective of the entire system including the other 18 species of native fish reported to live in the Spokane River. To make low flow recommendations on the basis of seasonal whitefish WUA is reductionist, compromises the principal of "do no harm" by allowing the baseline low flows become dangerously low and potentially compromising a larger ecosystem in the long term. It also contributes to the continued tilt towards prioritizing Spokane River Aquifer water to over-consumption rather than conserving ground water for the sustainable stewardship of the Spokane River, ecosystem health and future generations of recreationists.[19]

4. **U**se a p**o**st-**1**986, 50% ex**c**eed**a**n**c**e **cu**rve **o**r hi**g**her: The Riverkeeper recommendations will follow a more "conservative and protective" post-1986 50% exceedance curve (or higher) which is more protective of water than the Caucus recommendations. The Riverkeeper believes that using the higher exceedance corrects for a river that is depleted by anthropogenic causes. Defaulting to modern flows at the 50% exceedance is inherently protective of ecological values regardless of science that may look at optimal protection of one or two species in a matrix of hundreds or thousands. Further this curve protects recreational and aesthetic values more effectively.[20]

5. Modify the seasonal control points: Further, I recommend that the Ecology framework of adjusting flows between control points of March 31st and April 1st is flawed as the hydrograph clearly begins to sharply increase by March 1st. I think winter flows should be bracketed between October 1st and March 1st and spring flows between March 2nd and June 15th.[21]

6. **U**se a n**at**u**r**al hyd**r**ogr**a**ph: The flow recommendations should more clearly follow the natural

hydrograph. Ecology recommendations allow hydro-operators to drop flows 5650cfc in a 24 hour period between June 15th and June 16th of the year. This is clearly inappropriate in that if this were actually executed, such a massive drop of river flow volume would have a debilitating effect on the entire ecosystem, stranding aquatic organisms and dewatering large areas of the riverbed. It would be a better design to have the control points in the recommended hydrograph roughly coincide with the rise and fall of the natural hydrograph.[22]

Riverkeeper recommendations for summer flows (June 15 – September 30) for ecological values:

The Spokane Riverkeeper recommends a summer time flow of 1500-1800cfs (higher than 1986+50%exceedence) to protect ecological integrity of the Spokane River.[23]

The Spokane Riverkeeper feels that Ecology's recommendation for 850cfs is too low and does not go far enough in setting a boundary that will protect the aquatic ecosystems of the Spokane River. Base flows of 850cfs flows do not mimic the more ample flows of the early 20th century that predate the placement of numerous wells in and around the Spokane River.[24]

As stated above, low flows (below 1000cfs at the Spokane USGS Gauge) experienced in the latter half of the 20th are not necessarily normal or natural summer flows. If one looks at the compiled hydrographic data for the Spokane River between 1899 and 1950 summer time low flows discharges were consistently above 1000cfs and actually, very often above 1500cfs. It is not until 1950 that we begin to see the discharges in the lower river dip under 1000cfs and not until the 1960s that we see summer discharges periodically as low as 850cfs.[25]

Setting flows as low as 850cfs as a matter of policy does not meet the "authority and purpose" of the instream flow rule-making process. These base flows may well represent a persistent crisis rather than a norm to be relied on for healthy ecosystem function and codified as public policy. At 850cfs much of the stream bed of the lower SR is dewatered and dried out. A growing base of ecological science is revealing that dewatering a river below 75% of its capacity is detrimental to the benthic community. Such dewatering may have profound effects on the composition of species, the diversity and relative abundance of benthic organisms.[26]

In her study, Catherine Leigh reports, "Higher wet-season flow magnitudes, flow variability and rates of fall were correlated with lower richness in the following dry season. Alteration of the flow-disturbance regime that increases the likelihood of flow cessation in macro invertebrate habitats, or extends the duration of the dry season beyond that previously experienced in these highly seasonal systems, may alter the resistance and resilience of assemblages such that the seasonal decline and recovery of biodiversity may no longer be so reliable. Given the projected increase in low-flow incidence in many regions of the world, future research needs to examine the effects of reduced flow, flow cessation and stream drying as multiple, interacting stressors on stream biota" (Leigh, 2013).[27]

Further, Ledger, et al found that prolonged drought and dewatering may tilt the ecosystem towards a two dimensional composition of organisms with short life cycles. "These largely predictable drought-adapted assemblages consisted of small short-lived taxa (>1 life cycle per year, e.g. chironomids), or those with refuge-seeking or interstitial habits (e.g. ceratopogonids, oligochaetes), whereas many larger taxa with longer life cycles (1 life cycle per year), including some caddis, mayflies and beetles, were eliminated by frequent dewatering (Ledger et al., 2011). Future shifts in climate are expected to increase the frequency, intensity and extent of drought events in river systems, with potentially devastating effects on benthic ecosystems "(Sponseller et al., 2010).[28]

Ushering in such changes in the macro invertebrate community may have profound implications for the species composition of vertebrates up the food chain. Largescaled suckers, speckled dace and bridgelipped suckers all depend on these benthic organisms in their life cycle as do native Columbia Basin Redband trout and mountain whitefish. The interrelationship between these communities and species is poorly understood but Dr. Allan Scholz has documented that "In point of fact, suckers have co-evolved with salmonids and that Suckers are also an important food source for redband trout and cutthroat trout" (Scholz, et al 2010). Additionally all of these fish form a terrestrial bridge to larger land animals that depend on eating fish for their survival. River otters, blue herons, osprey and bald eagles are a few of the creatures that depend on a functioning aquatic ecosystem in the Spokane River.[29]

At 850cfs, trout may find optimal temperatures, given that proportionally the river is mostly ground water and minimally surface water. The WUA may peak at 850 but the system as a whole is more complex and the Spokane Riverkeeper believes this perceived benefit is a red herring. The cold water of an 850cfs base flow would be too low to provide diversity in habitat and benthic health. In actual fact, such low flows may have long lasting and permanent erosion of macro invertebrate taxonomic diversity and relative abundance. They could in effect allow for the construction of a biological filter that selects for a compromised and degraded ecosystem over a potential rich and diverse ecosystem. Higher flows would offset the one-dimensional benefit of cold water. In fact, even with warmer summer surface water, thermal refuges of cold, aquifer inputs would still exist and would still be utilized by salmonids in addition to the expanded stream-bed habitats and rich benthic world that a minimum summer base flow of 1500cfs to 1800cfs would provide.[30]

A flow of 1500cfs to 1800cfs would be between 96% and 100% of WDFW's calculated Weighted Usable Area (WUA) for redband trout and it would provide the flow to wet much of the streambed and safeguard aquatic ecosystems in the lower Spokane River.[31]

Summer F**lo**ws (**Ju**ne 15 – **S**ep**t**emb**e**r **3**0) for re**cre**a**t**ion**/boat**ing:
Spokane Riverkeeper recommends 1500 to 1800cfs (higher than 50% exceedance) for a low summer flow to ensure proper functioning recreation and community values.

Community recreation and access to the river is very important. When the river drops below a flow of 12 – 1300cfs it becomes difficult to navigate certain stretches and several runs become inaccessible to larger inflatables, dories and drift boats. Additionally, some rapids are dewatered and impassable at 1500cfs and thus deprive boaters of a community public resource at the very time of year when water temperatures make this kind of recreation feasible.[32]

Win**te**r f**lo**ws (O**cto**ber 1st – **M**ar**c**h 31) f**o**r e**colo**gi**c**a**l/**re**c**rea**ti**o**n**al valu**e**s:
The Riverkeeper recommends an instream flow no lower than 4000cfs during the winter.
This is a default to very near the 20th century 50% exceedance to control for slightly higher historic flows. This means 5 out of ten years, winter flows will be above 4000cfs.[33]

As mentioned above, I recommend correcting the bracket date to stop at the 1st of March.[34] The state Caucus recommends a base flow of 1700cfs to prevent compromising whitefish spawning productivity. The Spokane Riverkeeper appreciates the attention to whitefish the historic flows tended to be much higher than this. There are 18 other native species of fish in the river and we have not calculated the WUA for any but O. Mykiss.[35]

Spring F**lo**ws (April 1 – J**un**e 15) **f**or **ecological/recreational v**alu**e**s:

Spokane Riverkeeper recommends **8**0**0**0cfs to protect redband trout spawning habitat. This is an exceedance between 70-80% at peak flows but ensures a 50% exceedance at the latter end (June 15th). It is essential that flows do not drop below 6500cfs any earlier than June 15th.[36]

Conclusion:
Unfortunately, some of the anthropogenic changes in SR flows may be difficult to avoid in the coming decades. This is especially true given the sheer number of on-paper senior water rights that are held by water purveyors who could begin to use this water at some future point. However, it is imperative that the Department of Ecology (and others eg. municipalities) adopt an instream flow rule that is protective of the Spokane River and a rule that applies pressure to normalize a high value for water.[37]

Ideally this rule would help shift our water use from a paradigm of over-consumption to one of conservation and storage in nature or aesthetic, recreational and biological values. Communities might then begin to pursue conservation through incentive based pricing, conservation technologies, education and regulatory statutes that ultimately protects their water and the Spokane River. The instream flows rules need to provide robust frameworks that act as a backstop to over-consumption and poor water stewardship by the communities in our region.[38]

If these flows are set too low, the Spokane River may well become a tragedy of the commons that relegates future generations to a life with a biologically dead river. To live in Spokane without a functioning Spokane River would degrade the quality of life for generations. The adoption of a sound instream flow rule is an essential step in ensuring a healthy environment for generations to come.[39]

Thanks very much for the opportunity to comment,

Jerry White, Jr.
Spokane Riverkeeper

Good evening, my name is Jerry White. I'm here representing the Spokane River Keeper tonight. I would like to thank the Department of Ecology as well tonight for recognizing that the river has the right to exist.[H1]

I will start my comments by saying that much is unknown about the ecological function of all urban streams in America, and the Spokane River is no exception. Really, we have no detailed studies on aquatic amphibians and numerous other native fish in the river that constitutes an entire wetland and eco system. Given the lack of science and the resulting uncertainties around that lack of knowledge and science, and given that there are no absolutes, we -- I think you're going to hear my comments are very conservative in approach.[H2]

There are three large factors that are threatening the flows to the Spokane River, things we do know even without the science, we know we have an overconsumption of water problem in this area that is taxing our aquifer which is intimately linked with the river. [H3] We have numerous wells that are in close proximity to the river that amplify the extreme low flows we're seeing in the summertime,[H4] and we have local climate change that's likely to reduce Idaho's snow packs to levels that I just learned that today at the Columbia Basin conference that we may even be losing our Idaho snowpack, and the Spokane is a rain based system, by the year 2080. That's the UW Climate Science Group is doing that research. That's a pretty bleak future in that sense.[H5]

Given these, the conservative and protective approach would be to modify the rules that have been

recommended by Ecology in the following ways: I do not feel it's appropriate to use the 100 percent exceeding curve for instream flows. It's neither conservative nor protective nor does it meet the authority and purpose of the rule making to protect and preserve fish, wildlife, scenic aesthetics and recreational water quality values.[H6] The base flow recommendations should be -- I'm sorry, we should be basing flow recommendations on data clear back to 1899 and not begin at 1986. I know that seems odd, but I think to bracket that rule making with that data set that starts at '86 contributes to kind of a creeping base line syndrome, and it creates a new normal that may not be normal at all.[H7]

The reasonable flows seen in the descending hydrograph may actually represent a crisis of overconsumption, and historic flows should be used in this sense to better tell us what normal actually is.[H8]

I think we need to regulate flows for the entire eco system, rather than simply mountain white fish and Redband trout, which is -- I never thought I would hear myself say that. I absolutely love fishing for trout and value the Redband trout as an indicator species in our river. But while it may seem counterintuitive, I believe the river is a large system, and we have to look at all of the pieces of that system, including the large scale suckers, vertebrates, and we may ultimately undo the food web that supports the Redband trout, I believe that to be true.[H9]

I believe we should modify the seasonal control points for instream flow regulations, specifically the mitigating control point I think should be changed from March 31st back to March 1st. Naturally, the Spokane river hydrograph begins to rise at this earlier date. In addition, we expect that trend to happen even earlier as our local climate change accelerates. I would also like to see those dog legs at either side of the flows that they recommended fall at a more natural hydrograph.[H10]

So I believe that a summertime flow of 1,800 to 2,000 is much more realistic.[H11] I believe that Ecology recommendations from 850 cfs is too low and it doesn't go far enough of setting the boundary that will protect aquatic species and the eco system of the Spokane River.[H12]

The only other recommendation that I will make is that the springtime flow protecting Redband should be up around 8,000 cfs, which represents a 50 percent exceeds in the later end of June and that critical June 15th point. It's essential, of course as you know, that the flows don't go below 6,500 cfs any earlier than June 15 to protect those trout.[H13]

The only other thing I would say is that the instream flows that are set for overconsumption, and this is the only way we can continue to have Spokane River in the future and not see it blundered and it is critica for future generations to have this community asset.[H14] Thank you for your time.

Spokane Tribe (Kieffer, B. J.)

Dear Ms. Wessel:

On behalf of the Spokane Tribe of Indians ("Tribe"), please accept these comments on the Washington State Department of Ecology's ("Ecology") draft instream flow rule for a portion of the Spokane River. These comments do not, nor are they intended in any way to impact the Tribe's federally reserved water rights within the Spokane River ("River"') that have a priority date of August 18, 1877. The reserved rights include quantities necessary to carry out the purposes of the Spokane Indian Reservation. The purposes include but are not limited to guaranteeing the Tribe access to fish for food within its boundary waters including the Columbia and Spokane Rivers.

The Tribe applauds Ecology for beginning this important task, particularly in light of Idaho's continued ove allocation of the Spokane River and the Rathdrum Aquifer for consumptive use within Idaho.[1] However, the Tribe is uneasy about the methodology used to develop the rule, and the way it has been structured. After two meetings with Ecology staff and internal deliberations within the Department of Natural Resources, the Tribe strongly encourages Ecology to revisit and revise the minimum instream flow rule to protect higher flows in early to mid-summer and higher flows in the fall through the winter period. Ecology should revise the rule to contain monthly or fifteen-day minimum instream flow requirements instead of the overly generalized blocks of time.[2] The following are the Tribe's specific comments.

Metering

The tribe does not find any technical, scientific, or policy reason that remotely justifies the removal of the metering requirements that were contained in the pre-proposal draft of WAC 173-557-060. The metering requirement must be reinserted.

First, it appears the metering requirement removal was done for strictly political purposes, oddly when only two entities negatively commented on this requirement during the pre-proposal comment period.

Second, the Tribe has significant experience with the need for metering. The Tribe's experience with Chamokane Creek has taught us that a lack of data and metering mixed with an over allocation of groundwater will lead to senior water rights holder's use being curtailed to the benefit of junior "exempt well" owners. During the continued Chamokane Creek management under the federal water master it ha become necessary to model the effects of exempt wells on the flows. This required metering on a voluntary basis creating a less than ideal situation. It makes absolutely no sense for Ecology to drop the metering requirements when any associated costs are de minimus and potential regulatory and scientific gains significant.

Third, the Tribe came to Ecology's defense in 2010 when two legislative proposals were developed to strip Ecology of the authority to meter exempt wells. (HB 2468 and HB 2548). It is extremely frustrating that almost four years later Ecology is now failing to use this important tool in the water resource protection tool box. In areas with direct hydraulic continuity like the proposed boundaries of this rule, exempt wells have the potential to directly affect senior water rights holders, and must be monitored in a scientifically defensible manner: meters.[3]

Quantities

After review of the draft rule and supporting materials, the Tribe requests that Ecology closely review and reconsider the adoption a flat 850/500cfs from June 16-September 30. The Tribe supports the 850/500cfs as the minimum flow for the later portions of August and September because this represents a normal hydrograph for the Spokane River, and it acknowledges the requirements within Avista's FERC license. However, after review of the data, the flows that currently exist in the Spokane River, the average flows in June and July are much higher than 850/500 cfs. (See exhibit 1 Rule in black). Additionally, the flows are much higher in portions of October through April. See id. These flows must be better protected. As Ecology is well aware this rule does not affect senior water rights holders within the area of the rules regulation, and it defies logic to not protect as much water in the River as possible. [4]

First, Ecology appears to rely solely on the IFIM study which addressed trout and mountain whitefish. The Tribe does not dispute the relevance of this study. The Tribe is apprehensive about what appears to be Ecology utilization of it as a sole basis for the flows contained in the draft rule.[5] The RCWs and WACs that govern instream flow development are clear in that Ecology needs to protect scenic, recreational,

navigational and aesthetic values in addition to fish and wildlife. Upon review of the many other comments submitted during this process it is clear that the navigational, recreational, and aesthetic concerns are not properly protected.[6] These would be protected if Ecology would simply adopt a stepped down rule to protect the current hydrograph instead of the arbitrary blocks of time based solely on Ecology's interpretation of the IFIM study.[7]

Second, from a cultural resource standpoint, the Tribe is worried that the rule will not adequately protect redband trout habitat. The Tribe must try and protect all the resources necessary for the Tribe's culture to continue. Redband trout are unique genetically and may very well be critical for the reintroduction of steelhead into the Upper Columbia Region. The continued protection and enhancement of any suitable redband trout habitat is critically important to the Tribe. To be blunt, more water left in the River will be better for the redband's continued survival.[8] This is supported by the WDFW's observation that the IFIM study is important, but more water in the River will certainly not have a negative impact on fish within the portion of the River regulated by this rule. [9] More water is further supported by the recreational, navigational and aesthetic interests that desire higher flows and have commented as such.[10]

Ecology should develop flow numbers for early to mid-summer and the fall and winter months that better preserves the statutorily protected interests and better serves the navigational and recreational communities, including the River's aesthetic qualities.[11] The Tribe strongly urges Ecology to adopt a stepped down instream flow rule based on the appropriate data for June 16-September 30 and a stepped up rule for October 1 to March 31, including protections for flows above 6500cfs. The rule could be organized in fifteen-(15) or thirty-(30) day blocks to protect the current flows in the Spokane River.[12]

Idaho Adjudication

As acknowledged in Ecology's public statements and responses to public comments one of the purposes of this instream flow rule is to better position the State of Washington if and or when a bi-state apportionment of the Spokane River occurs between Idaho and Washington. The failure of Washington to protect the current higher flows completely fails to do this, and leaves the Washington portion of the Spokane River unprotected. Although, it is sometime stated in tongue in cheek fashion, Idaho's stated policy is that a drop of water leaving Idaho is a wasted drop of water. Washington must take this seriously because Idaho throughout all the Basin wide processes never fails to act this policy out.[13]

Given that the Spokane River likely is or will be over appropriated in the near future based on the municipalities activities in Idaho and Washington, adopting a stepped down approach to protect a more natural hydrograph is very appropriate and supported by the data.[14]

WAC 173-557-100

The Tribe supports the language contained within WAC 173-557-100.[15]

If you have any questions, feel free to contact me at 509-626-4427

Sincerely,

B. J. Kieffer
Director
Spokane Tribal Natural Resources Department

Stevens County (McCart, Wes)

Re: Comments for Chapter 173-557 WAC Draft Rule

I would like to submit the following for the record on behalf of the Board of Stevens County Commissioners and the over 43,000 citizens we represent in Stevens County.

Proposed new section WAC 173-557-060(3) as written does not protect our citizens and residents in the affected part of Stevens County. Specifically, "Mitigation must be achieved through an ecology- approved mitigation plan." This language is unacceptable. In the preliminary draft, all of the presentations and in meetings with the department it has been stated that ecology was going to purchase a water right and place it trust to mitigate for all new permit exempt well withdrawals within the rule boundaries. It is paramount that development and property rights are protected.

Ecology must purchase and place in trust the necessary water quantity to mitigate for new exempt well uses prior to any new rule taking effect. If this cannot be done, then the rule should not be allowed to take effect.[1]

The stated purpose of this rule is to protect the Spokane River and the Washington interest If Washington and Idaho go to court over State appropriations/allocations, as stated many times by ecology representatives. Yet, when we previously asked if setting an instream flow would have any effect on such a court case, the answer was an instream flow rule would NOT have any advantages.[2] It has also been stated that the aquifer and Spokane River have been over appropriated and if all of the water allocated were put to beneficial use, the river would be dry.[3] If this is the case, why do a rule.

We believe that until there can be an adequate reason given to adopt an instream flow rule and mitigation water has been put in place for new exempt well usage that this rule should not be adopted.[4]

Thank you for allowing us to comment on this draft rule. Please contact me should you have any questions.

Wes McCart
Stevens County Commissioner- Chair

Stevens County PUD (Price, Dick)

My name is Dick Price. I'm the general manager of the Stevens County Public Utility District. We are a water conveyer, public water systems in Stevens and northern Spokane counties, all 17 water systems, two of which are over the aquifer in the Nine Mile area. We've been involved in watershed planning and WRIA 55 and WRIA 54 for many years, and our opinion is that Ecology has probably done a pretty good job trying to balance the many divergent interests and beneficial uses of the water in this state and in the aquifer.[H1] Thank you.

Steward, Mark

I'm a resident of Spokane, a conservationist, and a frequent paddler on the Spokane River.[1] I understand you are proposing a minimum flow of 850cfs for the Spokane River. I believe this flow is way too low for the Spokane River.[2] Anything below 1000cfs is difficult to navigate in anything but a kayak. In fact, at 850cfs I'd probably stay away from the river because it's too low to enjoy.[3]

I'm also concerned that dissolved oxygen levels may be far too low at 850cfs for a vigorous and healthy fishery, like the Spokane River.[4]

I suggest a minimum flow of 2000cfs. With proper management, coordination with the dams and Idaho, as well as water utility conservation, property and business conservation and progressive water rates, this goal can be met.[5]

Please 'think big' for our river. Big water, big waves, big fish. We love it and it's a treasure.[6]

Sincerely,

Mark Steward

Stracchino, Keith V

Dear Madam,
while I realise that negotiating this type of inter-state agreement is always a very contentious business I wish to comment that the minimum specified flow at 850 cubic feet per second is extremely low for the Spokane river. I believe that the analysis of needs has proposed a very inadequate number and that the analysis needs to be revisited in order to provide for a larger and more realistic minimum flow.[1] I live near the Spokane River in the City of Spokane Valley, at the height of summer, the stream flow is already so low that large portions of the river bed within the city of Spokane become above water level. We cannot permit a statutory reduction in what is already a latent water supply problem for the second largest urban conurbation in the State of Washington.[2]

Thank you for your attention to this matter.
Keith V Stracchino

Struck, Fred

Your proposed Spokane River flow is rediculous.[1] It should be greatly increased to make sure that habitat for various species, especially fish, is sufficient for a healthy population.[2] The flow should be based on science rather than user (water drawer's) wants.[3]

Systems Coaching LLC (W Thomas Soeldner)

I offer sincere thanks to the Department of Ecology for drafting a rule for the Spokane River, not least because instream flow rules create a “water right for the river” that prevents allocation of future water rights that harm stream flows. Such a right is vital for the future health of the river.[1]

That said, I cannot understand why Ecology has proposed such a low instream flow (850 cfs) for flows below the Monroe St. dam during the summer months.[2] Surely a “water right” for the river should assure the river's health and thereby the maintenance of normal river use for all the river's natural dependents.[3]

A summer flow of 850 cfs below Monroe Street is not sufficient for the redband trout which use the river for spawning - excuses to the contrary by Ecology are scientifically bogus.[4] Nor does such a low flow allow for the river's popular recreational use by boaters, paddlers, and floaters.[5] Ecology has done no research or outreach to these user communities as to needed flows.[6]

In addition, Washington and Idaho are heading for a clash as to how much Spokane River instream and outstream water each state is entitled to. By picking low numbers Ecology is putting our state's negotiating position in serious jeopardy, and seemingly ignoring interstate sovereignty issues, which incidentally also seem to be off the governor's radar.[7]

Finally, why does Ecology use different methods to establish instream flows for the Spokane River watershed than they do for other state watersheds? In other watersheds flows are protected in nine out of ten years. In Spokane the flows give 50% or less protection. Why is the Spokane River offered less protection than other rivers in the state?[8]

These are serious questions Ecology must answer. I concur with other community recommendations that there be a 2,500 cfs flow during the summer months to protect the health of the river and its normal and natural uses.[9]

The Department of Ecology has done a disservice both to Spokane and to the State of Washingto with its proposal for minimum instream flow of 850 cfs for the Spokane River.[10] Ecology failed to do a thorough study of various elements that should have been of importance in their consideration,[11] and the biology of fish which was considered, was not thoroughly investigated.[12]

Ecology's own rule, WAC 173-557-01, indicates that the "authority and purpose" of the instream flow rule making is designed to: "protect and preserve fish, wildlife, scenic, aesthetic, recreational, water quality, and other environmental values; navigational values; and stock watering requirements." Yet the thousands of Spokane's citizens who enjoy the river for fishing, tubing, kayaking, canoeing, rafting and for its aesthetic and scenic values were not consulted nor did their enjoyment of the river seem to be considered. The DOE did not reach out to the huge community of people including private associations of river users and recreational businesses who depend on the river flows in order to operate and who are an important part of the economic fabric of Spokane.[13]

Nor does tourism seem to have been considered. The "Small Business Economic Impact" did not even consider non-consumptive users such as those businesses that provide recreational opportunities for the public. These are businesses that draw tourist dollars to Spokane. Only consumptive users seemed to have been considered.

The study states that, "All currently established businesses using an established water right are not required to comply with the proposed rule. Essentially this proposed rule has little or no impact on small or any other business. All current businesses already operating under an established water right are not affected." But this is false. Recreational business using the Spokane River are heavily impacted by the rule, and the job impact could be significant.[14]

Navigational value is also identified as one of the purposes of instream flow rule-making, yet was not considered at all.[15]

As for fish science, the study appears only to have considered generic data without data specific to the Spokane River.[16] Flows of 850 cfs would be lower than the natural flow regime in many years, and under Ecology's proposal would be started much earlier than natural flows currently occur, resulting in serious stress to fish in the river.[17]

Finally, there appears to have been little or no consideration of the scenic and aesthetic values of the river flowing through an urban area. I walk along the river regularly and now that flows as low as 100 cfs dramatically and negatively affect the natural beauty of the river, exposing boulders, rocky shores, and sand banks.[18]

Please reconsider the low flow instream flow of 850 cfs. It is not only an insult to Spokane, but a failure of Ecology's duty to the State of Washington.[19]

Thank you.

Townsell, John

I believe that the Department of Ecology should not adopt the current proposed rule[1] and instead undertake studies to determine the optimal flows for fish and recreation.[2] Ecology must also assess how the instream flow rule will affect future interstate allocation with Idaho.[3]

As a Washington State citizen, I care deeply about what happens to our waters in the state, especially flowing streams and water allocations.

In this capacity, I do care about the Spokane River.[4]

I believe that the Department of Ecology is proposing summer season flows that do not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish and other resident fish.[5]

I believe that the Department of Ecology has failed to study recreational flows, despite the Spokane River's tremendous popularity with boaters and the needs of the inhabitants of the stream such as fish. These studies are needed![6]

I do not believe that Idaho should take all water that is not claimed in Washington's flow rule.[7] Ecology needs to assess the Interstate allocation implications of its flow rule.[8]

Right now, we have the chance to apply sound scientific principles to the water situation regarding the Spokane River. Lets do it![9]

Please do not shortchange the area residents, the recreational users and the fish and other inhabitants of the Spokane River.[10]

Thank you.
John Townsell

PROBLEM:
When I submitted the above message, twice I received:
"error" : true,
"message" : "Internal error",
"status" : 500

This is Sunday evening so I don't expect to be able to reach the contact shown: "If you are having problems with this form, contact Chris Anderson 360 407-6634 "

I don't see how I can contact the Department of Ecology through using this form.

However,I see that I can email my comments to you, Ann Wessel, so I am doing so. Will you accept my comments so that they will be counted as a "comment" even though your Department's form doesn't work?

Darn but I am frustrated!! Why can't Government agencies' forms work!!! [11]

Thanks.

John Townsell

Upper Columbia United Tribes (Kutchins, Keith)

The UCUT requests that Ecology include future instream flows for anadromous fish reintroduction - based on broad regional support for reintroduction contained in the Columbia River Treaty Regional Recommendation (12/13, 2013); the Northwest Power and Conservation Council 2014 Columbia River Basin Fish and Wildlife Program (10/8/14); and the City of Spokane Resolution #2014-0070 (7/7/14).[1]

Upper Columbia United Tribes (Michel, D R)

Dear Ms. Wessel and Mr. Post:

The Upper Columbia United Tribes (UCUT), comprised of the Coeur d'Alene Tribe, Colville Confederated Tribes, Kalispel Tribe, Kootenai Tribe of ldaho and the Spokane Tribe, are concerned about the proposed instream flow rules for a portion of the Spokane River proposed by the Washington State Department of Ecology (Ecology).

The UCUT and the Columbia Basin tribes, along with the Canadian First Nations are leading the effort to reintroduce anadromous fish and restore fish passage to all historical locations above Chief Joseph and Grand Coulee dams, including the Spokane River. There is broad support throughout the Columbia Basin for this action. The Columbia River Treaty U.S. Entity Regional Recommendation for the Future of the Columbia River Treaty after 2024 (pgs. 5-6, December 13, 2013; ATTACHMENT A) includes investigation of the feasibility of reintroduction. The Northwest Power and Conservation Council's 2014 Columbia River Basin Fish and Wildlife Program (pgs. 84-85, October 8, 2014; ATTACHMENT B) describes a science-based, phased approach to investigating the reintroduction of anadromous fish above Chief Joseph and Grand Coulee dams. Also, the City of Spokane unanimously passed Resolution 2014-0070 (ATTACHMENT C) expressing support for anadromous fish passage above Grand Coulee Dam that may result in reintroduction into their historical habitats that lie within the City of Spokane and throughout the Upper Columbia Region.

The UCUT is very concerned that Ecology's proposed rule for instream flows in the Spokane River does not include analysis of flow required for anadromous fish. The UCUT respectfully requests that the Ecology re-considers its proposed instream flow with respect to impacts to anadromous fish reintroduction. Ecology has pre-dam (before anadromous fish blockage) flow data that can be used to help determine anadromous fish needs.[2]

Thank you for in advance for reconsidering your flow proposal in light of recent developments on reintroduction of anadromous fish into the Spokane River. The UCUT extends our support for establishing a healthy instream flow that protects ecosystem-function, including anadromous fish reintroduction in the Spokane River. We look forward to collaboratively working with Ecology towards our mutually beneficial goals and objectives.[3]

D.R. Michel, Executive Director

Silver Bow Fly Shop (Visintainer, Sean)

Dear Washington State Department of Ecology,

My name is Sean Visintainer, I own the Silver Bow Fly Shop in Spokane. I am writing to voice my concern for the proposed instream flow rule on the Spokane River.

I have been with the Silver Bow since 2002 and have owned the business since 2005. In the past 12 years that I have been involved with the business and local fishing community I have watched a growing interest in the Spokane River. This interest has grown so much that for the past 5 years I have made it a large focus of my retail fishing business and guide service. We operate guided fly fishing trips on the Spokane River, sell equipment for fishing the Spokane River, hold fly fishing classes / lessons on the river, and provide information related to fishing the Spokane River. I currently employee 5 fishing guides on the river in addition to 5 shop staff employees that rely on the Spokane River business. Myself and staff service hundreds of trips on the Spokane River and countless fisherman both local and abroad looking to fish this urban gem.

In addition to my business there are 7 other fishing businesses that rely on Spokane River angling traffic.[1]

I would like to say that I do appreciate the DOE for drafting a rule to help protect the Spokane River, it is long overdue.[2] My concern is that the proposed instream flow of 850cfs is too low for our wild Redband fishery amongst other issues that it will create.

When a river the size of the Spokane shrinks down to a dangerously low volume like 850cfs my biggest concern is that it will put added strain on the Redband trout. With low flows the amount of quality habitat is diminished substantially and the trout will be very confined. When the trout are confined into a smaller habitat they are more susceptible to angling pressure, poaching pressure, and natural predators such as osprey, eagles, and heron. "Like shooting fish in a barrel" would be a very appropriate idiom in this situation.

Besides added strain from loss of habitat combined with higher angling pressure I feel that the fish would suffer from warmer water temps and less oxygen content in the water.[3] I would like to see more actual studies before a non-natural flow of 850cfs is put into effect.[4]

I feel that a flow of 2500cfs during the summer will protect the wild Redbands while being a safe level for fisherman boating the river, whitewater users, and other Spokane River boat enthusiast. Below 2500cfs substantially more rocks and obstructions are exposed and become hazards to the boaters and their craft. While we are not a whitewater outfit, I can speak from many personal trips through the Bowl & Pitcher and Devils Toenail that 2500cfs is the absolute minimum to safely navigate the rocky rapids.[5] Aesthetically the river looks healthier when flows are higher than 2500cfs and we routinely refer people traveling through to go and check out the river and it's magnificent falls as one of the cities main attractions. Not something you can or want to recommend at 850cfs.[6]

I would also not like to see Washington State give away the river to Idaho, the upstream state that will claim all water not protected by Washington's flow rule.[7]

Being a small business that is affected by flows and rules on the Spokane River, I wish we would have been contacted about the economic impacts that it will have on mine and other fishing businesses around the region.[8] I urge you to do more research and consider higher instream flow values that mimic the more natural flows of nature for the protection of the fish, the recreational users, and the businesses relying on a healthy Spokane River.[9]

Thank you for allowing me to comment.

Sean Visintainer

Wagstaff, William

I would encourage the Dept. of Ecology to consider a higher minimum instream flow for the Spokane River. A flow of 850 cfs does not provide for a very scenic river, adequate fish and wildlife habitat, or a minimum flow for rafters and other river users. It in essence barely keeps the river wet![1] A minimum flow of 2500 cfs would do a much better job of addressing these considerations and providing for the health of this community asset.[2]

WaterWatch of Oregon (DeVoe, John)

Dear Director Bellon, The Spokane River is one of Washington's most important rivers[1]. During hot summer months, thousands of people turn to the river for relief and recreation.[2] Fish and wildlife depend on this river: water is life.[3] Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and set a poor precedent for rivers statewide.[4] The Department of Ecology failed to analyze flows needed for recreational use of the river.[5] As I understand the proposed rule, the proposed flow does not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[6] By low-balling the flow, Washington State is effectively ceding the river to Idaho, the upstream state that will no doubt claim all water not protected by Washington's flow rule.[7] The people and fish of Washington state deserve better.[8] For the Spokane River, no flow rule is better than a bad rule. I ask that you either set the summertime low flow at the protective level of 2,500 cfs, or withdraw the rule altogether.[9] As goes the Spokane Rivers, so goes the other rivers of Washington State. Please take steps to protect this important river and don't set a precedent that will surely result in degraded and dewatered rivers elsewhere in the state.[10] For rivers, John DeVoe Executive Director WaterWatch of Oregon

WDFW (Beecher, Hal)

My name is Hal Beecher, I'm an instream flow biologist for the Washington Department of Fish & Wildlife. The Department of Fish & Wildlife supports the adoption of the proposed instream flow rule WAC 173-557, the water resources -- water resource management program for the Spokane River and Spokane Valley Rathdrum Prairie Aquifer. This rule, if enforced, will provide significant protection for fish habitat in the Spokane River, so that the Spokane River can continue to support native fish and sustain a recreational fishery, as well as contributing to the aesthetics that are an important part of that fishery.[H1]

The Department of Fish & Wildlife has participated in both the watershed planning process for the Upper and Lower Spokane River and the federal re-licensing of Avista's Spokane River hydroelectric project. The leaders and coordinators of the state and federal processes are to be commended for sharing resources resulting in efficient and a detailed analysis of the full effects on Spokane river fish. Thus, we have more information than most watersheds have had as a basis for a proposed instream flow. In developing flow recommendations that have been incorporated in the proposed rule, the Department of Fish & Wildlife sought to protect habitat for the most sensitive fishes in the river, considering all life stages, their seasonality and variability, and how the past century of flows has affected fish habitat.[H2]

In addition to instream flow studies by Northwest Hydraulic Consultants and Hardin-Davis, EES Consulting, Natalie M. Peterson, and Parametrix, evaluation of options included important insight from Spokane County, Avista, Idaho Fish & Game, Ecology staff, and the Department of Fish & Wildlife Spokane -- Spokane office.[H3] Thank you.

Wells, Lynn F

There is a definition for mitigation. It is necessary to have the mitigation in place before the instream flow rule is enacted.[1]

The Boundary that extends into Stevens Co. as shown in Plate 1 of the 2007-5041 and 5044 reports shows the well log in alluvial gravels in Spokane Co. and may not be representative of the boundary into Stevens Co. portion.[2]

White, Jerry

Dear Ann Wessel,

I am writing to let you know that the Spokane River needs more than 850 cfs water in the summer.[1] Few cities are blessed with a beautiful river that runs through its center, but Spokane not only has the river, but a large aquifer that trades water along the rivers course. This of course provides the cold temperatures that make for a trout fishery.[2] So excellent fishing, interesting scenery and rapids for fine boating and deep holes and public access for swimming -- please provide more than a trickle of water in the summer to support this recreation.[3]

Peace, Jerry White

Wilder, Stewart

Dear Director Bellon - As a river recreationist and fly fisherman, I wanted to comment on reduced water flow rulings that must be studied thoroughly in order to protect and preserve the ecosystems that are dependent or adequate water flows.[1] The Spokane River is one of Washington's most important rivers.[2] During hot summer months, thousands of people turn to the river for relief and recreation.[3] Fish habitat and wildlife depend on this river and with low flows increased temperature and impacts on biological and ecological sustainability for life in the waters would be in jeopardy: water is life.[4] Setting summertime flows at 850 cfs would be a debacle for the Spokane River -- and risk rivers statewide.[5] The Department of Ecology failed to analyze flows needed for recreational use of the river.[6] The proposed flow does not have a sound biological basis to protect redband trout, the Spokane River's signature wild fish.[7] By low-balling the flow, Washington State is effectively giving away the river to Idaho, the upstream state that will claim all water not protected by Washington's flow rule.[8] The discussions should involve all stakeholders in the flow between states or border countries when involved.[9] For the Spokane River, no flow rule is better than a bad rule. I ask that you either set the summertime low flow at the protective level of 2,500 cfs, or withdraw the rule altogether.[10] As goes the Spokane Rivers, so goes the other rivers of Washington State.[11] Please take steps to protect this important river.[12] Stewart Wilder

Williamson, Grant

I am concerned that Idaho's water right permitting practices in Idaho's Basin 95 combined with Washington State's low proposed inflow requirement of 850 cfs will lead to environmental consequences in Washington state.[1]

Trout Unlimited, Spokane Fly Fishers (Wright, Steve)

I am writing this to ask that you DO NOT adopt the current proposed stream flow rule[1] and take the time to do proper studies to insure that the flows are correct for the fish and all users of the river.[2] Below are some specific concerns.

1 - There is not sound biological basis or study to protect the redband trout. It is a very special wild fish native to this water shed. We have for years tried our best to destroy their habitat and we have the ability to reverse this trend. They need more water!!![3]

2- There is not study for flows needed for all recreational users. There are new and improved boater access as well as possible new access on the Spokane River. This will lead to more people using the river than ever. It makes no sense to improve river access with out the water necessary to use it.[4]

3- If I understand correctly Idaho can take all water not claimed under Washington's flow rule. This makes absolutely no sense. Water is becoming an ever scarce resource and should be treated as such. Water that flows between states needs to have an interstate allocation for all effected parties.[5]

Thank you for your time,
Steve Wright
Spokane, WA

Zovanyi, Louise

Thank you for drafting a rule for the Spokane River, but the proposed flows are way too low.[1]

A flow of 2,500 cubic feet per second is recommended during summer months as a flow that will protect fish, boaters, and businesses that depend on the river (the state is proposing only 850 cfs).[2]

Washington State needs to protect the Spokane River when water is allocated between Washington and Idaho: the proposed flow is a major giveaway of water to Idaho.[3]

Our rivers are one of our most valuable assets. As climate change effects runoff levels and rainfall quantities it will be especially important that we manage this natural resource and all it effects.[4]

Thank you for your foresight and please continue this protection of our rivers.[5]

Regards,
L. Zovanyi

Appendix B: List of Commenters for "Sierra Club Members" Comment 4

Aaseby, Jeff
Abbott, Alex
Abel, Joshua
Acker, Michael
Adams, Vicki
Adams, Roberta
Adams, Elma Fern
Adams, Marty
Adamson, Kristen
Adel, Sean Den
Adman, Eric
Affleck, Carol
Agard, Lisa
Ahrens, William
Aiken, Janey
Akinbami, Carolyn
Alecxandra, Kathryn
Alford, Susan
Allen, Harriet
Allen, Teresa
Allison, Chet
Allred, Don
Allrud, Sydney
Amend, Tom
Amoroso, Amy
Anderson, Rosanne
Anderson, Linda
Anderson, Linda
Anderson, Jeannine
Anderson, Kate
Anderson, Reilly
Anderson, Lynnette
Anderson, Mark
Anderson, Becky
Anderson, Donald
Anderson, Dennis
andrews, L
Andrick, Jill
Aniballi, Brett
Anthonise, Elaine
Armstrong, Pat
Arthur, Rolland
Arveson, Michael
Askew, Nina
Asterino, Brenda
Avery, Judy
Ayala, Lisa
Ayers, Randall
Bach, Mary Catherine
Backman, Karen Hedwig
Baer, Tanya
Bailey, Ryan
Bailey, Patricia L.
Bailey, Meredith
Bailey, David
Bailor, Ann
Baird-Levine, Bob
Baker, Ariel
Baker, Terry
Ballo, Mark
Bandura, Mary
Banghart, Robert
Banks, Aaron
Bapst, Marie
Barber, Kristin
Bardelson, Susanne
Barnes, Noel
Barone, Christina
Barrett, Nick
Barrett, Rick
Barrow, Robert
Barson, Kalanit
Bartlett, Ali
Bartlett, Faye
Bartlett, Wendy
Barton, Gail
Barton, Marsha
Bates, James
Baxter, Robin
Bayer, John
Beaman, Lisa
Beard, John
Beaton, Bruce
Beattie, Bill
Bechtel, Jim
Beck, Cj
Becker, Keith
Beleny, Charles
Bell, Stephanie
Bell, Dottie
Bellbrook, Dorje
Benafel, Linda & Chris
Benak, Sheila
Benedict, Marc
Benham, Mary
Bennani, Julie
Bennington, Mary Lou
Benson, Liane
Bereczki, Patricia
Bergmann-Ness, Margaret
Bergner, Rich
Bergquist, Jim
Berlin, Susanne
Bernard, Valerie
Berry, Brent
Bertis, Loretta
Betz, Michael
Biale, Cheryl
Bieze, Patricia
Billings, Suzanne
Billmaier, Michelle
Birch, Becky
Birkner, David
Birnel, Reed
Blackburn, Patricia
Blackwell, Toni
Blair, Keith
Blair, David
Blakley, Leann
Blitzer, Mark

Blondo, Joseph
Blumer, Janet
Boderck, Michele
Boehmke, Laverne
Boles, Judith
Bonfield, Barbara
Bookbinder, Phyllis
Bookter, Christian
Borso, Pamela
Bos, Katherine
Bouchard, Steven
Boudreau, Lucinda
Boury, Andrea
Bowen, Patty
Bowen, Normajean
Bower, J C
Bowie, Herb
Bowman, Sylvia
Bowman, Jessica
Boyd, Madora
Boynton, Robin
Boynton, Patricia
Bozied, Shary
Braaten, Chrystyne
Branson, Jeanne
Brant, Daniel
Braun, Enid
Braunwart, Tod
Brayton, Patricia
Breitenbach, Teri
Bremer, John
Breneman, Michael
Brennan, James
Briggs, Julia
Brinkhaus, Andrew
Brislawn, Alice
bronkhorst, Whitney
Brown, Barbara E.
Brown, Nancy
Brown, Barry
Brown, Harvey
Brown, Jeff
Brown, Kathy
Brown, Marguerite
Bruder, Karl
Bryan, Teresa
Buch, Tony
Buchan, William
Buchanan, Brad
Budnik, Dave
Buell, Eric
buerkle, melanie
Buetow, Julie
Bumford, Magdalene
Burgess, Dorothy
Burke, Sharon
Burke, Ersie
Burke, Heather
Burkhardt, Helga
Burr, Eric
Busch, Brad
Bushey, Lowell
Bye, Susan
C, Carolyn
Caballero, Christophe
Cain, Donald
Calamba, Charlene
Calkins, Cynthia
Calle, Cristina
Caluya, Yvonne
Cameron, Cami
Canonica, Charlene
Capen, Peter
Capers, Al
Capp, Carmena
Capwell, Deborah
Carlson, Kurt
Carlson, Jollie
Carroll, James & Katherine
Carson, Geoffrey
Caruzzi, Rick
Caster, Cynthia
Castilleja, Rebecca
Caughlan, Anne
Caviezrl, Simone
Caya, Jamie
Chahine, Samer
Chaney, Adrienne
Chapman, Paul J
Charles, Jill
Chasse, Joe
Chemel, Roger
Chesnut, Joanna
Chester, Paula
Childs, Constance
Chowen, Mardel
Chrisman, Chris
Christensen, Lauren
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Stutheit, Don
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Sullivan, Brian
Sullivan, Maya
Sullivan, Gayatri
Sullivan, Cheryl
Sumption, Patricia
Sun, Helen
Sunderland, Donald
Sutherlin, Paula
Svanoe, Tor
Swan, Stephanie
Sweeney, Janis
Swoffer, Thomas
Sword, Carol
Symmes, Bill
Szanyi, Gail
Szumlas, Nick
Talbot, Shelley
Tam, Susanna
Tan, Shirlee
Tarpley, Polly
Tate, Sharon
Tauscheck, Steve
Taylor, Ryan & Ann
Taylor, Nick
Taylor, Alanna
Taylor, Ricky
Teach, Jean
Teed, Cornelia
Telles, Anna
Tenkhoff, Dorothy
Terns, Anthony Milo
Tethys, Yara

Tharp, Rod
Theriault, Chad
Thierry, Judith
Thomas, Patricia
Thomas, Mark
Thomas, Kat
Thomas, Lisa
Thomas, Tom
Thompsen, Linda
Thompson, Bonnie
Thompson, Muhammad
Thompson, Robert & Diane
Thompson, Jerry
Thompson, Steve
Thorne, Eugene
Thorne, Jan
Thornsbury, Jean
Thuot, Chuck
Thweatt, Greg
Timms, Fred
Tippel, Tammara
Titilah, Jennifer
Tobias, Alice
Todd, Sandra
Tollfeldt, Regina
Tomazic, Michael
Topp, Linda
Torchia, Carol
Torma, Jane
Tountas, Barbara
Townsend, Darlene
Tracy, Rebecca
Trainor, Riva
Traversie, Krohn
Travis, Teri
Treisman, Janna
Tremmel, Paul
Trescone, Thomas
Trimmell, Tara
Tsai, Rachel
Tsang, Christina
Tsh, Frank
Tupling, Julie
Turner, Kelly
Turnoy, David
Tyzio, Nick
Udenberg, John
Uhl, Angelo
Ulrich, Joseph
Umphred, Neal
Unger, Wanda
Urias, Victoria
Uyenishi, Steven
Uzuner, Selim
Valenti, Frank
Van Horn, Terri
Van Vorous, Heather
Van Zant, Peter & Alix
Vandegrift, Debra
Vandenberg, Nancy
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Varanitsa, Oleg
Varieur, Patricia
Veenhuizen, Gregory
Viau, Beverly
Viavant, Peter
Vilgalys, Justas
Villalobos, Derek
Visintainer, Cara
Visintainer, Michael
Visintainer, Jon
Vitale, Andy
Vogel, Dakota
Vogel, Sally
Voliva, Steven
Von Borstel, Bruce & Carol
Von Hoffmann, Ronald
Von Lintel, Philip
Von Seggern, Dan
Von Tobel, Robert
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Voronovszky, Mariska
Wakeley, Jean
Walker, Dorothy
Wall, Laura
Wallace, Matt
Walseth, David
Walthew, Janet P.
Wambold, Jase
Warden, Patricia
Ward-Johns, Carol
Ware, Tom
Wariner, Elizabeth
Warren, Linda
Wasserman, Linda
Watson, Frank
Watson, Nancy
Watts, Brent
Way, Janet
Waytz, Anita
Weathers, Mary
Weeks, Ken
Weeks, Barbara
Wehrli, Peter
Weick, William
Weick, Mark
Weis, Marie
Weiser, Joan
Weisman, Paula
Weiss, Paul
Weller, Lloyd
Wells, Steven
Welton, Tiffany
Wende, Mike and Jody
Wenzel, Scott
Werner, Al
Wesson, Richard And Carla
West, Alice
West, Lisette
West, Janice
West, G.
Westland, Christine
Weston, Ed
Westra, Jennifer
Westre, Bill
Weyand, Tim And Kathleen
Weyer, Diane
Wheaton, Preston
Wheeler, Jerry
Wheeler, Kassie
Whitaker, Mark
Whitcomb, Edward

White, Nancy
White, Earl
White, Shelley
White, Elizabeth
White, Duane and Bert
Whitefoot, Jan
Whitson, Paula
Whitt, Brian
Wiancko-Chasman, Anna
Wible, Karen
Wickwire, Mary
Wiederhold, Terry
Wieland, Monika
Wight, Barbara
Wilkins, Alixandre
Willadsen, Edna
Williams, Morris
Williams, Kirsten
Williams, Rosemary
Williams, Ernie
Williams, Raymond
Williamson, Michael
Willison, Nancy
Wilson, Yvonne
Wilson, Linda
Wilson, Julie
Wilson, Lauren
Wilson, M
Wilson, Leigh
Winchell, Katrina
Windell, Steven
Wingate, Jim
Winger, Michael
Winter, Gregory & Julie
Wirth, Mark
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Wolfe, Rebecca
Woll, Margaret
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Wood, Sandra
Wood, Francis, MD
Wood, Sandy
Woodard, Nate
Woodbridge, Jennifer
Woodruff, James
Woolhiser, Karen
Wright, Steve
Wright, Patte
Wright, Carolyne
Wrixon, Laura
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Yaplee, Jeffry
Yarwood, Jay
Yearout, Douglas
Yelin, Tom
Yencich, Joseph
Young, Erin C.
Young, Derek
Young, Jeanne
Young, Loewyn
Young, William
Zapf, Fred
Zaremba, Mary
Zarter, Ellen
Zavareei, Hamid
Zentz, Barbara
Zhang, Jiazhu
Zick, Debbie
Zimmer, Kristen
Ziring, Alice
Zontek, Ken
Zorn, Glen
Zugel, Joann
Zupansic, Greg
Zweibel, George
Zyph, Todd