



# AGENDA

## WRIA 15 Watershed Restoration and Enhancement Committee Meeting

July 14, 2020 | 10:00 a.m.-12:30 p.m. | [WRIA 15 Committee Webpage](#)

### Location

WebEx Only  
(See instructions below)

### Committee Chair

Stacy Vynne  
Svyn461@ecy.wa.gov  
(425) 649-7114

### Handouts

- Agenda
- Compiled comments on draft chapters
- Policy and adaptive management proposals
- Adaptive Management Discussion Guide

### Welcome, Agenda and Updates

10:00 a.m. | 10 minutes | Susan Gulick and Stacy Vynne

### Projects Update

10:10 a.m. | 25 minutes | Stacy Vynne, Technical Consultants, All | Discussion

- Update on water rights acquisition projects
- Summary of workgroup discussion on projects and project list organization

### Plan Development

10:35 a.m. | 30 minutes | Stacy Vynne, All | Discussion

Handout: [Compiled Comment Tracker for Discussion](#)

- Summary of comments on chapters 1-3
- Discussion on select comments
- Update on plan development process and next steps

### Policy and Adaptive Management: Potential Recommendations

11:05 a.m. | 1 hr 15 mins | Susan Gulick, All | Discussion

Handouts: [New Policy Proposals](#)

[WRIA15 Policy Proposal Tracker](#)

[Adaptive Management Discussion Guide](#)

- Adaptive Management
  - Refine committee's desired approach to tracking and adaptation
- Review process and timeline for policy proposals
- New proposals from King County
  - Adapt and Update Instream Flow Rules (P45)
  - Recycled Water (P46)
  - Support for Ecology to Maintain Robust Water Management Efforts (P47)
- New proposals from Squaxin Island Tribe
  - Funding Plan (P07)
  - Instream Flow Rule Revisions (P33)
  - PEW Withdrawal Limits (P44)
  - Plan Implementation Durability (A11)
  - Monitoring and Research (A20)
  - Upgrade Well Reporting (A04)
  - Water Supply Data (A23)
- Updates on proposals from previous meetings
  - WDFW Project Tracking (A25)
  - Water Master (A14)
  - Study of County Planning (A26)
  - Drought Response (P16)
  - PEW Offset Analysis (P21)
  - Group A Hookups (P28)
- Upcoming proposals, if any

### Public Comment

12:20 p.m. | 5 minutes | Susan Gulick

### Next Steps and Action Items

12:25 p.m. | 5 minutes | Susan Gulick, Stacy Vynne

- Next meeting—Thursday, August 6, 2020, 9:30 a.m., Webex Only

**WRIA 15 Upcoming Meetings:** <https://ecy.box.com/v/WRIA15UpcomingMtgs>

#### WebEx Information

##### **WRIA 15 Committee Meeting**

Meeting number (access code): 133 326 8239

Meeting password: nsJHBAWV272

Join meeting

##### **Join by phone**

[+1-206-207-1700](tel:+12062071700) United States Toll (Seattle)

## WRIA 15 Chapters 1,2&3 Comments

Document Line Number	Representative Name	Entity	Date	Comment	Comment Code	How was comment addressed?
10	Dan Cardwell	Pierce County	06/04/20	Where is there evidence that water availability is being strained?	Yellow (Moderate Concern)	
11	Dan Cardwell	Pierce County	06/04/20	How is it coordinated? Perhaps reflects the comprehensive plans or incorporates assumptions that reflect comp plan goals and policies. Wouldn't it be appropriate to mention what brought this planning to be...meaning reference to the appeal of a rural element of a County's comp plan...and how it would support the growth? Could say a little more straight forward that the comp plans identifies where and how future population, housing, and job growth is planned.	Yellow (Moderate Concern)	Under review by ECY management. To what extent does WRIA 15 want to include this information and in Chapter 1 or 2?
15	Paul Pickett	Squaxin Island Tribe	07/02/20	Lines 15-19: (2 sentences): quote the mandatory requirements verbatim from RCW 90.94.030(b) – (e) rather than paraphrasing it and omitting material mandatory components.	Red (Strong Concern)	Ecology management will review comment to make revision.
17	Megan Kernan	washington Department of Fish and Wildlife	06/25/20	From WDFW's perspective, an essential element on RCW 90.94.030 is the requirement to replace water lost to future consumptive use by permit exempt wells (90.94.030(3)(b) RCW). Please be explicit about this requirement of the law in your description.	Yellow (Moderate Concern)	Ecology management will review comment to make revision.
18	Dan Cardwell	Pierce County	06/04/20	How about wells associated with group A water systems? Should the story tell the whole story re: group A, group B and permit exempt wells...and then clarify this planning only addresses consumptive use from new permit exempt wells.	Yellow (Moderate Concern)	Under review by ECY management. To what extent does WRIA 15 want to include this information and in Chapter 1 or 2?
19	Dan Cardwell	Pierce County	06/04/20	The purpose of the plan is to identify projects to off-set the impacts of permit-exempt wells to the stream flow. The Plan is one requirement of the RCW.	Yellow (Moderate Concern)	Revision under review by Ecology Management.
20	Dan Cardwell	Pierce County	06/04/20	Not how local gov'ts can...rather local gov'ts are able to through the identification of projects that offsets the stream flow impacts future permit exempt wells.	Yellow (Moderate Concern)	Revision under review by Ecology Management.

## WRIA 15 Chapters 1,2&3 Comments

28	Dan Cardwell	Pierce County	06/04/20	Provide background on permit exempt wells not needing to go through permit process. Discuss how homes get water...group A, group B and individual permit exempt. Then discuss that this only applies to permit exempt wells. In most circumstances the majority of permit exempt wells are located in unincorporated rural areas. In general I'm asking that a more complete story is told...that permit exempt wells are a small part in providing growth to the entire watershed	Yellow (Moderate Concern)	Revision under review by Ecology Management.
34	Dan Cardwell	Pierce County	06/04/20	For background it would be beneficial if the number of acres (and percentage) under federal and state ownership should be provided...then the percent of the area within Pierce County rural area should be provided. And include the percent of area within a group A water system service areas.	Yellow (Moderate Concern)	Under review by ECY management. To what extent does WRIA 15 want to include this information and in Chapter 1 or 2?
36	Paul Pickett	Squaxin Island Tribe	07/02/20	Lines 36-38 (1 sentence): quote the mandatory requirements verbatim from RCW 90.94.030(b)-(e), rather than paraphrasing it and omitting material mandatory components.	Red (Strong Concern)	Ecology management will review comment to make revision.
65	Paul Pickett	Squaxin Island Tribe	07/02/20	Lines 65-77 (2 paragraphs and 3 bullets): quote the mandatory requirements verbatim from RCW 90.94.030(b)-(e), rather than paraphrasing it and omitting material mandatory components.	Red (Strong Concern)	Ecology management will review comment to make revision.
69	Tristan Weiss	Washington Department of Fish and Wildlife	06/25/20	Since this bullet is specifically referencing RCW 90.94.030(3)a, I suggest adding the word "protect" between "measure and enhance" to more completely capture the language of the statute.	Green (Low Concern)	Stacy will check against legislation and make change if aligns.
132	Paul Pickett	Squaxin Island Tribe	07/02/20	List the consultants and their areas of expertise and support.	Yellow (Moderate Concern)	Does committee want this level of detail? Or referenced in Appendix?
154	Paul Pickett	Squaxin Island Tribe	07/02/20	Lines 154-155: Suggested revision: "The WRIA 13 Committee strived for consensus, and when consensus could not be reached, the chair and facilitator documented the Committee members' positions. All agreements and dissenting opinions were documented in meeting summaries that were reviewed and agreed upon by the Committee."	Yellow (Moderate Concern)	Note that this should be "WRIA 15". For committee review.
179	Paul Pickett	Squaxin Island Tribe	07/02/20	Cite Figure 1 here.	Green (Low Concern)	Stacy can make revision.

## WRIA 15 Chapters 1,2&3 Comments

179	Paul Pickett	Squaxin Island Tribe	07/02/20	Suggest: "WRIA 15 encompasses the entire Kitsap Peninsula and surrounding islands is (676 square miles), and..."	Green (Low Concern)	Does committee have concern with revision?
184	Paul Pickett	Squaxin Island Tribe	07/02/20	Recommend two figures with the features mentioned in the narrative - one with topographic shading, streams, and subbasin boundaries. A second with land uses and political jurisdictions.	Green (Low Concern)	Note that we are working on consistent maps across all WRIAs. Does the WRIA 15 Committee want these figures as well?
204	Paul Pickett	Squaxin Island Tribe	07/02/20	Lines 204-212, replace with: "Tribes with usual and accustomed fishing areas within WRIA 15 include the Suquamish, Port Gamble S'Klallam, Squaxin Island, Skokomish, Nisqually, Muckleshoot and Puyallup Tribes. These tribes hold reserved fishing rights in WRIA 15 under their treaties with the federal government (Treaty of Medicine Creek, Treaty of Point No Point, Treaty of Point Elliott). The Tribes also possess Treaty-reserved federal water rights in WRIA 15 in quantities that are necessary to support healthy salmon populations. These water rights are necessary to carry out the purposes of their Treaties, which include the guarantee of a self-sustaining homeland and sufficient water to support the fishing right. These rights operate outside of the state water rights system and have the most senior priority date. While these water rights have not yet been quantified by a court, they likely exceed the amounts that are established by state instream flow rules. Indian water rights are property rights held in trust by the United States for the benefit of Indian tribes."	Red (Strong Concern)	This revision needs approval by the other tribal representatives in WRIA 15.
215	Nam Siu	Washington Department of Fish and Wildlife	06/23/20	Include fall and summer chum as well as chinook and steelhead! Additionally, state their protected/endangered status, i.e. ESA listed Hood Canal Fall Chum, Puget Sound Chinook and Steelhead	Red (Strong Concern)	Stacy can add - we are working with HDR on a fish table that will likely be added to Chapter 2.

## WRIA 15 Chapters 1,2&3 Comments

215	Paul Pickett	Squaxin Island Tribe	07/02/20	Provide a figure with a map of salmon stream color-coded with stocks	Green (Low Concern)	Note that we are working on consistent maps across all WRIAs. Does the WRIA 15 Committee want these figures as well?
216	Brittany Gordon	Washington Department of Fish and Wildlife	06/25/20	It may be worth mentioning that many streams also experience flashy high stormflows in winter due to development-related impervious surface		Discuss with committee
219	Nam Siu	Washington Department of Fish and Wildlife	06/23/20	Add "water-use competition is exacerbated by loss of water recharge, storage, and metering landscapes such as wetlands due to development" before "Culverts...etc"	Green (Low Concern)	Discuss with committee
251	Paul Pickett	Squaxin Island Tribe	07/02/20	Define LIO, it's role in the Puget Sound Partnership, any relevant Action Agenda items, and provide a footnoted weblink.	Green (Low Concern)	Stacy can make this revision.
252	Paul Pickett	Squaxin Island Tribe	07/02/20	Add a sentence or two with context for the lead entity: enabling law, overall planning process and goals, GSRO role, web link to more info.	Green (Low Concern)	Stacy can make this role (some of the details are in footnote). Is role of GSRO too detailed?
252	Paul Pickett	Squaxin Island Tribe	07/02/20	A map showing LIO and Lead Entity boundaries would be helpful.	Green (Low Concern)	Stacy can get from PSP. Stacy will discuss if we want for all WRIAs.
254	Nam Siu	Washington Department of Fish and Wildlife	06/23/20	FYI Hood Canal LIO is also know as "Hood Canal Coordinating Council"	Green (Low Concern)	Stacy can revise
254	Paul Pickett	Squaxin Island Tribe	07/02/20	The discussion should include the Alliance for a Healthy South Sound, who are also an LIO in WRIA 15. Provide a description and the web link for AHSS.	Yellow (Moderate Concern)	Stacy can make this revision.
269	Paul Pickett	Squaxin Island Tribe	07/02/20	Insert information on all WRIA 15 streams that are 303d listed or have TMDLs completed, and the status of current TMDL studies and implementation plans. Also mention Ecology's south sound nutrient planning. Include a figure with a map of 303d and TMDL stream reaches.	Yellow (Moderate Concern)	Does the committee want this information on water quality? Stacy will need to discuss this additional information with management.

## WRIA 15 Chapters 1,2&3 Comments

280	Paul Pickett	Squaxin Island Tribe	07/02/20	Add language providing context for CWSP: enabling law, purpose and WDOH role	Green (Low Concern)	Stacy included some content. What additional content does the committee want to include?
283	Paul Pickett	Squaxin Island Tribe	07/02/20	Somewhere in this document a section is needed that describes the water management regime (permits, certificates, seniority, adjudication, etc), the Hirst decision, and how this plan fits in and coordinates with the rest of the regime.	Red (Strong Concern)	This section is being worked on for Chapter 1 by Ecology management.
293	Paul Pickett	Squaxin Island Tribe	07/02/20	provide context for the comp plan (GMA). Explain the relationship of the comp plan to the Hirst decisions and this planning process.	Red (Strong Concern)	This section is being worked on for Chapter 1 by Ecology management.
302	Paul Pickett	Squaxin Island Tribe	07/02/20	This section should be at the beginning of Chapter 2, perhaps after a brief introduction to the geographic location of WRIA 15, but before other discussions of human effects.	Green (Low Concern)	For Committee discussion
311	Paul Pickett	Squaxin Island Tribe	07/02/20	Include a figure that illustrates the subsurface geology, perhaps geologic cross-sections of the WRIA	Green (Low Concern)	Note that we are working on consistent maps across all WRIAs. Does the WRIA 15 Committee want these figures as well?
334	Paul Pickett	Squaxin Island Tribe	07/02/20	Illustrate the layers described in this paragraph with a figure, and cross-reference to the Appendix XX table with the terms mentioned in the narrative (Qva, QA1, etc).	Green (Low Concern)	Note that we are working on consistent maps across all WRIAs. Does the WRIA 15 Committee want these figures as well?
356	Nam Siu	Washington Department of Fish and Wildlife	06/23/20	I think there should be something in this "Hydrology and Streamflow" section that acknowledges shifting hydroperiods and intensities of flows due to climate change, and how this is all the more reason this streamflow restoration planning effort is important in increasing resilience of our streams to those changes. I see its mentioned in Lines 416 to 421, but still the topic of shifting hydroperiod and intensity of flows is not broached	Yellow (Moderate Concern)	Discuss with committee

## WRIA 15 Chapters 1,2&3 Comments

357	Paul Pickett	Squaxin Island Tribe	07/02/20	Move the paragraphs describing the climate of the WRIA from later in this section to the beginning. Start with rain, then the landscape.	Yellow (Moderate Concern)	For Committee discussion
357	Paul Pickett	Squaxin Island Tribe	07/02/20	Suggest: "Due to its irregular configuration and relatively small size geologic and topographic characteristics, ..."	Green (Low Concern)	Stacy can make this revision if no concerns from committee.
362	Paul Pickett	Squaxin Island Tribe	07/02/20	Suggest: "The relatively low mean annual precipitation over much of the WRIA caused by resulting from the rain shadow of the Olympic Mountains coupled with..."	Green (Low Concern)	Stacy can make this revision if no concerns from committee.
362	Joel Purdy	Kitsap Public Utility District	07/02/20	I am not sure of the reasoning behind this sentence. Rainfall in WRIA is relatively high (the rainshadow effects on the northern portion of the WRIA) and the reason behind PEWs and small systems is the low density of population.	Green (Low Concern)	Stacy will review with HDR.
366	Paul Pickett	Squaxin Island Tribe	07/02/20	Instead of: "The complexity, physiography and dominance of localized groundwater and surface water systems have resulted in the subdivision of WRIA 15 into many different hydrologic scales of subareas for different studies." Replace with: "Addressing the complexity of groundwater and surface water systems in WRIA 15 requires analysis at many different hydrologic scales depending on the needs of the studies."	Yellow (Moderate Concern)	Stacy can make this revision if no concerns from committee.
368	Paul Pickett	Squaxin Island Tribe	07/02/20	Lines 368-371: Delete this sentence. Subbasins are discussed in Chapter 3, and this suggests that subbasins were selected due to hydrology, when they were mostly driven by other factors.	Yellow (Moderate Concern)	Stacy can make this revision if no concerns from committee.
371	Paul Pickett	Squaxin Island Tribe	07/02/20	Lines 371-371: Instead of: "The subbasins are further discussed in Chapter 3 and the Technical Memo in Appendix x. These subbasins can be further divided into smaller drainage areas by Hydrologic Unit, such as Hydrologic Unit Code 12 (HUC-12) boundaries. There is evidence that some aquifers are continuous beneath several drainage basins." Replace with: "Examples include the subbasins (discussed in Chapter 3), and USGS Hydrologic Units, such as Hydrologic Unit Code 12 (HUC-12) boundaries. In addition, there is evidence that some aquifers are continuous beneath several drainage basins."	Yellow (Moderate Concern)	Stacy can make this revision if no concerns from committee.



## WRIA 15 Chapters 1,2&3 Comments

376	Paul Pickett	Squaxin Island Tribe	07/02/20	Lines 376-378, suggest: There is no contribution from upstream watersheds because WRIA 15 is surrounded by marine waters. Because all streams are contained in the WRIA, upstream sources, snow, and snowpack are not influencing factors 377 in the watershed, precipitation as rainfall is the dominant sole natural input..."	Green (Low Concern)	Stacy can make this revision if no concerns from committee.
380	Paul Pickett	Squaxin Island Tribe	07/02/20	Lines 380-384: move this paragraph to the beginning of the section.	Green (Low Concern)	Stacy can make this revision if no concerns from committee.
381	Joel Purdy	Kitsap Public Utility District	07/02/20	Precipitation at Holly has averaged 79.1 inches in the last 30 years. Further south along Hood Canal the rainfall is likely higher. Suggest changing this sentence to: ...peninsula to more than 80 inches along Hood Canal in the southwest portion of the WRIA.	Green (Low Concern)	Stacy will review with HDR.
385	Brittany Gordon	Washington Department of Fish and Wildlife	06/25/20	What percentage of summer flow comes from headwater wetlands and beaver ponds? Also, it should be noted that many streams in this WRIA DO go dry seasonally. And many of those streams still provide seasonal fish habitat.		Stacy can work with HDR to see if we have this information to include.
388	Tristan Weiss	Washington Department of Fish and Wildlife	06/25/20	This sentence could be rephrased for clarity. It appears that the intent of the sentence is closer to: "Practically all streams in WRIA 15 are augmented by groundwater discharge and many would go dry if groundwater recharge during precipitation became insufficient to maintain streamflow during dry periods."	Green (Low Concern)	Stacy will review.
390	Brittany Gordon	Washington Department of Fish and Wildlife	06/25/20	This section may be a good place to mention that headwater wetlands in WRIA 15 sometimes contribute hydrology in multiple directions, to multiple watersheds and even across sub-basins. For example, the wetland complex at Morgan Marsh and Hintzville contribute flow to multiple watersheds in both North and South Hood Canal		Discuss with committee
393	Paul Pickett	Squaxin Island Tribe	07/02/20	why "approximately"? Seems easy to count.	Green (Low Concern)	Stacy will review with HDR.
393	Paul Pickett	Squaxin Island Tribe	07/02/20	List all of the streams with regulatory controls, not just "major drainages".	Yellow (Moderate Concern)	Stacy can discuss with HDR including this information if committee agrees.

## WRIA 15 Chapters 1,2&3 Comments

395	Paul Pickett	Squaxin Island Tribe	07/02/20	Present and discuss the flow duration curves that Jim Pacheco developed.	Yellow (Moderate Concern)	Stacy can discuss with HDR including this information if committee agrees.
396	Nam Siu	Washington Department of Fish and Wildlife	06/23/20	I think the language in this statement should be stronger. i.e. "not meeting minimum flows during migration periods can negatively impact many fish species and result in massive pre-spawn mortalities of salmon."	Yellow (Moderate Concern)	Discuss with committee
401	Paul Pickett	Squaxin Island Tribe	07/02/20	Why only "East Kitsap"? This would be true everywhere.	Yellow (Moderate Concern)	Stacy will review with HDR.
406	Tristan Weiss	Washington Department of Fish and Wildlife	06/25/20	"Which may adversely affect salmonid production".	Green (Low Concern)	
409	Paul Pickett	Squaxin Island Tribe	07/02/20	Again, why only "East Kitsap"?	Yellow (Moderate Concern)	Stacy will review with HDR.
412	Paul Pickett	Squaxin Island Tribe	07/02/20	The sentence starts with "East Kitsap drainages", but Coulter, Rocky, and Minter Creeks are sound sound drainages. Since this section is about hydrology, create another subsection about salmon restoration needs, and organize it by lead entity areas.	Yellow (Moderate Concern)	Stacy will review with HDR.
417	Paul Pickett	Squaxin Island Tribe	07/02/20	Suggest you look at the Northwest Climate Toolbox for projections on the Kitsap peninsula ( <a href="https://climatetoolbox.org/">https://climatetoolbox.org/</a> ).	Yellow (Moderate Concern)	Committee needs to determine how much additional information on climate they want to include and in what context.
418	Joel Purdy	Kitsap Public Utility District	07/02/20	There needs to be an explanation that there is no large river like the Skokomish River in WRIA 16 and the responses could be quite different. For example the Skokomish River floods every year in the winter with just above average rainfall. Flooding in Kitsap County is a rare event and occurs in response to extreme precipitation events.	Green (Low Concern)	Stacy will review with HDR.
511	Joel Purdy	Kitsap Public Utility District	07/02/20	Is it eight or seven as in bullet on line 515 and table 2 on line 533?	Green (Low Concern)	Stacy will review with HDR.

## WRIA 15 Chapters 1,2&3 Comments

518	Paul Pickett	Squaxin Island Tribe	07/02/20	Instead of: "The subbasins approach is a nested approach where subbasins are essentially a "do not cross" line for finding projects to offset impacts.", replace with: "The subbasins are part of a nested approach where projects will be placed as close to impacts as possible."	Yellow (Moderate Concern)	Stacy will review with HDR.
524	Paul Pickett	Squaxin Island Tribe	07/02/20	Add two more bullets to "Other considerations were": "alignment of subbasins with Tribal Usual and Accustomed fishing areas"; and "adjustment of boundaries to take County jurisdictions into account"	Yellow (Moderate Concern)	This was not added into the technical memo. Stacy can make revision if committee agrees.
533	Nam Siu	Washington Department of Fish and Wildlife	06/23/20	Table 2. WRIA 15 Subbasins, Subbasin "Bainbridge Island" should include "Springbrook Creek, Murden Creek, Macs Dam Creek"; Subbasin "North Hood Canal" should include "Port Gamble Creek, Martha John Creek, Kinman Creek, "; Subbasin "West Sound" should include "Grovers Creek, Clear Creek, Crouch Creek, Illahee Creek, Steele Creek, Big Scandia Creek, Johnson Creek, Dogfish Creek, Bjorgen Creek, Klebeal Creek, Sam Snyder Creek, "	Red (Strong Concern)	Stacy can work with HDR to revise.
533	Paul Pickett	Squaxin Island Tribe	07/02/20	Table 2, for Anderson Island, include Schoolhouse Creek		
533	Teresa Smith	Bremerton, City of	06/25/20	Gorst Creek should be included in Table 2: WRIA 15 Subbasins under primary rivers and tributaries.	Yellow (Moderate Concern)	Stacy will review with HDR.

# Discussion Guide: Adaptive Management

Version 6 July 2020

## Purpose of Discussion

*The purpose of the discussion is to identify adaptive management provisions to include in the draft WRIA 15 plan. This is intended to build on and refine previous committee discussion and ideas.*

## Background

Adaptive management provides a mechanism to track plan implementation and to adapt if the desired outcomes of the plan are not achieved, or if assumptions used in the plan prove to be inaccurate. In general, adaptive management addresses what should be tracked/monitored, and what should occur if the tracking indicates adaptation is needed.

Ecology's NEB Guidance recommends adaptive management to help create reasonable assurance for plan implementation; however, RCW 90.94.030 does not require watershed plans to include adaptive management in order to achieve NEB. It is also important to note that the plan cannot obligate future actions. However, adaptive management can establish a framework for addressing future events if plan implementation does not occur as planned or if new information arises.

The committee should note that at this time there is no funding for adaptive management, and the committee should consider cost and funding sources in shaping adaptive management recommendations.

## Options for Committee Consideration

### 1. Tracking and Monitoring

There are two types of tracking commonly used in adaptive management. The first type is called “**status and trends**” and involves tracking general information within the watershed that is not necessarily the direct result of the plan. This could include such things as flow measurements<sup>1</sup>, rainfall, water use (to the extent there is metering), etc. The second type, called “**effectiveness monitoring**” is used to monitor the effect of specific projects or of the plan as a whole. It is difficult to monitor effectiveness at the project level, but one simple measure is whether or not a project is implemented as planned. A potentially more challenging measurement is whether the anticipated offset was successfully achieved. The committee may want to recommend that each project includes effectiveness tracking to the extent possible (but this would ultimately be negotiated between the project sponsor and funder).

If a committee wants to include a monitoring component, here are some monitoring options for the committee to consider. For each idea, it is important to identify how the information will be tracked, the frequency of measurement and reporting, who is responsible for tracking, how the information is reported and to whom, etc.

- a. Streamflow monitoring.

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<sup>1</sup> It is important to recognize that it is not possible to measure streamflow effects (positive or negative) of individual projects that are under consideration for streamflow restoration planning. Streamflow measurements will only provide information on the status and trends of a particular stream; additional work would be required to identify the cause of changes.

- What streams need to be monitored? Is there a gauge currently in place or are new gauges needed?
- b. The number and location of permit exempt wells.
  - Is this number significantly higher or lower than the plan anticipated?
- c. Project implementation
  - Was the project implemented as planned? If not, did it likely result in lesser or higher offset?
- d. Other ideas?

## 2. Adaptation Strategies

Adaptation strategies address what should occur if tracking indicates that plan expectations are not being met by significantly under-achieving or over-achieving offsets. Some groups, such as the Chehalis Basin, recommend reconvening the WREC to address the issue and prepare new recommendations and/or new projects. Others are considering turning the completed plan over to an existing group who may be able to support implementation more efficiently (e.g. an LIO, watershed council, county or other entity). A third option is to recommend triggers that lead to consequences if implementation is off track ([See Squaxin Island Tribe proposal linked at the end of this document](#)).

- a. Reconvening the WREC
  - Should the WREC meet annually (or more frequently) or only if specified targets are not met? Or should the WREC disband following the planning process?
- b. Assigning responsibility to another existing group (LIO, Lead Entity, watershed council, county or other)
  - Are there other groups in WRIA 15 who are suited to the task of implementing an approved streamflow plan?
- c. Establishing triggers for actions
  - What measures should trigger additional actions? What additional actions does the committee want to recommended?
- d. Other ideas?

## 3. Funding Strategies

As we have discussed before, multiple WRIAs (perhaps all Puget Sound WRIAs) have expressed interest in including an identical recommendation in their plans that asks for ongoing funding for adaptive management. ([See discussion guide linked at the end of this document.](#)) The draft language being considered is here:

*“The WRIA 15 Watershed Restoration and Enhancement Committee recommends that the legislature provide funding and a structure to monitor plan implementation (including annual tracking of new permit-exempt wells and project implementation by subbasin) and develop a process to adaptively manage implementation if Net Ecological Benefit is not being met as envisioned by the Watershed Restoration and Enhancement Plan”.*

Is the committee interested in including a recommendation like this in the plan? If so, WRIA 15 Committee members who wish to refine this language may work with other WRIAs to develop improved language. The hope is to have a short, simple recommendation that is identical in all WRIAs.

#### 4. Data Gaps

Data gaps can be addressed in multiple places in a plan, but it can be beneficial to address key data gaps in the adaptive management section. In particular, it is helpful to note what data would be beneficial in assessing plan implementation. If these data are not available, should the plan include recommendations to obtain this data going forward?

#### 5. WRIA 1 Example

Committee members have requested that we share examples for adopted plans or rule supporting documents. As an example of an adaptive management approach, WRIA 1's adopted rule includes the following components (and is [\*linked in its entirety at the end of this document\*](#)).

**Annual reporting:** The county (counties) will prepare an annual report to Ecology describing:

- Number of new building permits associate with new PE wells in the prior calendar year, including e-mail address of building permit recipients.
- A description of the status of each project
- Any other implementation actions to date

**Five-Year Self-Assessment:** The county (counties) will submit to Ecology every 5 years a description of:

- Total number of new building permits associated with new PE wells since plan adoption.
- The status of all projects
- Estimate of water and instream flow benefits realize through project implementation or other streamflow restoration work associate with RCW 90.94.20.
- Recommended project substitutions or actions.

#### Questions for committee discussion

- What information should be tracked?
- What should happen if tracking shows significant diversion from planned outcomes?
- Does the Committee support a standard request to the legislature for funding for adaptive management?
- Are there data gaps that should be addressed in this section?

#### Referenced Links:

- [WRIA 1 Adaptive Management Chapter](#)
- [Squaxin Island Tribe Adaptive Management Proposal](#)
- [Adaptive Management Funding Recommendation to the Legislature](#)

#### Additional Information

- [Nisqually Watershed Plan Addendum](#) (see pages 8-88 & 89)
- [Full WRIA 1 Rule](#)

## Policy proposal – WRIA 15 WREC

**Name:** Upgrade Well Reporting

**Entity:** Squaxin Island Tribe

**Type of policy idea** (see list below): Information process improvement

**Description of policy idea** (a short abstract):

1. *Identify the potential implementers and other key players.*
  - a. Ecology
2. *Describe proposed actions (including current policies or codes, existing programs and their limitations, problems to be corrected, etc.).*
  - a. See attached document “Proposed Improvements to the Department of Ecology’s Well Reporting Processes”
3. *Identify who the action impacts (if different than primary implementer).*
  - a. Well drillers, all users of well database information
4. *Describe benefits and challenges/obstacles.*
  - a. Benefits: better well location data; streamlined data collection and uploading; improved data access
  - b. Challenges: requires resources for development, roll-out, and training.

**Description of purpose:**

1. *How would this recommendation enhance the WRIA 15 plan? Describe the desired result and its purpose in this plan (we want to be clear how this relates to offsetting impacts from PEW OR be explicit that this is a benefit to the watershed even if not directly related to PEW impacts).*
  - a. Accurate well data is critical for all parties to make water management decisions that are protective of the environment and beneficial to communities. Improvements in the quality of well data in Washington State are essential for monitoring and management of shared water resources in the State of Washington. This supports the goals of the Plan.

**Description of concerns:**

1. *What, if any, concerns with this policy idea have WRIA 15 members expressed or that you anticipate?*
  - a. None anticipated, other than perhaps the allocation of limited resources.
2. *If you have discussed this with concerned members, what was the result of those discussions?*
  - a. Concept has been discussed, with general support.
3. *Are there other potential downsides or objections to the proposal that you anticipate?*
  - a. None anticipated.
4. *In what ways does your proposal address those concerns?*
  - a. Proposal stands by itself. Investment in this improvement in the short term will have long-term benefits.

**Cost and funding sources:**

1. *What elements of the proposal are likely to require funding?*
  - a. Platform development, testing, roll-out, and user training and support
2. *Provide a rough cost estimate (if known) and discuss potential funding sources and whether funding is one time or ongoing.*
  - a. Not yet known.
3. *Explain costs to other affected parties besides implementing regulators (for example: costs will increase for well drilling or new requirements on homeowners/home builders).*
  - a. There may be a small cost to well drillers for technology.



## **Proposed Improvements to the Department of Ecology's Well Reporting Processes**

### **The "Upgrade Well Reporting" Proposal**

**Developed by the Squaxin Island Tribe in consultation with Ecology's Well Construction and Licensing Office**

**Contributors: Ecology - Joe Witczak, Scott Malone, and Tara Roberts  
Squaxin Island Tribe - Erica Marbet**

**Final Draft May 28, 2020**

#### **Purpose:**

Accurate well data is critical for all parties to make water management decisions that are protective of the environment and beneficial to communities. The quality of well data in Washington State can be improved with changes to how the State collects information from drillers. These improvements are essential for monitoring and management of shared water resources in the State of Washington.

#### **Background:**

In 2018, at the request of the Squaxin Island Tribe, Ecology assigned staff to assess the accuracy of water well location reporting in Mason County. The project checked 187 water well reports (2.1% of the 8,910 water well reports from the county). Ecology uses the Public Land Survey system (PLS) to record well locations by township, range, section, quarter and quarter-quarter. Currently wells are mapped by 40-acre quarter-quarter centroids on the State Well Report Viewer. The results showed that 79% of well locations could be verified with the information on the report. Of those that could be verified, 33% had incorrectly reported PLS locations. Ecology performed a similar, statewide assessment of well location data and found a 24% error rate for all types of regulated wells.

As Tribes utilize Ecology's well report database frequently, tribal staff would benefit by improving well location data management and processes. In discussions between Ecology, Squaxin, and Mason County, all agreed that improvements to Ecology's well reporting processes could help reduce the error in water well location reporting.

Ecology is eager to expand their web-based well reporting options. In 2019, Ecology surveyed well drillers to determine their preferences regarding format and features. Of 133 respondents, 63% placed a high importance on a new well location mapping tool that would use recent aerial

imagery to determine a well's PLS location and coordinates. Only 6% responded that this effort would be of low importance. These results showed drillers preferred to submit well reports from a web form in the current well report format.

We propose the following changes to Ecology's well data processes:

**1. New well location mapping tool for drillers**

An interactive web-based mapping tool that provides an intuitive means of determining PLS location has been implemented in Oregon recently. Ecology is interested in developing their own web tool which provides the PLS and coordinates location (latitude/longitude) for a new well automatically. The Notice of Intent web form would shell into a new GIS application utilizing recent aerial imagery, a parcel overlay, and a tool that updates the quarter-quarter and coordinates on the NOI. The well driller need only click on the interactive map to generate a well location. When a driller finishes a well report, they can utilize the same tool to refine their coordinates and PLS location.

**2. Require coordinates on well reports**

Coordinates can perfectly describe a well location within a parcel. Adding latitude and longitude on well reports will serve to verify a well's location on the ground accurately and easily. Ecology intends to require well coordinates on reports, though a WAC change may eventually be needed.

**3. New web-based well reporting application**

Ecology is determining the best approach for implementing a new web-based well reporting application. According to a recent survey of drillers and their support staff, a web-form mimicking the current well report forms that uploads directly to Ecology's database is desired. The benefits of using a web-based well reporting process are numerous:

- Less backlog of scanning and data entry - more time for Ecology staff to vet well reports
- Legible text, fewer written responses
- Digitizing all well report data, not just the fields that were captured by Ecology staff during the scanning process
- A smart form format can eliminate out-of-range entries

By capturing digitized well location data, it would be feasible in the future to automate the process of verifying well locations and water right information. Tracking well location and permit-exempt wells is a need of users who download geospatial datasets

from Ecology's GIS data page (<https://ecology.wa.gov/Research-Data/Data-resources/Geographic-Information-Systems-GIS/Data>).

The Well Construction and Licensing Office at Ecology needs more capacity to vet well reports. Automation from web-based reporting would free up staff to do more vetting, because the office's staff would not have to do as much scanning of paper documents and manual entry of data fields for each report. They need more automation, not FTEs.

***Please share this proposal with your RCW 90.94 watershed planning committees ask members to support it. This would include adding it as a proposed action in a watershed plan.***

***Please contact Mary Verner, Manager of Ecology's Water Resources Program and Tyson Oreiro, Ecology's Tribal Liaison to express your support for the "Upgrade Well Reporting" proposal.***

***See next two pages for figures.***

<https://appswr.ecology.wa.gov/wellconstruction/Wells/NoticeOfIntentForm.aspx?form=noiwaterwellform>

[Laws, Regs and Rules](#)

[Notice of Intent Forms](#)

[Contact Us](#)

## Well Construction and Licensing Search Tools

### Step 1 of 3: Enter Information

An asterisk (\*) designates the field as required.

## Notice of Intent Form to Construct a Water Well

### Property Owner Contact Information

\*An organization name or the first and last property owner name is required.

Organization Name\*  (e.g. Daisy Farms LLC)

OR

Last Name\*

First Name\*

Email Address\*

Confirm Email Address\*

Mailing Address\*

City\*

State\*

Zip\*

Phone (  )

International customers cannot submit online. [Contact us](#) for assistance.

### Consulting Firm Contact Information

Firm Name

### Well Location

Township\*

Latitude

Range\*

Longitude

Section\*

\* Quarter-Quarter Section:

NW	NE	NW	NE
*	*	*	*
SW	SE	SW	SE
*	*	*	*
NW	NE	NW	NE
*	*	*	*
SW	SE	SW	SE
*	*	*	*

Well Street Address

Well City

Well Zip Code

Tax Parcel Number

County\*

Add interactive map to automatically identify township, range, section, latitude, and longitude



Make Optional

Make Mandatory

<https://fortress.wa.gov/ecy/publications/documents/ecy050120.pdf>

## WATER WELL REPORT

**DEPARTMENT OF  
ECOLOGY**  
State of Washington

**Type of Work:**  
☐ Construction  
☐ Decommission  $\Rightarrow$  Original installation NOI No. \_\_\_\_\_

**Proposed Use:**    ☐ Domestic    ☐ Industrial    ☐ Municipal  
                          ☐ Dewatering    ☐ Irrigation    ☐ Test Well    ☐ Other \_\_\_\_\_

**Construction Type:**                      **Method:**  
☐ New well    ☐ Alteration                      ☐ Driven    ☐ Jetted    ☐ Cable Tool  
☐ Deepening    ☐ Other \_\_\_\_\_                      ☐ Dug    ☐ Air-    ☐ Mud-Rotary

**Dimensions:** Diameter of boring \_\_\_\_\_ in., to \_\_\_\_\_ ft.  
 Depth of completed well \_\_\_\_\_ ft.

**Construction Details:**

Casing	Liner	Diameter	From	To	Wall Thickness	Steel	PVC	Welded	Thread
<input type="checkbox"/>	<input type="checkbox"/>	_____ in.	_____	_____	_____ in.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	_____ in.	_____	_____	_____ in.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	_____ in.	_____	_____	_____ in.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Perforations:**    ☐ Yes    ☐ No                      Type of perforator used \_\_\_\_\_  
 No. of perforations \_\_\_\_\_                      Size of perforations \_\_\_\_\_ in. by \_\_\_\_\_ in.  
 Perforated from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. below ground surface

**Screens:**    ☐ Yes    ☐ No                      ☐ K-Packer  $\Rightarrow$  Depth \_\_\_\_\_ ft.  
 Manufacturer's Name \_\_\_\_\_  
 Type \_\_\_\_\_                      Model No. \_\_\_\_\_  
 Diameter \_\_\_\_\_ in.    Slot size \_\_\_\_\_ in. from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 Diameter \_\_\_\_\_ in.    Slot size \_\_\_\_\_ in. from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**Sand/Filter pack:**    ☐ Yes    ☐ No                      Size of pack material \_\_\_\_\_ in.

Notice of Intent No. \_\_\_\_\_

Unique Ecology Well ID Tag No. \_\_\_\_\_

Site Well Name (if more than one well) \_\_\_\_\_

Water Right Permit/Certificate No. \_\_\_\_\_

Property Owner Name \_\_\_\_\_

Well Street Address \_\_\_\_\_

City \_\_\_\_\_ County \_\_\_\_\_

Tax Parcel No. \_\_\_\_\_

Was a variance approved for this well?    Yes ☐ No ☐

If yes, what was the variance for? \_\_\_\_\_

Location (see instructions on page 2):                      ☐ WWM or ☐ EWM  
 \_\_\_\_\_ 1/4-1/4 of the \_\_\_\_\_ 1/4; Section \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_  
 Latitude (Example: 47.12345) \_\_\_\_\_  
 Longitude (Example: -120.12345) \_\_\_\_\_

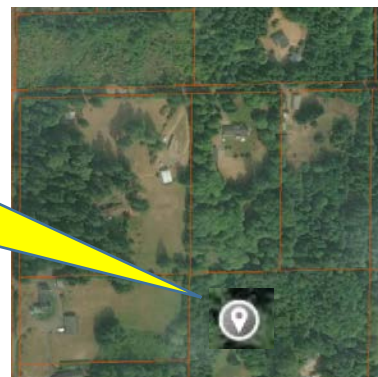
**Driller's Log/Construction or Decommission Procedure**

Formation: Describe by color, character, size of material and structure, and the kind and nature of the material in each layer penetrated, with at least one entry for each change of information. Use additional sheets if necessary.

Material	From	To

Make  
Mandatory

Add interactive map to  
automatically identify  
township, range,  
section, latitude, and  
longitude



Change this water well report into a web form.

## Policy proposal – WRIA 15 WREC

**Name:** Durability of Implementation

**Entity:** Squaxin Island Tribe

**Type of policy idea** (see list below): Adaptive Management; Regulation

**Description of policy idea** (a short abstract):

The Plan will identify the mechanisms that add certainty to its implementation over its life. These could include documentation of past practices and standard procedures; and expected linkages to existing policies, regulations, and planning documents.

1. *Identify the potential implementers and other key players.*
  - a. Ecology and Counties
2. *Describe proposed actions (including current policies or codes, existing programs and their limitations, problems to be corrected, etc.).*
  - a. For Ecology, this could include Plan implementation; and rule development, adoption, and implementation.
  - b. For Counties, this could include past practices and current practices with multi-jurisdictional plans; linkage to existing plans such as the Comprehensive Plan; and implementation through permitting rules.
3. *Identify who the action impacts (if different than primary implementer).*
  - a. It will indirectly impact all stakeholders in the Plan since to will improve the likelihood that the Plan will be improved and implemented.
4. *Describe benefits and challenges/obstacles.*
  - a. Benefits: documents procedures regarding how the Plan will be implemented, and increases the likelihood of Plan approval.
  - b. Challenges/obstacles: These descriptions are based on past or current practices, or they are recommendations. There may be reluctance to include anything in the Plan that looks like a commitment.

**Description of purpose:**

1. *How would this recommendation enhance the WRIA 15 plan? Describe the desired result and its purpose in this plan (we want to be clear how this relates to offsetting impacts from PEW OR be explicit that this is a benefit to the watershed even if not directly related to PEW impacts).*
  - a. It will improve the likelihood that the Plan will be improved and implemented.

**Description of concerns:**

1. *What, if any, concerns with this policy idea have WRIA 15 members expressed or that you anticipate?*
  - a. There is reluctance to include anything in the Plan that looks like a commitment.
2. *If you have discussed this with concerned members, what was the result of those discussions?*
  - a. The proposal is based on discussions with the staff of some counties.
3. *Are there other potential downsides or objections to the proposal that you anticipate?*

- a. It takes time to write down and it has no binding impact.
- 4. *In what ways does your proposal address those concerns?*
  - a. The proposal is based on past discussions.

**Cost and funding sources:**

- 1. *What elements of the proposal are likely to require funding?*
  - a. None anticipated
- 2. *Provide a rough cost estimate (if known) and discuss potential funding sources and whether funding is one time or ongoing.*
  - a. n/a
- 3. *Explain costs to other affected parties besides implementing regulators (for example: costs will increase for well drilling or new requirements on homeowners/home builders).*
  - a. None anticipated



## Policy proposal – WRIA 15 WREC

**Name:** Monitoring and Research

**Entity:** Squaxin Island Tribe

**Type of policy idea** (see list below): Information support

**Description of policy idea** (a short abstract):

The Plan should include a package of proposals for monitoring and research. Ideas to include:

- Support flow monitoring at all sites with ISF levels
- Improve ground water information – data, maps, and models
  - Map and quantify areas of impervious surface and critical recharge zones
  - Improve regional groundwater models
  - Map flow paths and rates for stream baseflow
  - Expand ground water monitoring
- Establish a program for habitat and NEB monitoring
- Monitor project implementation and effectiveness

The Plan should propose the development of a comprehensive monitoring and research strategy as part of Plan implementation. This strategy can refine the specific goals, elements, and priorities for monitoring and research.

1. *Identify the potential implementers and other key players.*
  - a. Various: Ecology, Counties, CDs, Tribes, PUDs
2. *Describe proposed actions (including current policies or codes, existing programs and their limitations, problems to be corrected, etc.).*
  - a. A variety of studies and programs are proposed. Specific studies and proposals will be developed by entities willing to invest time and resources.
3. *Identify who the action impacts (if different than primary implementer).*
  - a. The proposed actions will benefit all citizens in the WRIA by providing improved data and information for water planning.
4. *Describe benefits and challenges/obstacles.*
  - a. Benefits: improved data and information for water planning.
  - b. Challenges/obstacles:
    - i. Specific projects or programs need to be defined in detail
    - ii. Funding will need to be obtained.

**Description of purpose:**

1. *How would this recommendation enhance the WRIA 15 plan? Describe the desired result and its purpose in this plan (we want to be clear how this relates to offsetting impacts from PEW OR be explicit that this is a benefit to the watershed even if not directly related to PEW impacts).*
  - a. Information on water resources is always in short supply. Decisions are made with limited information, with assumptions made to address uncertainty. As the Plan is implemented, improved information will support adjustments to the Plan to better focus limited resources on the most significant problems and best solutions.

**Description of concerns:**

1. *What, if any, concerns with this policy idea have WRIA 15 members expressed or that you anticipate?*
  - a. This proposal is general in nature. Different members may interpret it differently or have different priorities for the study or program they'd prefer to focus on.
2. *If you have discussed this with concerned members, what was the result of those discussions?*
  - a. Discussions are supportive of the concept, although Committee members differ about details.
3. *Are there other potential downsides or objections to the proposal that you anticipate?*
  - a. Funding is a challenge, leaving implementation uncertain
  - b. The proposal is very general, and will likely occur piecemeal, if at all.
4. *In what ways does your proposal address those concerns?*
  - a. The proposal for developing a strategy would help to provide a more comprehensive and coordinated approach.
  - b. The proposal is intended to indicate the Committee's desires, while leaving the specifics flexible and adaptable.

**Cost and funding sources:**

1. *What elements of the proposal are likely to require funding?*
  - a. All of them
2. *Provide a rough cost estimate (if known) and discuss potential funding sources and whether funding is one time or ongoing.*
  - a. Impossible to estimate.
3. *Explain costs to other affected parties besides implementing regulators (for example: costs will increase for well drilling or new requirements on homeowners/home builders).*
  - a. Costs will depend on what is proposed and who agrees to fund it.
  - b. A monitoring or research study should not generate subsequent costs.

## Policy proposal – WRIA 15 WREC

**Name:** Water Supply Data for Comprehensive Water Planning

**Entity:** Squaxin Island Tribe

**Type of policy idea** (see list below): Monitoring and Research

**Description of policy idea** (a short abstract):

1. *Identify the potential implementers and other key players.*
  - a. Ecology, possibly consultant, support from Counties and WDOH
2. *Describe proposed actions (including current policies or codes, existing programs and their limitations, problems to be corrected, etc.).*
  - a. The following language is quoted from RCW 90.94.030:
    - i. (b) At a minimum, the plan must include those actions that the committee determines to be necessary to offset potential impacts to instream flows associated with permit-exempt domestic water use.
    - ii. (c) Prior to adoption of the watershed restoration and enhancement plan, the department must determine that actions identified in the plan, after accounting for new projected uses of water over the subsequent twenty years, will result in a net ecological benefit to instream resources within the water resource inventory area.
    - iii. (d) The watershed restoration and enhancement plan must include an evaluation or estimation of the cost of offsetting new domestic water uses over the subsequent twenty years, including withdrawals exempt from permitting under RCW 90.44.050.
    - iv. (e) The watershed restoration and enhancement plan must include estimates of the cumulative consumptive water use impacts over the subsequent twenty years, including withdrawals exempt from permitting under RCW 90.44.050.
  - b. To ensure compliance with the law, and consistent with principles of sound water management, the following information needs to be developed:
    - i. Past permit exempt domestic water wells and water use
    - ii. All projected water use for the next 20 years
      1. Permit exempt wells
      2. Inchoate municipal water rights brought into active use
        - a. Mitigated versus unmitigated
      3. New water rights
  - c. The following screening level information will be developed and included in the Plan:
    - i. Municipal water supply connections expected in the next 20 years, by subbasin
      1. Can be determined by difference from total growth and future PE wells
    - ii. Total number of existing PE wells by subbasin
      1. Can be determined by Counties from planning and permitting information

- d. Within one year of Plan approval, the following information should be developed for each subbasin:
  - i. Total existing (2018 and earlier) connections in service using:
    1. unmitigated inchoate water rights
    2. mitigated inchoate water rights
  - ii. Total connections expected to be put into service in the next 20 years using:
    1. unmitigated inchoate water rights
    2. mitigated inchoate water rights
    3. new water rights
3. *Identify who the action impacts (if different than primary implementer).*
  - a. Workload and financial impacts for participants in developing the information
4. *Describe benefits and challenges/obstacles.*
  - a. Benefits: Provides a robust information base for comprehensive water planning. Provides a context for the Plan and its goals.
  - b. Challenges/obstacles: Workload and financial requirements needed.

**Description of purpose:**

1. *How would this recommendation enhance the WRIA 15 plan? Describe the desired result and its purpose in this plan (we want to be clear how this relates to offsetting impacts from PEW OR be explicit that this is a benefit to the watershed even if not directly related to PEW impacts).*
  - a. Ensures that the Plan is in compliance with the law
  - b. Provides vital information for comprehensive planning by understanding both legacy water use and emerging trends.
  - c. Supports the overall goal of the plan to restore streamflow.

**Description of concerns:**

1. *What, if any, concerns with this policy idea have WRIA 15 members expressed or that you anticipate?*
  - a. Time spend on this task takes away from other important tasks
  - b. Capacity to do this work is limited
  - c. Ecology takes the position that this is not required by law
2. *If you have discussed this with concerned members, what was the result of those discussions?*
  - a. It has been discussed in Committee meetings, without result
3. *Are there other potential downsides or objections to the proposal that you anticipate?*
  - a. None
4. *In what ways does your proposal address those concerns?*
  - a. Split study into initial screening analysis and future more detailed analysis

**Cost and funding sources:**

1. *What elements of the proposal are likely to require funding?*
  - a. Staff time for collecting and analyzing information
2. *Provide a rough cost estimate (if known) and discuss potential funding sources and whether funding is one time or ongoing.*
  - a. One time funding, has not been determined

3. *Explain costs to other affected parties besides implementing regulators (for example: costs will increase for well drilling or new requirements on homeowners/home builders).*
  - a. No impact on other parties

## Policy proposal – WRIA 15 WREC

**Name: Funding for Plan Implementation**

**Entity:** Squaxin Island Tribe

**Type of policy idea** (see list below): Fees

**Description of policy idea** (a short abstract):

Two strategies are proposed to fund implantation of the Plan:

- New Permit Exempt Well Fees will be increased to \$1,500 per connection, as authorized by RCW 90.94.030 (5)(c). The Plan will identify the specific use of these fees, but the following distribution is suggested:
  - \$450/connection: to Ecology for supporting implementation
  - \$250/connection: retained by the County for administration and implementation costs
  - \$400/connection: to Ecology to distribute to an organization to create capacity to support implementation of the plan. Ecology will identify the organization conducting this work and provide the funding support in accordance with laws and regulations.
  - \$400/connection: to Ecology to fund education and technical assistance for conservation and drought resilience. Ecology will identify organizations conducting this work and provide the funding support in accordance with laws and regulations.
- The Plan will request that the legislature provide sustainable, stable funding for implementation of the Plan. This funding will be available statewide to address priority activities in common with all WRIAs with a Plan or Rule developed under RCW 90.94. These activities might include:
  - Ecology's role in implementing the Plan and ensuring compliance with WRIA rules.
  - A statewide education and technical assistance program for water conservation and drought resilience.
  - Monitoring, modeling, and research to collect information collection that supports better water management

The Plan recommends a dedicated fee rather than reliance on the general fund. An example might be an annual fee on permit exempt wells charged as part of the annual property tax assessment.

1. *Identify the potential implementers and other key players.*
  - a. Ecology and Counties
2. *Describe proposed actions (including current policies or codes, existing programs and their limitations, problems to be corrected, etc.).*
  - a. Ecology would need to develop and adopt a rule to implement this.
  - b. Counties would play a role in managing fees
3. *Identify who the action impacts (if different than primary implementer).*
  - a. New home buyers would absorb the fee in their purchase price.
  - b. A positive impact to all citizens in the WRIA will occur from funding of implementation
4. *Describe benefits and challenges/obstacles.*
  - a. Benefits: support implementation of the Plan and the ultimate achievement of its goals.

- b. Challenges/obstacles: resistance to increased fees and homebuyer costs

**Description of purpose:**

1. *How would this recommendation enhance the WRIA 15 plan? Describe the desired result and its purpose in this plan (we want to be clear how this relates to offsetting impacts from PEW OR be explicit that this is a benefit to the watershed even if not directly related to PEW impacts).*
  - a. Funding is critical to have a Plan that is actively implemented and achieves its goals.
  - b. Funding from the legislature is highly uncertain, and the law provides a mechanism to fund implementation through fees on new wells.
  - c. Funding needs are much larger than can be expected to be supported by local fees, so a parallel track to get statewide funding from the legislature should also be included.

**Description of concerns:**

1. *What, if any, concerns with this policy idea have WRIA 15 members expressed or that you anticipate?*
  - a. Resistance from counties and building industry to fees that add to the cost of homes.
2. *If you have discussed this with concerned members, what was the result of those discussions?*
  - a. Some willingness to accept a reasonable fee has been indicated.
3. *Are there other potential downsides or objections to the proposal that you anticipate?*
  - a. Committee members want the use of the fees to be clearly described.
4. *In what ways does your proposal address those concerns?*
  - a. I have proposed potential uses. As the Plan is more fully developed those uses can be better clarified and refined, or new ones included.
  - b. Fee levels are also proposed that be modified as the Committee chooses.

**Cost and funding sources:**

1. *What elements of the proposal are likely to require funding?*
  - a. The proposal is about funding.
2. *Provide a rough cost estimate (if known) and discuss potential funding sources and whether funding is one time or ongoing.*
  - a. Summary of PE well fee proposal in the table below.
3. *Explain costs to other affected parties besides implementing regulators (for example: costs will increase for well drilling or new requirements on homeowners/home builders).*
  - a. n/a

WRIA 15	# wells	Projected Annual Revenue – current	Ecology	County	Implementing Group	Conservation /drought	Total	Revenue - projected per year	
			Rate per well						
			\$ 450	\$ 250	\$ 400	\$ 400	\$ 1,500		
			Total per month						
			\$ 10,440	\$ 5,800	\$ 9,280	\$ 9,280	\$ 34,800		
278	\$ 139,200							\$ 417,600	



## Policy proposal – WRIA 15 WREC

**Name:** Instream Flow Rule revisions

**Entity:** Squaxin Island Tribe

**Type of policy idea:** Regulation

**Description of policy idea** (a short abstract):

Revise the WRIA 15 Instream Flow Rule (WAC 173-515) to improve protection of streamflows.

1. *Identify the potential implementers and other key players.*
  - a. Ecology
2. *Describe proposed actions (including current policies or codes, existing programs and their limitations, problems to be corrected, etc.).*
  - a. Close all streams with salmonid habitat in WRIA 15 tributary to the South Sound, other than Rocky and Coulter Creeks
  - b. For Rocky and Coulter Creeks, reassess the seasonal periods of closure and Instream Flow values with the most current ISF assessment methodology and salmon habitat information. This may include adding a seasonal period of closure where none currently exists.
  - c. Revise and add conditions to the rule related to permit-exempt wells consistent with the final watershed plan.
3. *Identify who the action impacts (if different than primary implementer).*
  - a. May affect future development by eliminating some sources of water supply.
4. *Describe benefits and challenges/obstacles.*
  - a. Benefits: updates rule for greater protection of aquatic resources from future water demands.
  - b. Challenges: rule-making process may alter the final rule; resistance to reduced access to surface and ground water.

**Description of purpose:**

1. *How would this recommendation enhance the WRIA 14 plan? Describe the desired result and its purpose in this plan (we want to be clear how this relates to offsetting impacts from PEW OR be explicit that this is a benefit to the watershed even if not directly related to PEW impacts).*
  - a. This recommendation would update the rule to:
    - i. Better protect streamflows from future water demands
    - ii. Support implementation of the Plan
    - iii. Support the goals of the plan for stream flow restoration and NEB
    - iv. Improve protection of Tribal and other senior water rights

**Description of concerns:**

1. *What, if any, concerns with this policy idea have WRIA 14 members expressed or that you anticipate?*
  - a. Uncertainty of rule-making outcomes

- b. Impacts on economic development
  - c. Workload to develop and implement the rule
- 2. *If you have discussed this with concerned members, what was the result of those discussions?*
  - a. No discussions yet
- 3. *Are there other potential downsides or objections to the proposal that you anticipate?*
  - a. See #1
- 4. *In what ways does your proposal address those concerns?*
  - a. Science-based approach
  - b. Focus on protection of salmonids

**Cost and funding sources:**

- 1. *What elements of the proposal are likely to require funding?*
  - a. Ecology will have to designate resources to implement.
- 2. *Provide a rough cost estimate (if known) and discuss potential funding sources and whether funding is one time or ongoing.*
  - a. Unknown at this time. Funding proposals have been provided separately
- 3. *Explain costs to other affected parties besides implementing regulators (for example: costs will increase for well drilling or new requirements on homeowners/home builders).*
  - a. May increase costs for development if less expensive water supplies are not allowed because of this rule.

## Policy proposal – WRIA 15 WREC

**Name:** Permit Exempt Well Withdrawal Limits

**Entity:** Squaxin Island Tribe

**Type of policy idea:** Regulation

**Description of policy idea** (a short abstract):

Permit Exempt Well limitations shall be established for this WRIA at the levels set in the WRIA 1 rule:

- Indoor domestic water use shall not exceed 500 gallons per day per connection, and shall not exceed a total of 3,000 gallons per day for a group domestic system; and
  - Outdoor domestic water use shall be limited to an area not to exceed a total of one-twelfth of an acre, or 3,630 square feet, for each connection, and one-half acre total for all connections in a group domestic system. Outdoor use limits are in addition to indoor water use.
1. *Identify the potential implementers and other key players.*
    - a. Ecology would be responsible for rule development and implementation.
  2. *Describe proposed actions (including current policies or codes, existing programs and their limitations, problems to be corrected, etc.).*
    - a. Rule revision would be required.
  3. *Identify who the action impacts (if different than primary implementer).*
    - a. Owners of homes with new permit exempt wells.
  4. *Describe benefits and challenges/obstacles.*
    - a. Benefits: reduces potential impact of new wells. Provides consistency with requirements for WRIA 1 and other WRIAs adopting these limits.
    - b. Challenges/obstacles: Ecology must expend resources to implement. Compliance may be difficult to achieve and inconsistent.

**Description of purpose:**

1. *How would this recommendation enhance the WRIA 15 plan? Describe the desired result and its purpose in this plan (we want to be clear how this relates to offsetting impacts from PEW OR be explicit that this is a benefit to the watershed even if not directly related to PEW impacts).*
  - a. These limitations provide a “safety factor” by setting limits on PE well use based on good water conservation practices. This improves the net benefits of offset projects as they are completed to restore streamflows and protect senior water rights.

**Description of concerns:**

1. *What, if any, concerns with this policy idea have WRIA 15 members expressed or that you anticipate?*
  - a. There may be resistance from homeowners who might have an expectation that there are no limits on their water use.
  - b. Ecology will have to invest resources to implement this as a rule and requirement.
2. *If you have discussed this with concerned members, what was the result of those discussions?*

- a. Concerns mainly are around compliance and enforcement – who is responsible and how would it occur?
- 3. *Are there other potential downsides or objections to the proposal that you anticipate?*
  - a. Counties may be uncertain about their role in compliance or the political response to the limits.
- 4. *In what ways does your proposal address those concerns?*
  - a. The proposal is consistent with a recently adopted rule.
  - b. A separate proposal will address compliance and enforcement issues.

**Cost and funding sources:**

- 1. *What elements of the proposal are likely to require funding?*
  - a. Ecology's role in development and implementation of the requirement
- 2. *Provide a rough cost estimate (if known) and discuss potential funding sources and whether funding is one time or ongoing.*
  - a. Ecology might be able to estimate from the WRIA 1 experience
- 3. *Explain costs to other affected parties besides implementing regulators (for example: costs will increase for well drilling or new requirements on homeowners/home builders).*
  - a. Reduced water use will likely reduce costs to homeowners.

**Revitalize, Enhance, and Expand Programs and Rules  
that  
Protect, Preserve, and Maintain Instream Flows**

1. *Identify the implementer and other key players*
  - Washington Legislature
  - Washington Department of Ecology (Ecology)
2. *Describe the recommended or required actions (including current policies or codes, existing programs and their limitations, perverse incentives, loopholes, etc.).*

Instream flows are designed to provide the levels of water flow, water quality, and aquatic habitat needed to protect and sustain instream resources like aquatic plants, fish, and other aquatic animals. Additionally, instream flows are critically important for maintaining the groundwater levels and surface water levels that humans have come to rely on for water supply, recreation, and aesthetics. Accordingly, instream flows should be protected, preserved, and maintained at robust levels.

In our regional history and identity, water is perceived to be plentiful. Inconvenient facts have made it apparent, however, that water is actually scarce. Population growth and development have resulted in increased consumption of water, particularly in rural areas where no public water supplies are available.<sup>1</sup> Changes in climatic and hydrologic systems, have created critical low streamflow conditions, particularly in late summer and early fall when demand for water is greatest for agricultural and domestic uses. Declines in floodplain ecological functions, including the endangerment of salmon populations and habitat, are attributable to altered and reduced streamflows. In order for Ecology to successfully manage these competing priorities, it must protect, preserve, and maintain robust instream flows so that Washington can thoughtfully adapt to unpredictable but inevitable climatic, hydrologic, biological, and social changes.

WRIA [#] WREC recommends the following actions be undertaken to revitalize, enhance, and expand programs and rules that protect, preserve, and maintain instream flows:

**Adapt and Update Existing Instream Flow Rules**

Habitat fragmentation, deforestation, removal of riparian vegetation, hydropower operations, and climate change have caused significant changes in water quantity, water quality, and timing in Washington's streams. As a result of these changes, existing instream flow rules may not adequately provide for the conditions needed to sustain instream resources in the future.

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<sup>1</sup> *Whatcom County v. Hirst, et al.*, 186 Wash.2d 648, 381 P.3d 1 (Wash. 2016)

Ecology uses fish habitat as baseline measure for setting instream flow levels.<sup>2</sup> The Legislature has established recovery of native wild salmon populations as a priority of state government.<sup>3</sup> We've learned a great deal about fish and fish habitat in the recent past, particularly in relation to recovery of endangered salmon and steelhead species. We would benefit from integrating that newly acquired knowledge into Ecology's baseline measure for setting instream flow levels.

Ecology applies hydrologic measures and assessments to quantify and schedule instream flow levels. Climatology and hydrology have advanced as scientific disciplines since the 1970's when Ecology set initial instream flow levels. We would benefit from applying the advancements of contemporary instream flow science into our instream flow rules.

Ecology should be provided with the funding and resources to adapt and update existing instream flow rules as needed to reflect contemporary facts and best available science. Instream flow rules have been established over a 50-year period of time utilizing a variety of methods, some of which are no longer accepted in the scientific community.<sup>4</sup> Consequently, Ecology may not have the data and methods it needs when called on to make difficult water management decisions. Ecology should integrate contemporary science into the instream flow rules for all basins to assure that existing instream flow rules are interpreted and applied based on contemporary standards and best available science.

#### Acquire Instream Rights

In Washington's appropriative system, instream flow rights are junior in priority to water rights that predate them. This legal structure can protect instream flows by preventing appropriation of new withdrawals, but it cannot restore water needed to sustain instream flows once it has been withdrawn by more senior users. As a result, in times of shortage, consumptive uses are often protected while the ecological functions that rely on instream flows are left to wither.

Climate change, decreased snowpack, and warming water temperatures have created stream conditions that threaten instream biological resources, including endangered salmonids. In order to assure that it is meeting its mandates to secure the "maximum net benefits"<sup>5</sup> for the State and to protect and enhance the instream flows "necessary to provide for preservation of wildlife, fish, scenic, aesthetic and

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<sup>2</sup> See WASH. STATE DEP/T OF ECOLOGY, PUB. NO. 03-11-007, A GUIDE TO INSTREAM FLOW SETTING IN WASHINGTON STATE 1011 (2003), <https://fortress.wa.gov/ecy/publications/documents/0311007.pdf>

<sup>3</sup> See RCW § 90.22.060, *see also* 90.48.010, 90.94.030(3)(a)

<sup>4</sup> See WASH. STATE DEP'T OF ECOLOGY, PUB. NO. 98-1813-WR, SETTING INSTREAM FLOWS IN WASHINGTON STATE 3 (2014), <https://fortress.wa.gov/ecy/publications/documents/981813wr.pdf>

<sup>5</sup> RCW § 90.54.020(2)

other environment values, and navigational values”<sup>6</sup>, Ecology must secure sufficient water rights to sustain robust instream flows.

The only process available to Ecology under State law for revising instream flow rules is notice and comment rulemaking, an administrative process that is not inherently responsive to changing conditions and advancing science. As a result, Ecology is constrained by law from adapting and advancing as needed to truly maximize and protect instream resources.

In response to these concerns, Ecology should be provided additional funding and resources for acquisition of water rights that can be repurposed to benefit instream flows. Additionally, private funding sources should also be encouraged to donate funds and water rights to TWRP for instream flow purposes.<sup>7</sup>

Acquired water rights should retain the original priority date and be permanently dedicated to instream uses through State’s Trust Water Rights Program. The instream right should be protected from the point of diversion to the river mouth.

#### Protect Instream Rights

Ecology should be provided with funding and resources to develop administrative capacity to fully account for instream flows – that is, to ensure that water dedicated to instream flows actually remains instream rather than being reallocated to other out of stream uses. To achieve this end, Ecology should take a hard look at implementing the following:

- Employ water masters to patrol streams and diversions;
- Develop and expand instream flow compliance programs utilizing real time monitoring and reporting technology;
- Enhance processes for determining when junior water users must curtail water use and provide sufficient monitoring and enforcement to assure curtailments occur;
- Assure that water savings accrued from past conservation efforts remain stream rather than being withdrawn by junior water users; and
- ensure that land use, shoreline management, and stormwater programs respect and implement instream requirements.

#### *3. Identify who is impacted by the action (if different than the primary implementer).*

- All citizens and residents of Washington; and
- All beneficiaries of Washington’s aquatic public trust resources.

#### *4. Describe benefits and challenges/obstacles.*

Revitalizing, enhancing, and expanding programs and rules that protect and preserve instream flows will serve the public interest in the following ways:

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<sup>6</sup> RCW § 90.54.020(3)(a)

<sup>7</sup> See RCW § 90.42.080(2)

- protect instream flows to benefit all aquatic public trust resources;
- restore and preserve natural resiliency in aquatic systems that are affected by dewatering due to over-appropriation and climate change;
- fully implement the State's water laws; and
- facilitate integration of state water laws with local land use, shoreline management, and stormwater programs.

Challenges and obstacles to balanced implementation may be encountered in the following ways:

- private parties that benefit from a lack of oversight, administration, and enforcement of State instream flow rules;
- private parties that see the State's instream flows as less of a public trust resource and more of an untapped water source during times of shortage may oppose enhanced protection of instream flow as a public trust resource;
- competing demands for state funding will challenge the Legislature to provide the necessary funding; and
- reprioritization and program growth within Ecology could create administrative changes that may threaten the norms and past practices of other agencies.



**WRIA [#] WREC STATEMENT RE:  
THE DEVELOPMENT AND USE OF RECLAIMED WATER**

1. *Identify the implementer and other key players*
  - Washington Legislature
  - Washington Department of Ecology (Ecology)
  - County Wastewater Treatment Programs
  - County Planning & Shoreline Management Programs
2. *Describe the recommended or required actions (including current policies or codes, existing programs and their limitations, perverse incentives, loopholes, etc.).*

In nature, all water is recycled. In our communities, recycled water is created by advanced wastewater treatment (which in this context is commonly referred to as “reclaimed water”). Our wastewater treatment plants mimic nature’s processes to filter and clean used water. Reclaimed water can be used safely for almost anything.

Reclaimed water is a product of advanced wastewater treatment. All wastewater receives standard treatment where solids are separated from liquids and dissolved organic material is subjected to microbial consumption. Reclaimed water receives advanced treatment where, after standard treatment, it receives an additional level of filtration to remove any remaining solids and it is disinfected to kill any pathogenic microbes.

Using reclaimed water is good for our region because, when used:

- it offsets water that would otherwise be diverted from the finite supply in our rivers and streams, thus preserving natural high quality instream flow;
- it reduces the amount of treated wastewater that is discharged into receiving water bodies like Puget Sound; and
- it creates water supply options, which makes the water supply system more resilient against drought and climate change.

Throughout Washington State’s history, we have seen our mountain watersheds and groundwater reserves as a reliable source of never ending freshwater. And, we have seen our rivers, estuaries, sounds, and oceans as a receiving basin with unquestioned capacity to absorb our wastewater. In between, we have seen wastewater as a liability to be dealt with and discarded. It is time that we changed our view. Using water only once is wasteful and unsustainable. We must begin to see wastewater as a valuable resource that, after advanced treatment, can be reused as locally sustainable freshwater.

WRIA [#] WREC is aware that implementing water recycling on a regional scale will require integrated water quality and quantity planning and new investments in treatment and distribution infrastructure, changes that no individual agency or entity can initiate alone. Accordingly, WRIA [#] WREC advocates generally for

enacting and promulgating state laws, rules, and regulations that encourage the development and use of reclaimed water. Some examples are:

- Integrate reclaimed water into water planning for non-potable use in agricultural, commercial, and residential settings (although reclaimed water is required to be assessed in municipal water system and sewer planning, there is no requirement for it to be evaluated for agricultural water supply).
- Remove disincentives for water right holders to switch to reclaimed water through expanded use of the Trust Water Rights Program (TWRP). Consider developing specific criteria for reclaimed water within the TWRP like financial incentives and flexible donation terms to encourage irrigators to use reclaimed water to augment instream flows.
- Encourage the development of ecologically beneficial watershed restoration projects such as managed aquifer recharge or wetland enhancement projects that utilize reclaimed water as the water source.
- Encourage residential and commercial developers to integrate non-potable water infrastructure into their projects for on-site rainwater harvesting or reclaimed water.
- Integrate water quality and water quantity objectives in water and wastewater planning. For instance, assess whether reclaimed water creates opportunities to restore streamflows while meeting regional water management goals of reducing nutrient loading to receiving waters like Puget Sound.
- Enhance public education and understanding regarding wastewater treatment and water recycling.
- Consider decentralized or on-site water recycling such as rainwater harvesting or building- or development-scale greywater recycling as tools to reduce water usage.

3. *Identify who is impacted by the action (if different than the primary implementer).*

- Same response as Item #1 above.

4. *Describe benefits and challenges/obstacles.*

Benefits:

- it offsets water that would otherwise be diverted from the finite supply in our rivers and streams, thus preserving natural high quality instream flow;
- it reduces the amount of treated wastewater that is discharged into receiving water bodies like Puget Sound; and
- it creates water supply options, which makes the water supply system more resilient against drought and climate change.

Challenges/obstacles:

- water systems rely upon planned revenue to finance their water systems and reclaimed water could disrupt planned water revenue. There are regional

discussions underway to develop coordinated planning to assess and address these impacts. ;

- persons and entities that focus on personal and public health might have concerns regarding potential health risks related to reclaimed water;
- developers and builders might resist the addition of new codes, rules, and regulations regarding wastewater conveyance infrastructure; and
- competing demands for state funding will challenge the Legislature to provide necessary funding.

DRAFT

## **Enable Ecology to Fully & Comprehensively Administer State Water Laws**

1. *Identify the implementer and other key players*
  - Washington Legislature
  - Washington Department of Ecology (Ecology)
  - Washington Attorney General
  - County Planning & Shoreline Management Programs
  - County Stormwater Programs
  - County Prosecuting Attorneys
2. *Describe the recommended or required actions (including current policies or codes, existing programs and their limitations, perverse incentives, loopholes, etc.).*

Washington's water laws set out conflicting priorities regarding water use. RCW 43.21A.064(5) authorizes Ecology to act in essence as an agent to assist applicants with "developing an adequate and appropriate supply of water" from new withdrawal sources. RCW 90.03.005 directs Ecology to promote the maximum use of the state's waters. Simultaneously, RCW 90.54.020(3)(a) charges Ecology with ensuring that "rivers and streams of the state shall be retained with base flows necessary to provide for the preservation of wildlife, fish, scenic, aesthetic and other environmental values."

These conflicting directives leave Ecology with having to balance inconsistent and competing priorities. Historically, Washington's elected officials have pressured Ecology to shift its respective priorities in order to serve the demands of their political constituents. The most powerful constituencies have been those that favor development and use of water. Accordingly, Ecology's water rights program has developed in a way that does not balance its competing priorities, but instead favors development and use over preservation of the State's waters and related natural resources.

This imbalance should be corrected. Ecology should be funded, staffed, and equipped adequately so that it can stand up and maintain a robust program to:

- measure and report water use to the full extent of the law;
- identify and document illegal water use;
- enforce against illegal water use and collect penalties;
- enforce standards for beneficial use and waste;
- ensure that water dedicated to instream flows actually remains instream;
- and
- ensure that land use, shoreline management, and stormwater programs respect and implement instream requirements.

3. *Identify who is impacted by the action (if different than the primary implementer).*
  - Same response as Item #1 above.

*4. Describe benefits and challenges/obstacles.*

Establishing balance in the implementation of Washington's water laws will serve the public interest in the following ways:

- enhance the scientific and factual information that informs our decisions and uses for waters of the State;
- fully implement the State's water laws;
- protect against depletion and injury to the State's waters due to over-appropriation, illegal use, and waste;
- protect instream flows; and
- facilitate integration of state water laws with local land use, shoreline management, and stormwater programs.

Challenges and obstacles to balanced implementation may be encountered in the following ways:

- private parties that benefit from a lack of oversight, administration, and enforcement of State water laws may oppose improving Ecology's administrative capacity;
- private parties that see the State's water as less of a public trust resource and more of a private commodity may oppose enhanced knowledge and control over water by Ecology;
- competing demands for state funding will challenge the Legislature to provide the necessary funding; and
- reprioritization and program growth within Ecology could create administrative changes that may threaten the norms and past practices of other agencies.