

JOINT LEGISLATIVE TASK FORCE ON WATER RESOURCE MITIGATION REPORT

November 14, 2022

MEMBERS

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Senator Judy Warnick, Co-Chair
Representative Joe Fitzgibbon
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Peter Godlewski, Business Interests Representative
Lisa Pelly, Environmental Advocacy Organizations Representative
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Introduction

In 2018, the Legislature created the Joint Legislative Task Force on Water Resource Mitigation (Task Force) as a part of Engrossed Substitute Senate Bill No. 6091, Sec. 301 (ESSB 6091). The Legislature directed the Task Force to review the treatment of surface water and groundwater appropriations as they relate to instream flows and fish habitat, and to recommend a mitigation sequencing process and scoring system to address such appropriations. The Legislature also directed the Task Force to review the Washington Supreme Court decision in *Foster v. Department of Ecology*, 184 Wn.2d 465, 362 P.3d 959 (2015).

In 2019, the Task Force submitted a report to the Legislature describing the formation and activities of the Task Force, the water mitigation pilot projects authorized by ESSB 6091, and challenges the Task Force faced in developing recommendations based on the progress of the pilot projects. The 2019 report can be accessed at:

<https://leg.wa.gov/JointCommittees/WRM/Documents/2019%20JLTWRM%20Report.pdf>

The Task Force recognizes that an increase in Washington's population together with climate change will further impact water availability. In the 2050s, Washington state is projected to see warming of +5.8°F (3.1-8.5°F). Washington's primary mechanism for storing water is in the form of mountain snowpack, which is sensitive to warming. Additionally, the population of Washington is projected to increase by as much as 2.5 million by 2040. Water utilities and cities will need water rights to provide water to the increased population.

Currently, there are 29 federally recognized Tribes in Washington State. Tribal reserved water rights may exist on or off the reservation, apply to surface and groundwater, are regulated under federal law, are not lost through non-use, and may be recognized by a treaty or an executive order. The Task Force recognizes the critical need for collaboration with Tribes on water issues in the state.

Overview of Task Force

Task Force Charge

The Legislature directed the Task Force to: review the treatment of surface water and groundwater appropriations as they relate to instream flows and fish habitat, develop and recommend a mitigation sequencing process and scoring system to address such appropriations, and review the Washington Supreme Court decision in *Foster v. Department of Ecology*. Additionally, the Legislature directed the Task Force to submit recommendations to the Legislature by November 15, 2019. The Task Force was reauthorized through the passage of Substitute House Bill No. 1080, Sec. 7024 (SHB 1080) in 2021, and the deadline for Task Force recommendations to the Legislature was extended to November 15, 2022. Recommendations of the Task Force must be made by a 60% majority of the voting members of the Task Force. Minority recommendations supported by at least five Task Force members may also be submitted.

Composition and Membership

The enabling legislation called for two members each from the largest caucuses of the Senate and House of Representatives to be appointed by the President of the Senate and Speaker of the House, respectively; one representative each from the departments of Ecology (Ecology), Fish and Wildlife (WDFW), and Agriculture, appointed by the respective agency directors; and several members appointed by consensus of the Task Force co-chairs representing a variety of interested parties. Those interested

parties include the farming industry, cities, municipal water purveyors, business interests, environmental organizations, and two federally recognized Indian tribes, one invited by recommendation of the Northwest Indian Fisheries Commission and the other invited by recommendation of the Columbia River Intertribal Fish Commission. The state agency representatives are not eligible to vote on Task Force recommendations.

The Task Force consists of the following members:

- Representative Steve Tharinger (D), Co-Chair
- Senator Judy Warnick (R), Co-Chair
- Representative Joe Fitzgibbon, (D)
- Senator Jim Honeyford (R)
- Representative Jacquelin Maycumber (R)
- Senator Jesse Salomon (D) ****
- Senator Kevin Van De Wege (D)
- Representative Jim Walsh (R) ***
- Carla Carlson, representing Northwest Indian Fisheries Commission**
- Dave Christensen, Department of Ecology*
- Megan Kernan, Department of Fish and Wildlife* *****
- John Weidenfeller, representing municipal water purveyors *****
- Peter Godlewski, representing business interests *****
- Lisa Pelly, representing an environmental advocacy organization
- Carl Schroeder, representing Washington cities
- Evan Sheffels, Department of Agriculture*
- Jeff Slothower, representing the farming industry
- Bruce Wishart, representing an environmental advocacy organization

*Non-voting member.

**Participating as a non-voting member.

*** appointed September 10, 2019, to replace Representative Vincent Buys

**** appointed June 14, 2021, to replace Senator Marko Lias

***** appointed September 13, 2021, to replace Sarah Mack

***** appointed September 13, 2021, to replace Michael Garrity

***** appointed March 1, 2022, to replace Bob Hunter

Updates Resulting from 2019 legislation

Legislation enacted in 2019 made several adjustments to the Task Force and related provisions. First, any position on the Task Force left vacant does not count towards a quorum.¹ Second, the Task Force expiration date was extended to December 31, 2020, and, if determined appropriate by a majority of the members, the Task Force was authorized to update its 2019 recommendations by November 15, 2020, based on additional information generated from the pilot projects.² Additionally, Ecology was directed to provide an update on the mitigation plans for each of the pilot projects based on additional

¹ Chapter 413, Laws of 2019, Sec. 7305 (3) (Substitute House Bill No. 1102)

² Chapter 413, Laws of 2019, Sec. 7305 (8)(a) (Substitute House Bill No. 1102)

information developed after the initial report in November 2018.³

2021 Reauthorization

The Task Force was again reauthorized through the passage of SHB 1080 in 2021.⁴ The language authorizing the Task Force remains the same except for the following updates and changes:

- By November 15, 2022, the Task Force must make recommendations to the Legislature;
- By November 15, 2022, the Department of Ecology must provide the Task Force with an update on the mitigation plans based on additional information developed after November 15, 2018;
- During the period from November 16, 2019, through December 31, 2022, the work of the Task Force is limited to a review of any additional information that may be developed after November 15, 2019, as a result of the pilot projects, and an update of the Task Force's November 15, 2019, recommendations; and
- The Task Force expires December 31, 2022.⁵

Summary of *Foster v. Ecology*

Introduction

On October 5, 2015, the Washington State Supreme Court issued its ruling in *Foster v. Department of Ecology*, 184 Wn.2d 465, 362 P.3d 959 (2015). The Supreme Court in *Foster* held that Ecology improperly used the "overriding consideration of public interest" (OCPI) exception to approve a water right permit application by the City of Yelm, reversing decisions of both the Thurston County Superior Court and the Pollution Control Hearings Board (PCHB). According to the Supreme Court, the prior appropriation doctrine does not allow for any impairment, even de minimis impairment, of senior water rights, in accordance with the Court's earlier decision in *Postema v. Pollution Control Hearings Board*, 142 Wn.2d 68, 11 P.3d 726 (2000). Accordingly, out-of-kind mitigation may not be used to remedy impairments to senior water rights, and the OCPI exception may only be used to offset temporary impairment of minimum flows.

City of Yelm Municipal Water Permit

Due to its growing population, the City of Yelm applied to Ecology for a new municipal water permit to meet its increasing water needs. Both Ecology and the City of Yelm acknowledged that minimum flows would be impacted even with the mitigation plan, with Ecology asserting that the plan would still result in a net ecological benefit despite the net loss of water. Ecology conditioned the permit on a mitigation plan that included several strategies using both in-kind and out-of-kind mitigation, to account for the impairments to minimum flows that would result from the new water uses. Ecology generally may not issue a water right permit for any use of water that would result in withdrawals that impair minimum flows, unless "it is clear that overriding considerations of public interest [OCPI] will be served."⁶ Ecology approved the permit under the OCPI exception based on a determination that water was available for appropriation for a beneficial use, and that appropriation would not impair existing water rights or be detrimental to the public welfare.

The City of Yelm permit was first appealed to the PCHB, which ruled in favor of Ecology and approved the permit. Although the PCHB found that Ecology's three-step test was not sufficiently stringent, the PCHB

³ Chapter 413, Laws of 2019, Sec. 7305 (13) (Substitute House Bill No. 1102)

⁴ Chapter 332 Laws of 2021, Sec. 7024 (Substitute House Bill No. 1080)

⁵ Id.

⁶ RCW 90.54.020(a)

concluded that Ecology's analysis still met the statutory OCPI exception standards, properly considered all impacts to minimum flows, and mitigated impacts in ways that would clearly benefit fish and wildlife habitat and outweigh any negative impacts of minimum flow impairment. The PCHB's decision was appealed to Thurston County Superior Court, which affirmed the PCHB's decision, and the Supreme Court granted direct review of the Superior Court's decision.

Supreme Court Analysis

After noting the similarities to *Swinomish Indian Tribal Community v. Department of Ecology*, 178 Wn.2d 571, 311 P.3d 6 (2013), the Supreme Court in *Foster* held that Ecology had exceeded its authority in granting the City of Yelm's permit under the OCPI exception, finding that: (1) the OCPI exception only permits temporary impairment of minimum flows; (2) municipal water needs do not qualify as "exceptional circumstances" needed to apply the OCPI exception; and (3) a mitigation plan may not use ecological benefit to correct impairment to a senior water right. The Supreme Court also upheld the standard established in *Postema*, finding even de minimis impairment to a senior water right to be a violation of the water code. In its analysis, the Supreme Court assumed the Legislature did not intend to use the terms "withdrawal" and "appropriation" synonymously in the water code. Accordingly, the Court concluded that the Legislature uses the term "appropriation" when assigning a permanent legal water right, and "withdrawal" when it intends to refer to a temporary use or diversion of water. A three-Justice minority of the Court dissented, disagreeing with both the majority's interpretation of the word "withdrawal" to mean a temporary use or diversion of water, and with the comparison of *Foster* to *Swinomish*, stating that the PCHB correctly had applied the law and that the permit and accompanying mitigation plan should be upheld.

Water Resource Mitigation Pilot Projects

Engrossed Substitute Senate Bill 6091 required Ecology to issue permit decisions for up to five water resource mitigation pilot projects. The purposes of the pilot projects are (1) to inform the Task Force process created by ESSB 6091 and (2) to enable the processing of water right applications that address water supply needs.

Ecology is authorized to issue water right permits in reliance upon water resource mitigation of impacts to instream flows and closed surface water bodies under the following mitigation sequence:

- Avoiding impacts by complying with mitigation required by adopted rules that set forth minimum flows, levels or closures, or making the water diversion or withdrawal subject to the applicable minimum flows or levels;
- Where avoidance of impacts is not reasonably attainable, minimizing impacts by providing new or existing trust water rights or through other types of replacement water supply resulting in no net annual increase in the quantity of water diverted or withdrawn from the stream or surface water body and no net detrimental impacts to fish and related aquatic resources; or
- Where avoidance and minimization are not reasonably attainable, compensating for impacts by providing net ecological benefits to fish and related aquatic resources in the Water Resource Inventory Area (WRIA) through in-kind or out-of-kind mitigation or a combination thereof, that improves function and productivity of affected fish populations and related aquatic habitat. Out-of-kind mitigation may include instream or out-of-stream measures that provide a net ecological benefit to existing water quality, riparian habitat, or other instream functions and values for which minimum instream flows or closures were established in that WRIA.

Ecology must monitor the implementation of these pilot projects, including all related mitigation, at least annually through the end of 2028.

Engrossed Substitute Senate Bill 6091 set forth criteria for eligible pilot projects:

- A city operating a Group A water system in Kitsap County and WRIA No. 15, with a population between 13,000 and 14,000;
- A city operating a Group A water system in Pierce County and WRIA No. 10 with a population between 9,500 and 10,500;
- A city operating a Group A water system in Thurston County and WRIA No. 11, with a population between 8,500 and 9,500;
- A nonprofit mutual water system operating a Group A water system in Pierce County and WRIA No. 12, with between 10,500 and 11,500 service connections; and
- An irrigation district located in Whatcom County and WRIA No. 1, solely for the purpose of processing changes of water rights from surface water to groundwater and implementing flow augmentation to benefit instream flows.

Water right applicants eligible to be processed as pilot projects under ESSB 6091 were required to notify Ecology of their interest in participating in the pilot program by July 1, 2018. Five water right applicants that met the eligibility criteria submitted applications to Ecology of their interest by that date:

- City of Port Orchard;
- City of Sumner;
- City of Yelm;
- Spanaway Water Company; and
- Ag Water Board of Whatcom County.

Once pilot project applicants notified Ecology of their interest, applicants then worked to develop a proposed mitigation strategy in accordance with the avoid-minimize-compensate sequence established by ESSB 6091. Once mitigation strategies have been developed, applicants submit a draft Report of Examination (ROE) to Ecology. Ecology reviews each ROE and makes it available to the public for a 30-day comment period. At the end of the public comment period, modifications to the ROE may be made if needed. Ecology then issues a final decision on the ROE, which will be made available for a 45-day public comment period.

As required in ESSB 6091, Ecology provided the Task Force with information on conceptual mitigation plans for each pilot projects by November 15, 2018. A description of the conceptual mitigation plans for the five pilot projects is located on the Task Force webpage at <http://leg.wa.gov/JointCommittees/WRM/Documents/EcologyConceptualMitigationPlans.pdf>.

Engrossed Substitute Senate Bill 6091 requires Ecology to expedite processing of applications for water resource mitigation pilot projects in order to ensure that the processing of pilot projects could inform the task force process in a timely manner. ESSB 6091 also requires each pilot project applicant to reimburse Ecology for Ecology's costs of processing its application.

The City of Yelm submitted a watershed mitigation plan to Ecology in April 2021. The mitigation plan uses both in-kind (direct replacement flow) and out-of-kind (riparian protection and habitat

improvements) mitigation strategies that demonstrate achieving a net ecological benefit (NEB). Yelm's hydrological model documented potential impacts to regulated waterbodies through a conservative, detailed hydrological analysis. In instances where avoidance and minimization are not reasonably attainable, the City has advanced analysis of proposed mitigation in the context of achieving NEB in WRIAs 11 and 13. Through interlocal agreements in both WRIAs, Yelm, together with Olympia and Lacey, have documented through financial and institutional controls that the mitigation will be fully implemented and remain in place for the full duration of the anticipated water use. These agreements include monitoring provisions and associated cost allocation. The monitoring plans include contingency and corrective actions if goals and measures for specific habitat projects are not achieved.

The City of Yelm and Ecology worked on a draft ROE that was released in February 2022 for public comment. No comments were received. Additionally, Ecology and the City of Yelm worked with the Nisqually, Squaxin, and Puyallup tribes to get their input on the draft ROE. The final ROE was posted on May 9, 2022. In June 2022, Ecology issued a new water rights permit, in the amount of 942 acre-feet per year, to the City of Yelm. This new water right will help create nearly 5,000 new water connections and help Yelm provide water to its citizens for the next 20 years.

As of November 2022, the timeline by which the other pilot project applicants are projected to submit their draft ROEs to Ecology is:

- City of Sumner: mid-year 2023.
- Spanaway Water Company: is awaiting the release of a new United States Geological Survey (USGS) model prior to developing a mitigation plan.
- City of Port Orchard: end of 2022.
- Ag Water Board of Whatcom County: has submitted a water right application to Ecology for processing the streamflow augmentation project on Dakota creek and is working with Ecology on the mitigation sequencing steps.

Topics of Discussion

Conservation

Background

Washington - General water conservation requirements.

Under the Water Resources Act of 1971, [Chapter 90.54 RCW](#), federal, state, and local governments, individuals, corporations, groups and other entities are encouraged to carry out practices of conservation as they relate to the use of the waters of the state. In addition to traditional development approaches, improved water use efficiency, conservation, and use of reclaimed water are required to be emphasized in the management of the state's water resources. In some cases, conserved water will be a potential new source of water with which to meet future needs throughout the state. Use of reclaimed water is encouraged through state and local planning and programs with incentives for state financial assistance recognizing programs and plans that encourage the use of conservation and reclaimed water use.

Also under the Water Resources Act of 1971, state and local governments, individuals, corporations, groups, and other entities are encouraged to carry out water use efficiency and conservation programs and practices consistent with the following principles:

- Water efficiency and conservation programs should use an appropriate mix of economic incentives, cost share programs, regulatory programs, and technical and public information efforts. Programs which encourage voluntary participation are preferred.
- Increased water use efficiency and reclaimed water should receive consideration as a potential source of water in state and local water resource planning processes. In determining the cost-effectiveness of alternative water sources, consideration should be given to the benefits of conservation, wastewater recycling, and impoundment of waters. Where reclaimed water is a feasible replacement source of water, it must be used by state agencies and state facilities for nonpotable water uses in lieu of the use of potable water.
- In determining the cost-effectiveness of alternative water sources, full consideration should be given to the benefits of storage which can reduce the damage to stream banks and property, increase the utilization of land, provide water for municipal, industrial, agricultural, and other beneficial uses, provide for the generation of electric power from renewable resources, and improve streamflow regimes for fishery and other instream uses.
- Entities receiving state financial assistance for construction of water source expansion or acquisition of new sources shall develop, and implement if cost-effective, a water use efficiency and conservation element of a water supply plan.
- State programs to improve water use efficiency should focus on those areas of the state in which water is overappropriated; areas that experience diminished streamflows or aquifer levels; regional areas that the Governor has identified as high priority for investments in improved water quality and quantity, including the Spokane River, the Columbia River basin, and the Puget Sound; areas most likely to be affected by global warming; and areas where projected water needs, including those for instream flows, exceed available supplies.
- Existing and future generations of citizens of the state of Washington should be made aware of the importance of the state's water resources and the need for wise and efficient use and development of this vital resource. In order to increase this awareness, state agencies should integrate public information programs on increasing water use efficiency into existing public information efforts. This effort shall be coordinated with other levels of government, including local governments and Indian tribes.

Under Washington's water code, [Chapter 90.03 RCW](#), based on the tenet of water law that precludes wasteful practices in the exercise of rights to the use of waters, Ecology is required to reduce wasteful practices to the maximum extent practicable, taking into account sound principles of water management, the benefits and costs of improved water use efficiency, and the most effective use of public and private funds.

Ecology may require metering of surface water diversions and groundwater withdrawals as a condition for new water right permits and may also require reports regarding such diversions and withdrawals as to the amount of water being diverted or withdrawn.

Owners and operators of sewage systems must obtain approval of plans for the construction of new sewage systems and improved or expanded sewage systems from Ecology or its local government designee. Such sewer plans must include a discussion of water conservation measures considered or underway that would reduce flows to the sewerage system and an analysis of their anticipated impact on public sewer service and treatment capacity.

Washington - Municipal water conservation requirements.

Water conservation for municipal purposes is required by the 2003 municipal water law, [Second Engrossed Second Substitute House Bill 1338 \(2E2SHB 1338\)](#). The primary conservation requirements of 2E2SHB 1338 are now codified at [RCW 70A.125.170](#). Under 2E2SHB 1838, the Department of Health (DOH) must adopt rules to implement the conservation requirements; those rules are codified at [Chapter 246-290 WAC](#). The municipal water conservation requirements apply to Group A community water systems with 15 or more residential connections and Group A non-community systems that provide water for residential uses to a non-residential population for 25 or more people for 60 or more days per year.

Under the 2003 municipal water law, the DOH must develop conservation planning requirements which ensure that municipal water suppliers implement programs to integrate conservation with water system operation and management and identify how to fund and implement conservation activities. These requirements apply to all municipal water suppliers, although they must be tailored to be appropriate to system size, forecasted system demand, and system supply characteristics.

Conservation planning requirements adopted by the DOH must include the selection of cost-effective measures to achieve a system's water conservation objectives, evaluation of the feasibility of adopting and implementing water delivery rate structures that encourage water conservation, evaluation of the system's water distribution system leakage and an identification of any steps necessary for achieving leakage standards, and collection and reporting of water consumption, source production, and water purchase data and the frequency for reporting such information.

The DOH must also develop water distribution system leakage standards. It must institute a graduated system of requirements based on levels of water system leakage but must not require less than 10 percent leakage for the total system's supply. The DOH must establish minimum requirements for water conservation performance reporting which must include the adoption and achievement of water conservation goals by suppliers, the adoption of implementation schedules, a public reporting system for regular reviews of conservation performance against adopted goals, and requirements for modifying plans if conservation goals are not being met.

A municipal water supplier with 1,000 or more service connections must, in preparing its regular water system plan updates, describe its conservation measures, the improvements in efficiency resulting from the conservation measures over the previous six years, and projected effects of conservation on delaying its use of inchoate (as yet unused) water rights before it may divert or withdraw additional inchoate water.

As a result of the passage of [Substitute House Bill 1397](#) in 1989, the State Building Code Council was required to adopt rules that implement and incorporate water conservation performance standards for certain plumbing fixtures. The state water conservation performance standards superseded all local government codes. The state water conservation performance standards were eventually superseded by federal standards which were as strong or stronger than the state-level standards, and were subsequently repealed by the passage of [Second Substitute House Bill 1444](#) in 2019.

Washington - Use of reclaimed water.

The Department of Ecology adopted rules for the use of reclaimed water in 2018, which are codified in [Chapter 173-219 WAC](#). The rules address all aspects of reclaimed water, including permitting for the generation, distribution, and use of reclaimed water across Washington. The rules apply to all existing

and proposed facilities. A facility that reclaims water may not impair any existing water right downstream from any freshwater discharge point of such a facility unless compensation or mitigation for such impairment is agreed to by the holder of the affected water right.

Concepts and ideas discussed by presenters at work sessions

Elements of water conservation - Municipal.

There are four general types of municipal water conservation:⁷

- customer programs;
- rate structure / price impacts;
- system operation improvements; and
- plumbing codes / standards.

Examples of future opportunities for improvement within each of these types of conservation include, among others:⁸

- customer programs:
 - metering technology to monitor use and leaks;
 - landscaping water; and
 - commercial indoor.
- rate structure / rate impacts: Improvement opportunities for some utilities, such as charging more per unit of water as more water is used.
- system operation improvements: Improvement opportunities such as increased leak detection and repair, though funding can be a limiting factor.
- plumbing codes / standards:
 - sub-metering for multifamily residences; and
 - landscape requirements.

Elements of water conservation - Agricultural.

There are multiple categories of water conservation and efficiency in the agricultural water distribution system, including:⁹

- piping;
- lining and sealing canals;
- re-regulating reservoirs; and
- pumping back seepage water.

There are also multiple types of on-farm water conservation and efficiency, including:¹⁰

- drip irrigation;
- under-tree micro-spray;
- center pivot and linear sprinklers;
- wheel lines;
- hand lines;

⁷ "Seattle Public Utilities Water Conservation Program"; Kelly O'Rourke, Seattle Public Utilities; presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on November 2, 2021.

⁸ Id.

⁹ "Water Supply & Conservation"; Scott Revell, Roza Irrigation District; presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on November 2, 2021.

¹⁰ Id.

- ponds;
- shade cloth; and
- cover grasses.

Ecology provides cost-share funding for water conservation and efficiency projects through the irrigation efficiencies program.

Washington - Water conservation in practice.

The City of Walla Walla began a 10-year leak repair program in 2010 that reduced leaks by making repairs to water distribution infrastructure. The repair program reduced distribution system leakage from approximately 35 percent in 2010 to approximately 18 percent in 2020, with an overall leakage goal of 10 percent. The leak repair program now saves over 600 million gallons per year.¹¹

The City of Mesa began to charge for water by volume in 2014. As a result, Mesa's water production was able to decrease by 26.4 million gallons per year, a decrease of 41 percent.¹²

From 1990 to 2015, on a statewide level in Washington:¹³

- Washington's population increased by 47 percent;
- Washington's domestic and public water use decreased by 23 percent; and
- Washington's per capita water use decreased by 48 percent.

As a result of conservation measures, the City of Seattle now uses the same amount of water that it did in the 1950s, even though the population has doubled since that time.¹⁴

Colorado - Water conservation.¹⁵

The Colorado Water Conservation Board (CWCB) is Colorado's water policy and planning agency. The CWCB is not a regulatory agency. It is self-funded through the CWCB's water loan program. Its responsibilities include water supply planning, watershed and flood protection, and stream and lake protection. The CWCB operates on an incentive-based, cooperation-based model that seeks to achieve compliance through access to state funding. By contrast, the Colorado Department of Public Health and Environment, which enforces the Safe Drinking Water Act and the Clean Water Act, is regulation-based and achieves compliance through fines and punitive measures.

The CWCB implements multiple Colorado laws, including laws that require water efficiency plans, annual data reporting, integration of water efficiency and land use. The CWCB also administers the Water Efficiency Grant Fund. Rainwater harvesting pilot projects are authorized under Colorado law. Colorado law also requires mandatory use of metered delivery and billing systems. The sale of inefficient indoor water fixtures in Colorado is essentially prohibited.

¹¹ "Water Use Efficiency in Public Water Systems"; Mike Means, Washington State Department of Health; presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on November 2, 2021.

¹² Id.

¹³ Id.

¹⁴ "Seattle Public Utilities Water Conservation Program"; Kelly O'Rourke, Seattle Public Utilities; presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on November 2, 2021.

¹⁵ "Perspectives on Colorado Water Efficiency"; Kevin Reidy, Colorado Water Conservation Board; presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on November 2, 2021.

At the local planning level, Colorado law provides that if a local government includes a water element in its comprehensive plan, the plan must include water conservation policies. This requirement is not punitive, but rather is enforced through access to funding provided by Colorado's Department of Local Affairs. Water conservation plans must evaluate certain required elements; these plans must then be revised and submitted for approval to the CWCB every seven years. One element requires water providers to evaluate "best management practices for water demand management, water efficiency, and water conservation that may be implemented through land use planning efforts."

Colorado water providers are required to submit annual water demand and water conservation data to the CWCB, including:

- population;
- annual water produced;
- monthly customer category metered water consumption;
- current rate structure;
- integration of water and land use planning;
- water conservation programs; and
- expenditures on water conservation of programs and staff.

Colorado has multiple water re-use rules, including rules related to non-potable uses, greywater control and use, and direct potable re-use.

The Colorado Water Plan sets out multiple objectives related to water conservation, including:

- achieve 400,000 acre-feet of municipal and industrial water conservation by 2050; and
- by 2025, 75 percent of Colorado residents will live in communities that have incorporated water-saving actions into land-use planning.

The CWCB provides for funding for multiple activities related to the Colorado Water Plan, including:

- land use and water trainings and guidance;
- large-scale landscape retrofits;
- landscape professional training;
- greywater new home pilot demonstration project; and
- direct potable re-use demonstration projects.

Nevada - Water conservation.¹⁶

The Southern Nevada Water Authority (SNWA), which serves southern Nevada, including the greater Las Vegas area, recycles 99 percent of the water used indoors.

The SNWA relies on the Colorado River to meet 90 percent of its water needs. As a result of significant reductions in the amount of water available from the Colorado River, Southern Nevada has undertaken four major activities to meet its water needs:

- reducing demands / water conservation;
- Colorado River negotiations;

¹⁶ "Meeting Water Demands in Southern Nevada"; Andrew Belanger, Southern Nevada Water Authority; presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on June 22, 2022.

- securing alternate supplies; and
- addressing infrastructure needs.

Actions taken by the SNWA to reduce water demand include:

- landscape development codes;
- golf course water budgets;
- mandatory watering schedules;
- water waste enforcement;
- tiered water rates; and
- incentive programs.

As a result of demand reduction programs, per capita water usage in the SNWA service area has fallen from 211 gallons per day in 2000 to 113 gallons per day in 2021, a 48 percent reduction in per capita water consumption, and an overall 26 percent reduction in the region's Colorado River consumption.

Regulations adopted by the SNWA related to water conservation include:

- no turf in new homes;
- no turf in new commercial properties;
- golf course water budgets;
- mandatory watering restrictions;
- water-waste prohibition; and
- limits on manmade ornamental water features.

The SNWA has also adopted an incentive program that pays residents and businesses to convert grass to more water-efficient plants and trees. This has resulted in the replacement of 202 million square feet of grass with water-smart landscaping since 1999, and a savings of 163 billion gallons of water. The SNWA also operates an incentive program for owners of commercial and multifamily properties who install water-efficient devices and technology. Property owners can earn up to \$45 for every 1,000 gallons of water saved.

Looking to the future, the SNWA recently adopted a new Water Resource Plan to introduce initiatives that, when implemented, will help meet a new conservation goal of 86 gallons per capita per day. These water conservation initiatives will focus on the following areas:

- landscape efficiency;
- cooling efficiency (many buildings in the SNWA service area use evaporative cooling towers);
- water loss control;
- irrigation compliance; and
- new development efficiency.

At the statewide level, Nevada recently enacted a prohibition on using community water supplies to water existing non-functional grass, such as neighborhood entries, streetscapes, medians, and roundabouts. The prohibition does not apply to single family residences. Each square foot of non-functional turf accounts for approximately 55 gallons of lost water per year.

Texas - Water conservation.¹⁷

Texas has engaged in water planning at a statewide level since 1997. The purpose of statewide water planning is to provide for the orderly development, management, and conservation of water resources, and to prepare for and respond to drought conditions. For purposes of planning, the state is divided into smaller geographic regions that each engage in their own regional water planning process.

Water conservation is one of the first water management strategies that must be considered by the regional water planning groups when meeting a future need.

Texas's state water planning requirements establish multiple reporting obligations for water providers, including:

- Water use survey - must be prepared annually by 7,000 entities;
- Water loss audit - prepared every five years by 4,000 retail water suppliers;
- Water loss audit - prepared annually by 600 retail water suppliers;
- Water conservation plan - revised every five years for 800 entities; and
- Annual conservation report - the annual report on the implementation of the water conservation plan.

The Texas Water Development Board serves as a statewide body that provides planning and technical support to the regional water planning groups, including:

- Demand and population estimates;
- Agricultural water use estimates;
- Water loss audit data;
- Targets and goals from annual conservation reports;
- Best management practices that are being implemented; and
- Copies of water conservation plans provided by each entity.

Conservation as a water source represents 29 percent of the total volume of water that the 2022 Texas Water Plan projects will be needed to serve Texas's population by 2070, including:

- 977,000 acre-feet per year in municipal conservation;
- 1.2 million acre-feet per year in agricultural conservation; and
- 44,000 acre-feet per year in industrial conservation.

Water conservation is recommended for more than half of the approximately 3,000 water user groups in Texas, at an estimated overall capital cost of more than \$7 billion.

California - Water conservation.¹⁸

California's population has grown from approximately 15 million people in 1960 to just under 40 million people as of 2015. Over that same time period, California's municipal water consumption has risen from approximately 4 million acre-feet in 1960 to a high of approximately 10 million acre-feet in 1995, and has

¹⁷ "State Water Planning & Conservation in Texas"; John T. Sutton, Texas Water Development Board, and Karen Guz, San Antonio Water Systems; presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on June 22, 2022.

¹⁸ "California Water: Urban and Agriculture"; Amy Talbot, Regional Water Authority - Sacramento Region, and Emily Rooney, Agricultural Council of California; presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on June 22, 2022.

since dropped back down to approximately 6 million acre feet as of 2015. During that same time period, California's agricultural water consumption has gone from approximately 29 million acre-feet in 1960 to a high of approximately 42 million acre-feet in 1995, and has since dropped back down to approximately 31 million acre-feet in 2015. In the agricultural sector, almond farmers have reduced the amount of water required to grow each almond by 33 percent between the 1990s and the 2010s, and are working to further reduce that amount by another 20 percent by 2025. In the dairy industry, the amount of water required to produce each gallon of milk in California has gone down by more than 88 percent over the past 50 years.

Legislation enacted in California required water suppliers to adopt a budget-based approach to water planning and conservation. Water suppliers are required to prepare an annual water supply and demand assessment. The water use objective for a water supplier includes an indoor residential use standard, an outdoor residential use standard, a commercial / industrial / institutional use standard, and a water loss standard, among other elements.

The Sustainable Groundwater Management Act (SGMA), enacted in 2014, requires local agencies to form groundwater sustainability agencies for the high and medium priority basins. Groundwater sustainability agencies develop and implement groundwater sustainability plans to avoid undesirable results and mitigate overdraft within 20 years. Plans for high-priority basins were submitted in 2020 and these basins must achieve sustainability by 2040. Plans in medium-priority basins were submitted in 2022 and these basins must achieve sustainability by 2042. The SGMA structure allows for local control with state assistance and enforcement. The California Department of Water Resources assists with technical, planning and financial assistance, while the State Water Resources Control Board handles enforcement. Advantages of the SGMA include local control, state assistance when needed, and the fostering of creative solutions. Challenges associated with the SGMA include the following of up to 1,000,000 acres, and significant shifts in land use and crop production.

Looking to the future, there are positive aspects of California's water conservation outlook, including increased efficiency, targeted and innovative programs, and standardized information. There are also challenges, including cost effectiveness, a possible shift toward a top-down rather than a bottom-up approach to conservation, ongoing environmental challenges such as drought and wildfires, and customer communication.

Concepts and ideas from the chart of topics (from conservation and demand management categories)

- Municipal/agricultural;
- Water use reductions;
- Low-volume plumbing codes;
- Best management practices;
- Discussion of new and higher conservation responsibilities with new municipal water rights accessed through this new process;
- Requiring pretreatment;
- Reduction of leak rates; and
- Pricing.

Mitigation

Background

Mitigation in the Foster Decision.

On October 5, 2015, the Washington State Supreme Court (Court) issued its ruling in *Foster v. Department of Ecology*, 184 Wn.2d 465, 362 P.3d 959 (2015) (*Foster*). The city of Yelm applied to Ecology for a new municipal water right permit to meet its increasing water needs. Ecology conditioned the permit on an extensive mitigation plan that included several strategies using both in-kind and out-of-kind mitigation to account for the impairment to minimum flows that would result from the new water uses. The mitigation plan included offsetting the total quantity of water through in-kind or “wet water” mitigation. However, the timing of the mitigation did not match perfectly—the in-kind mitigation occurred during the low-flow period only. In Yelm’s water right permit decision, Ecology determined the OCPI exception was appropriate for use in this water right decision since it resulted in a net ecological benefit, despite the net loss of water.

The Court in *Foster* held that the prior appropriation doctrine does not allow for any impairment, even de minimis impairment, of senior water rights, in accordance with the Court's earlier decision in *Postema*. Accordingly, out-of-kind mitigation may not be used to remedy impairments to senior water rights, and the OCPI exception may only be used to offset temporary impairment of minimum flows.

Mitigation Sequencing.

The [legislation](#) establishing the Task Force described a mitigation sequence under which Ecology may issue water right permits in reliance upon water resource mitigation of impacts to instream flows and closed surface water bodies. The mitigation sequence is as follows:

- **Avoid:** Avoiding impacts by complying with mitigation required by adopted rules that set forth minimum flows, levels or closures, or making the water diversion or withdrawal subject to the applicable minimum flows or levels.
- **Minimize:** Where avoidance of impacts is not reasonably attainable, minimizing impacts by providing new or existing trust water rights or through other types of replacement water supply resulting in no net annual increase in the quantity of water diverted or withdrawn from the stream or surface water body and no net detrimental impacts to fish and related aquatic resources.
- **Compensate:** Where avoidance and minimization are not reasonably attainable, compensating for impacts by providing net ecological benefits to fish and related aquatic resources in the WRIA through in-kind or out-of-kind mitigation or a combination thereof, that improves function and productivity of affected fish populations and related aquatic habitat. Out-of-kind mitigation may include instream or out-of-stream measures that provide a net ecological benefit to existing water quality, riparian habitat, or other instream functions and values for which minimum instream flows or closures were established in that WRIA.

Mitigation sequencing is also discussed in the Washington Administrative Code (WAC). In [Chapter 173-26 WAC](#), related to shoreline master programs adopted under the Shoreline Management Act, master programs must include provisions that require proposed individual uses and developments to analyze environmental impacts of a proposal and include measures to mitigate environmental impacts not otherwise avoided or mitigated to assure no net loss of shoreline ecological functions. Master programs must include a requirement that mitigation measures be applied in the following sequence of steps listed in order of priority:

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts.

- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- Reducing or eliminating the impact over time by preservation and maintenance operations;
- Compensating for the impact by replacing, enhancing, or providing substitute resources or environments.
- Monitoring the impact and the compensation projects and taking appropriate corrective measures.

Mitigation requirements are also described in [Chapter 220-660 WAC](#) for hydraulic projects, defining mitigation as sequentially avoiding impacts, minimizing and rectifying unavoidable impacts, and compensating for remaining impacts. This mitigation must achieve no net loss. "Mitigation sequence" means the successive steps that the Department of Fish and Wildlife (WDFW) and the applicant must consider and implement to protect fish life when constructing or performing work. These steps must be considered and implemented in the order listed:

- Avoid the impact altogether by not taking a certain action or parts of an action.
- Minimize unavoidable impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking steps to reduce impacts.
- Rectify the impact by repairing, rehabilitating, or restoring the affected environment.
- Reduce or eliminate the impact over time.
- Compensate for remaining unmitigated impacts by replacing, enhancing, or providing substitute resources or environments.

Mitigation sequencing is also described in [Chapter 173-700 WAC](#) related to wetland mitigation, defining wetland mitigation to mean sequentially avoiding impacts, minimizing impacts, and compensating for remaining unavoidable impacts to wetlands or other aquatic resources. Further, compensatory mitigation means the restoration, creation, enhancement, or in exceptional circumstances, the preservation of wetlands or other aquatic resources for the purpose of compensating for unavoidable impacts to wetlands or other aquatic resources which remain after all appropriate and practicable avoidance and minimization have been achieved.

Concepts and ideas discussed by presenters at work sessions

Mitigation Under the *Foster* Decision.

In the city of Yelm's water right application, the Pollution Control Hearings Board (PCHB) determined that every feasible in-kind mitigation option was exhausted, all impacts were "fully mitigated and trackable over time," out-of-kind benefits to fish and stream habitat were "significant and clearly established through sound science," and "permanent and net ecological benefit to affected streams, more than sufficient to offset minor depletion of water." The Court acknowledged the "net ecological benefit" but concluded that was not enough for OCPI.¹⁹

The *Foster* decision has affected Ecology's work in various ways and one example is a project in Whatcom County. Ecology was funding two projects in Whatcom County: (1) pilot project to augment creek with groundwater; and (2) transfer irrigation surface water rights to groundwater wells. Ecology halted the transfers after the *Foster* decision.²⁰ Additionally, the *Foster* decision has affected Ecology's decisions related to:

¹⁹ "Foster Mitigated Water Permits"; Dave Christensen, Department of Ecology; presentation delivered to the Joint legislative Task Force on Water Resource Mitigation on June 22, 2018.

²⁰ "How the *Foster* Decision Affects Our Work"; Dave Christensen, Department of Ecology, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on November 10, 2020.

- new withdrawals;
- groundwater right changes; and
- surface to groundwater right changes.²¹

Another example of work that is potentially impacted by the *Foster* decision are the plans or plan updates that 15 planning groups are implementing under the Streamflow Restoration Law. These plans could include a mix of projects, such as projects to offset estimated impacts from 20 years of development using permit exempt wells. Highest priority projects address impacts in-time and in-place, but out-of-time and out-of-place offsets are authorized. Some potential projects would require water right permit decisions and thus would conflict with *Foster* decision.²²

The *Foster* decision has set up a “perfect” mitigation requirement for any, even de minimis, depletions of regulatory minimum instream flows. For example, a water right applicant must supply mitigation that is in kind (wet water mitigation—and not other types of mitigation, like habitat improvements), in time (at the same time as the modeled or actual impairment), and in place (in the same location within the water body).²³

Mitigation in Other States.

Colorado.

In Colorado, the state water regulatory agency may accept impairment to an instream flow if:

- through mitigation, it can continue to preserve or improve the natural environment to a reasonable degree notwithstanding the injury; or
- it is a de minimis impact to an instream flow (i.e., has a 1 percent or less depletive effect).

The state water regulatory agency in Colorado has discretion in determining whether to accept mitigation, even where that mitigation is not in kind, in time, and in place.²⁴

In Colorado, pumping tributary groundwater that impacts surface water requires that pumping depletion be replaced by a substitute supply through a plan for augmentation. An Augmentation Plan is a plan to replace induced stream depletions using a substitute supply of water, approved by the Water Court, to address injury.²⁵

Idaho.

Idaho requires mitigation for transfers where: (1) modeled depletions in any reach increase by more than 2/acre feet per trimester; (2) modeled depletions in any reach increase by more than 10 percent, and (3) modeled depletions in any reach are greater than 10 percent of the sum of all depletions

²¹ "Foster Decision Refresher"; Dave Christensen, Department of Ecology; presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on May 24, 2022.

²² "How the *Foster* Decision Affects Our Work"; Dave Christensen, Department of Ecology, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on November 10, 2020.

²³ "Water Resources Laws Regarding Impairment and Mitigation of Regulatory Instream Flows in Other States Compared to Washington State"; Adam Gravley, Jenna Mandell-Rice, and Rachael Lipinski, Van Ness Feldman, LLP, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on June 22, 2022.

²⁴ Id.

²⁵ "Surface Water and Ground Water Interaction - Colorado Ground Water Administration"; Kevin Rein, Colorado Division of Water Resources, presentation delivered to the Joint Legislative Committee on Water Resource Mitigation on November 10, 2020.

modeled in all reaches.²⁶

The Idaho Water Resource Board (IWRB), through the Director of the Department of Water Resources, in association with water districts and IWRB-appointed local rental committees, operates the Water Supply Bank, a water exchange market, to facilitate the acquisition and voluntary exchange of water rights in Idaho and to satisfy new and supplemental water uses. Idaho's Water Supply Bank program includes:

- The Board's Bank, which is a statewide, water exchange marketplace facilitating the lease and rental of water rights;
- Regional Rentals Pools, which are regional (basin-specific) water exchange markets to facilitate the lease and rental of storage water or natural flow water rights; and
- The Shoshone-Bannock Tribal Water Supply Bank, which is an Upper Snake River reservoir storage water rental program operated by the Tribes.²⁷

The minimum stream flow statute allows the IWRB to file for unappropriated water to be used for instream flows and allows any person to petition the IWRB to file for a minimum flow right. Minimum instream flows must be approved by the legislature. Mitigation is allowed, including mitigation to offset injury to instream flows. There is no obligation for mitigation to "enhance" environmental conditions, it must only mitigate injury.²⁸

California.

In California, new water rights and changes of use of existing water rights cannot unreasonably affect or substantially injure any senior legal user of water (referred to as the "no injury rule"). There is no clearly identifiable statutory or regulatory language, or case law, on whether conditions placed on water right permits, licenses, or changes of use to preserve instream flows may be specifically impaired, modified, or removed. There is no clearly identifiable statutory or regulatory language, or case law, on whether the public trust doctrine may be invoked to impair existing instream flows for other public benefits. There is no clearly identifiable statute, regulation, or case law that provides a standard for mitigating impacts to minimum instream flows.²⁹

Kansas.

In Kansas, the minimum desirable streamflow law allows the state legislature to set minimum flows for specific waterbodies. There is no clearly identifiable statute, regulation, or case law that provides a specific mitigation standard for instream flows.³⁰

Montana.

State law in Montana recognizes that the creation of an instream flow may impair existing water rights and provides a time-limited remedy. The Department of Natural Resources and Conservation (DNRC) may modify an appropriated water reservation for instream flows if all or part of the reservation is not

²⁶ "Water Use Mitigation and Water Banking in Idaho"; Remington Buyer, Idaho Water Resources Board, presentation delivered to the Joint Legislative Task Force on November 10, 2020.

²⁷ Id.

²⁸ "Water Resources Laws Regarding Impairment and Mitigation of Regulatory Instream Flows in Other States Compared to Washington State"; Adam Gravley, Jenna Mandell-Rice, and Rachael Lipinski, Van Ness Feldman, LLP, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on June 22, 2022.

²⁹ Id.

³⁰ Id.

required for its purpose and the need for reallocation outweighs the need shown by the original reservation. Reallocations cannot occur on any stream or river more than once every five years. There is no clearly identifiable statute, regulation, or case law that provides a specific mitigation standard for either appropriated or leased instream flow rights.³¹

Nevada.

The State Engineer is authorized to grant a water right application to protect instream flow rates, provided the appropriation does not interfere with senior water rights. There is no clear distinction between water rights for instream flows versus those for other beneficial uses requiring a diversion. The State Engineer is not authorized to impose mitigation conditions on new water right permits or changes of use. The Nevada Supreme Court has held there is no statutory basis for the State Engineer to impose mitigation conditions. However, dicta indicates that if mitigation were judicially recognized, it would have to be full mitigation in kind, place, and time.³²

Oregon.

The Instream Water Right Act converted prior Minimum Perennial Flows that had been established under the 1955 act to instream rights after an administrative process, and also allows for a request to the Oregon Water Resources Department (OWRD) by the Oregon Department of Environmental Quality, Oregon Parks and Recreation Department, or the Oregon Department of Fish and Wildlife for instream water rights in the amount needed to support recommended public uses. By regulation, if there would be an injury to an instream water right, OWRD would have to consent to that injury, after obtaining the consent of the state agency that initially requested that instream flow water right. In issuing the consent to impair an instream flow, OWRD can include “any conditions necessary to ensure that the change will . . . result in a continued net benefit to the resources consistent with the purposes of the instream water right.”³³

Oregon has developed the Deschutes Basin Mitigation Program to maintain scenic waterway and instream water right flows; accommodate growth through new ground water development and sustain exiting uses; and facilitate restoration of flows in Middle Deschutes River and tributaries.

The elements of the Deschutes Basin Mitigation Program include:

- requiring surface water mitigation for new groundwater permits for impacts on surface water but does not mitigate for impacts on groundwater resources and does not require mitigation for water right exempt wells;
- identifying tools for providing surface water mitigation;
- establishing a system of mitigation credits;
- providing for a 200 Cubic Feet per Second (CFS) allocation cap;
- providing for establishment of mitigation banks; and
- requiring annual and five-year evaluations.

The Deschutes Basin Mitigation Program includes ways to provide mitigation, including completing a mitigation project or obtaining existing mitigation credits. Mitigation project types include: permanent mitigation projects (instream transfer; allocation of conserved water; and performance dependent

³¹ Id.

³² Id.

³³ Id.

mitigation, including storage releases and aquifer recharge) or temporary mitigation projects (time-limited instream transfer; and instream lease).³⁴

Discussion of Criteria for Mitigation Sequencing.

Mitigation sequencing has been used previously in Washington, including in Twisp, the Columbia River, Lake Roosevelt, Kittitas County, and Chelan County. When considering mitigation sequencing, one presentation discussed avoidance, minimization, and compensation and asked what criteria would be or could be needed for each after the *Foster* decision.³⁵

What criteria exist for avoidance?

- How long do you have to look for water-for-water mitigation? Twisp is near/downstream of Canada and looked for decades.
- How much money do you have to spend? Twisp spent way above average market rate because there is no “upstream.”
- Is it different for each geographic locality? Micro-climates in Yakima and northern counties are different.
- Is it different for public vs. private entities? Does criteria for a city or county differ from a developer or industry?
- Does the purpose of use of the project matter? That is, is a fish hatchery the same as a farm or city or industry (e.g. bypass reaches)?
- Where do water markets fit?
- Where does condemnation fit?

What criteria exist for minimization?

- How much of the project must be changed? How does this affect the State Environmental Policy Act process?
- Do you rely on existing standards or do you have to go further? For example, the municipal conservation standard is 10 percent. Do you need to do more if this criteria is triggered?
- Do you have to sacrifice some elements of your project? For example, lawn watering vs. indoor domestic use is a common bank choice.
- Do you have to phase your project to allow for more time to find the “perfect” mitigation? That is, do you get 10 years of growth but not 20 years for the next increment of a municipal permit, or do you get it all?
- Is minimization quantitative, or qualitative, or consultation based? If fisheries co-managers are on board, where does that fit in?
- Does it matter if a basin has storage or not, or do you have to build it?

What criteria exist for compensation?

- Does “net” mean slightly better than neutral or are mitigation ratios used (e.g. 2:1 benefit)?
- Is fishery co-manager concurrence mandatory?
- Are in-time, in-kind, and in-place all equal?
- Can metrics be placed around in-time to make it streamlined? For example, if mitigation

³⁴ "Deschutes Basin Mitigation Program"; Dwight French and Sarah Henderson, Oregon Water Resources Department, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on November 10, 2020.

³⁵ "Mitigation Sequencing"; Dan Haller, Aspect Consulting, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on September 28, 2018.

- occurs in times of scarcity and offsets demand in times of abundance, then it is “net environmental benefit.” In most basins moving from summer to winter would be beneficial most of the time.
- If mitigation moves the hydrograph opposite of the push of climate change, is that sufficient?³⁶

Mitigation Generally.

There are various water-for-water mitigation options, such as instream flow restoration, agricultural well mitigation, and domestic well mitigation, all of which could be impacted by the *Foster* decision.

Implementing water-for-water mitigation takes a few steps. Once a water right is identified, a water right change application is filed with Ecology to change the purpose and place of use. Ecology issues a Report of Examination (ROE) that reviews the extent and validity of the water right, evaluates impact on other water rights, identifies primary and secondary reach of instream water rights, and develops a Trust Water Right schedule that lays out the following:

- when water will be protectable instream and terms for managing the water for instream flow restoration;
- when/where water will be protected instream, terms for managing the water, and where mitigation will be available for agricultural well mitigation; or
- when/where water will be protected instream, terms for managing water, a process for distribution of water to mitigated uses, and where mitigation will be available for domestic well mitigation.

After the ROE and the Trust Water Right schedule are completed, the water right owner deeds water to Ecology.³⁷

For agricultural well mitigation, simultaneously with water right change applications, a new permit application is filed for mitigated agricultural uses, including location, number, and size of wells or new surface diversion approach (water wheeling). New permits contain development schedule giving agricultural users time to develop their water use (underlying water right protected from relinquishment).

It is much more complex to develop an approach to how mitigation water will be used for domestic well mitigation because water is destined to mitigate much smaller uses over much larger area over a longer period, so not many places have done this.

Out-of-kind mitigation in water right applications are concepts borrowed from the ecological restoration and mitigation banking world, such as: (1) wetlands, (2) species conservation (including salmon) and (3) Natural Resources Damages restoration. Ecological restoration and mitigation banking is driven by collaboration between mitigation sponsor and an Interagency Review Team and defined by development of a prospectus, which lays out proposed restoration that will create ecological uplift on particular site. A Mitigation Banking Instrument documents the restoration construction plan and modeling of ecological uplift. It also describes the location and purpose of restoration as well as the location of eligible mitigation (service area), provides information on proposed ecological functions that will be improved,

³⁶ "Mitigation Sequencing"; Dan Haller, Aspect Consulting, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on September 28, 2018.

³⁷ "Implementing and Monitoring Mitigation"; Peter Dykstra, Plauche & Carr, LLP, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on September 28, 2018.

and describes financial assurances that will be provided by mitigation sponsor over the various phases of project. Out-of-kind mitigation requires long-term stewardship endowment.

Implementing and monitoring mitigation is complex. Designing, implementing, and monitoring mitigation takes time, financial resources, collaboration, and creativity. There are existing tools that can be used to help move this effort forward. Many of these tools will have to be adapted to the water resource challenges Washington is currently facing but there is a foundation.³⁸

The Yakima Basin Water Marketing study builds off years of market-based water transaction activity in the Yakima Basin made possible by the need for more water for agriculture and the Yakima adjudication. The adjudication makes it somewhat easier to transfer water because more information is known about the water right that is being transferred. The study is designed to identify transactional costs and increase efficiency and market access. Key points to making a water marketing structure successful includes timeliness and transparency, confidence in the market structure, local collaboration, and a well-defined purpose. In a smart water market structure (an electronic format to match buyers and sellers), there is a need to create automation where possible to allow the market to create opportunities. There also needs to be a database of water rights in the smart market.³⁹

In response to the experiences of the five pilot projects, Ecology discussed "lessons learned" at the May 24, 2022, Task Force meeting. One takeaway is that the mitigation sequencing approach is problematic because avoiding impacts is not applicable, there is uncertainty around what is "reasonably attainable" (for example, what is considered "good enough" before moving between tiers), and there is not a clear "cost-benefit" calculation for approach.⁴⁰

Another takeaway from the experiences of the pilot projects relates to out-of-kind mitigation. There is no consensus around which habitat model(s) are appropriate. These models are needed to determine "Net Ecological Benefits." There is an added uncertainty on effectiveness and longevity of projects.⁴¹

A third takeaway from the experiences of the pilot project relates to the use of hydrological models. All models are abstractions, but they are not treated that way in case law. *Postema* and *Foster* elevate potential impacts based on a hydrological model to "demonstration of proof." There is a need to address how to use and interpret model output that is within the model and measurement uncertainty.⁴²

Ecology staff also discussed things to consider when moving forward with mitigation options when creating requirements for new permit decisions based on existing rights. Different situations would have to be fully addressed or thought through (e.g. ag user, municipal user, single right). Ecology does not generally evaluate an existing "portfolio" of rights in their decisions and this would be a significant change to look at how existing rights are used and managed. Additionally, changes to statute (e.g. increased conservation) that relate to new decisions should apply to the new water rights issued in those

³⁸ "Implementing and Monitoring Mitigation"; Peter Dykstra, Plauche & Carr, LLP, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on September 28, 2018.

³⁹ "Yakima Basin Water Marketing"; Justin Bezold, Lisa Pelly, Trout Unlimited; Urban Eberhart, Kittitas Reclamation District, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on November 10, 2020.

⁴⁰ "Update on Pilot Projects - Initial 'lessons learned'"; Dave Christensen, Department of Ecology, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on May 24, 2022.

⁴¹ Id.

⁴² Id.

decisions.⁴³

From Ecology's experience, using out-of-kind mitigation as compensation for water right permit applications is extremely complex and subject to scrutiny because of uncertainty in measuring actual impacts, measuring benefits, and longevity of projects. The issues that have come up in the pilot projects have touched on many areas of water law, including trust water rights, municipal water rights, water right change statutes (including annual consumptive quantity), and reclaimed water and it is an immense challenge to make a "Foster Pilot" decision that doesn't interrelate with other parts of the water code.⁴⁴

Washington is the only state of those discussed before the Task Force that specifically characterizes impairment of regulatory flows to include de minimis impairment. Washington is the only western prior appropriation state with regulatory flows that also has an affirmative legal requirement that mitigation to offset impairment be in kind, in time, and in place. In some of the other states, like Colorado, the state water regulatory agency has discretion in determining whether to accept mitigation (even when that mitigation is not in kind, in time, and in place).⁴⁵

Concepts and ideas from the chart of topics (from mitigation and infrastructure categories)

- Pilot project focus is too narrow. Questions should be (1) When is mitigation needed (less often), (2) If needed, what it should look like;
- Compliance over time;
- Paired with conservation strategy;
- In time and in place standards;
- Moving surface water to groundwater sources - timing/re-timing considerations;
- Fish critical times;
- Potential impacts to groundwater streamflow contributions and fish;
- In-kind standard;
- When in-kind ("water-for-water") mitigation is proposed, allow timing and place flexibility (out of time/out of place), provided appropriate criteria are met;
- Reservoir storage;
- Aquifer recharge;
- Reclaimed water;
- Temperature; and
- Source-switch

Legal concepts - Impairment; De Minimis Use; Injury and Impact; and OCPI

Impairment

Background

When seeking a new water right, a person must file an application with Ecology, which must consider a four-part test when deciding whether to issue the requested right: (1) whether water is available; (2) whether a beneficial use of water would be made; (3) whether granting the right would impair existing rights; and (4) whether the proposed use would detrimentally affect the public welfare. If an application

⁴³ Id.

⁴⁴ Id.

⁴⁵ "Water Resources Laws Regarding Impairment and Mitigation of Regulatory Instream Flows in Other States Compared to Washington State"; Adam Gravley, Jenna Mandell-Rice, and Rachael Lipinski, Van Ness Feldman, LLP, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on June 22, 2022.

passes this test, Ecology issues a permit which establishes a timetable for constructing the infrastructure to access the water and for putting water to beneficial use. When the conditions of the permit are satisfied, Ecology issues a water right certificate.

There is no explicit definition of water right impairment in the water code ([RCW 90.03](#)) or groundwater statute ([RCW 90.44](#)). However, there are two impairment standards in other parts of the code, one for municipal reclaimed water treatment facilities ([RCW 90.46.130\(1\)](#)) and one for food processor and industrial reuse treatment facilities ([RCW 90.46.130\(2\)](#)):

“Except as provided in subsection (2) of this section, facilities that reclaim water under this chapter shall not impair any existing water right downstream from any freshwater discharge points of such facilities unless compensation or mitigation for such impairment is agreed to by the holder of the affected water right.” (RCW 90.46.130(1))

“Agricultural water use of agricultural industrial process water and use of industrial reuse water under this chapter shall not impair existing water rights within the water source that is the source of supply for the agricultural processing plant or the industrial processing and, if the water source is surface water, the existing water rights are downstream from the agricultural processing plant's discharge points existing on July 22, 2001, or from the industrial processing's discharge points existing on June 13, 2002.” (RCW 90.46.130(2))

De Minimis

Background

Barron's Law Dictionary defines “de minimis” as: “insignificant; minute, frivolous. Something or some act which is ‘de minimis’ in interest is one which does not rise to a level of sufficient importance to be dealt with judicially.”⁴⁶ In *Postema*, the Washington Supreme Court concluded that "[RCW 90.03.290](#) does not, however, differentiate between impairment of existing rights based on whether the impairment is de minimis or significant. If withdrawal would impair existing rights, the statute provides the application must be denied." As noted in *Foster*, "[o]ur cases have consistently recognized that the prior appropriation doctrine does not permit even de minimis impairments of senior water rights. Therefore, we reject the argument that ecological improvements can 'mitigate' the injury when a junior water right holder impairs a senior water right."

Concepts and ideas discussed by presenters at work sessions

Impairment and de minimis standards in Washington.

The *Postema* decision was an appeal of a batch denial of applications to withdraw groundwater in hydraulic continuity with closed surface water. The Washington Supreme Court held that instream flow rights are rights subject to the same protection as other water rights. The Court also held that no impairment to existing rights is permissible, even de minimis impairment and that "any effect on the flow or level of the surface water" in closed streams would mean impairment.⁴⁷

The Court's ruling in *Foster* made it clear that water right mitigation must address flow impairment, even de minimis impairment, both in-time, and in-place. For new groundwater uses, mitigating all flow impairment from all affected waterbodies can literally be impossible. A new groundwater withdrawal

⁴⁶ *Postema v. PCHB*, dissent by Justice Sanders.

⁴⁷ "*Foster* Decision Refresher"; Dave Christensen, Department of Ecology; presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on May 24, 2022.

may have predicted (modeled) impacts that extend out many miles from the proposed new well. Under the *Foster* decision, the applicant must mitigate flow impacts in multiple, potentially dozens of, smaller tributary streams. Often, applicants find that flow mitigation through acquisition and retiring of a senior water right is not available from these smaller streams.⁴⁸

The *Foster* decision has set up a “perfect” mitigation requirement for any, even de minimis, depletions of regulatory minimum instream flows. For example, a water right applicant must supply mitigation that is in kind (wet water mitigation—and not other types of mitigation, like habitat improvements), in time (at the same time as the modeled or actual impairment), and in place (in the same location within the water body).⁴⁹

The Reclaimed Water Use statute, RCW 90.46.130, provides that “facilities that reclaim water under this chapter shall not impair any existing water right downstream from any freshwater discharge points of such facilities unless compensation or mitigation for such impairment is agreed to by the holder of the affected water right....” Ecology supports reclamation and reuse/recharge of water to promote the most efficient and effective use of state water resources. Reclamation and reuse/recharge can provide great benefits to the environment, fish and wildlife, and communities. In some situations, legal constraints surrounding impairment to instream flows have hampered projects.⁵⁰

The WAC (WAC 173-500-050) defines consumptive and non-consumptive use as follows:

- “Consumptive use” means use of water whereby there is a diminishment of the water source.
- “Nonconsumptive use” is a type of water use where wither there is no diversion from a source body, or where there is no diminishment of the source.⁵¹

Impairment and De Minimis Standards in Other States.

California.

In California, new water rights and changes of use of existing water rights cannot unreasonably affect or substantially injure any senior legal user of water (referred to as the “no injury rule”). There is no clearly identifiable statute, regulation, or case law that provides a standard for mitigating impacts to minimum instream flows.⁵²

Colorado.

In Colorado, the state water regulatory agency may accept impairment to an instream flow if:

- through mitigation, it can continue to preserve or improve the natural environment to a reasonable degree notwithstanding the injury; or

⁴⁸ “How the *Foster* Decision Affects Our Work”; Dave Christensen, Department of Ecology, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on November 10, 2020.

⁴⁹ “Water Resources Laws Regarding Impairment and Mitigation of Regulatory Instream Flows in Other States Compared to Washington State”; Adam Gravley, Jenna Mandell-Rice, and Rachael Lipinski, Van Ness Feldman, LLP, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on June 22, 2022.

⁵⁰ “Reclaimed water reuse/recharge and the Water Code”; Kasey Cykler, Department of Ecology, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on November 2, 2021.

⁵¹ “Return flow and water conservation in agricultural systems”; G. Thomas Tebb, Department of Ecology, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on November 2, 2021.

⁵² “Water Resources Laws Regarding Impairment and Mitigation of Regulatory Instream Flows in Other States Compared to Washington State”; Adam Gravley, Jenna Mandell-Rice, and Rachael Lipinski, Van Ness Feldman, LLP, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on June 22, 2022.

- it is a de minimis impact to an instream flow (i.e., has a 1 percent or less depletive effect).⁵³

Idaho.

The minimum stream flow statute allows the Idaho Water Resource Board (IWRB) to file for unappropriated water to be used for instream flows and allows any person to petition the IWRB to file for a minimum flow right. Minimum instream flows must be approved by the Legislature. There is no clearly identifiable statute, regulation, or case law that provides a specific standard for impairment of instream flows. New water rights and changes of use of existing water rights cannot reduce the quantity of water under existing rights and must be in the public interest.⁵⁴

Kansas.

In Kansas, the minimum desirable streamflow law allows the state legislature to set minimum flows for specific waterbodies. There is no clearly identifiable statute, regulation, or case law that provides a specific impairment standard for instream flows. New water rights or changes in use to existing water rights cannot impair an existing right or adversely affect the public interest.⁵⁵

Montana.

State law in Montana recognizes that the creation of an instream flow may impair existing water rights and provides a time-limited remedy. The Department of Natural Resources and Conservation (DNRC) may modify an appropriated water reservation for instream flows if all or part of the reservation is not required for its purpose and the need for reallocation outweighs the need shown by the original reservation. Reallocations cannot occur on any stream or river more than once every five years. Priority of appropriation does not include the right to prevent changes by later appropriators if the prior appropriator can reasonably exercise the water right under the changed conditions. DNRC may modify or revoke a change in use to protect instream flows, either held in fee simple or leased by FWP, for up to 10 years after approving the change, if a senior water rights holder submits new evidence not available at the time the change was approved that proves that the senior rights holder's water right is adversely affected.⁵⁶

Nevada.

The State Engineer is authorized to grant a water right application to protect instream flow rates, provided the appropriation does not interfere with senior water rights. There is no clear distinction between water rights for instream flows versus those for other beneficial uses requiring a diversion. There is no clearly identifiable statute, regulation, or case law that provides a specific standard for impairment of instream flows.⁵⁷

Oregon.

In Oregon, the state water agency can approve a transfer that would injure an instream flow if: (1) that instream flow was created through a request from a state agency; and (2) the state agency consents to the injury. In issuing the consent, the state agency can include conditions necessary to ensure a continued net benefit to resources consistent with the purposes of the instream water right. New rights

⁵³ Id.

⁵⁴ Id.

⁵⁵ Id.

⁵⁶ Id.

⁵⁷ Id.

or changes in use cannot reduce surface water flows within a scenic waterway more than a combined cumulative total of one percent of the average daily flow or one cubic foot per second, whichever is less.⁵⁸

Washington.

Washington is the only state of those discussed before the Task Force that specifically characterizes impairment of regulatory flows to include de minimis impairment. Washington is the only western prior appropriation state with regulatory flows that has affirmative law requiring that mitigation to offset impairment be in kind, in time, and in place. In some of the other states, like Colorado, the state water regulatory agency has discretion in determining whether to accept mitigation (even when that mitigation is not in kind, in time, and in place).⁵⁹

Injury and Impact

Background

In *Postema*, the primary issue concerned the impact of groundwater withdrawals on surface waters having minimum flow requirements set by rule which are unmet a substantial part of the year, and on surface waters closed to further appropriation. The Washington Supreme Court held that "[t]he statutes plainly provide that minimum flows, once established by rule, are appropriations which cannot be impaired by subsequent withdrawals of groundwater in hydraulic continuity with the surface waters subject to the minimum flows." The Court further held that "[RCW 90.03.290](#) does not, however, differentiate between impairment of existing rights based on whether the impairment is de minimis or significant. If withdrawal would impair existing rights, the statute provides the application must be denied."

In *Foster*, the Court concluded that:

"[T]he mitigation plan does not mitigate the injury that occurs when a junior water right holder impairs a senior water right. The water code, including the statutory exception, is concerned with the legal injury caused by impairment of senior water rights—water law does not turn on notions of “ecological” injury. Our cases have consistently recognized that the prior appropriation doctrine does not permit even de minimis impairments of senior water rights. . . . Therefore we reject the argument that ecological improvements can “mitigate” the injury when a junior water right holder impairs a senior water right."

Concepts and ideas discussed by presenters at work sessions

In the *Foster* decision, the Washington Supreme Court held that there is a "legal injury" to adopted instream flows when a new appropriation would impact flows below minimum levels and that de minimis impairment meets this threshold. The Court rejected use of out-of-kind mitigation even if it provides "ecological benefit" and held that OCPI cannot be invoked for any permanent impairment of adopted instream flows.⁶⁰

Colorado case law recognizes that pumping tributary ground water impacts surface water "[w]hen that impact occurs in an over-appropriated basin the depletion to the surface water is legally presumed to injure surface water rights, Colorado case law and statutory law require that pumping depletion be

⁵⁸ Id.

⁵⁹ Id.

⁶⁰ "*Foster* Decision Refresher"; Dave Christensen, Department of Ecology; presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on May 24, 2022.

replaced by a substitute supply through a plan for augmentation." Colorado has been considering the issues that arise between a groundwater diversion and its impact on surface water since 1974 as part of the South Platte Rules, "[b]ecause of the time lag between a ground water diversion and its impact on surface water users, conditions may arise such that a potential injury to surface diverts (sic) may not actually occur, but the burden of assuring that there will be no injury to the senior appropriator must fall on the junior appropriator."⁶¹

When considering surface water depletion in Colorado, there is initially a determination as to the effect of:

- time: when does the depletive effect occur at the stream;
- location: where on the stream, relative to vested water rights, does the depletive effect occur; and
- amount: for the time increment, at the location, what is the volume (or rate) of the depletion.⁶²

In Idaho, when approving water right permits, licenses, transfers, exchanges, rentals, curtailment calls, and mitigation plans, approvals cannot cause injury and impact does not equate to injury. Idaho has defined material injury in rule (IDAPA 37.03.11.42). Mitigation is required to guard against or mitigate for injury, it must be in kind, in time, and in location, and mitigation may be secured through a water right transfer, exchange, or rental.⁶³

Idaho uses models to evaluate impacts attributable to water use changes and mitigation is required for transfers where:

- modeled depletions in any reach increase by more than 2/acre-feet per trimester;
- modeled depletions in any reach increase by more than 10 percent, and
- modeled depletions in any reach are greater than 10 percent of the sum of all depletions modeled in all reaches.⁶⁴

The experiences of the pilot projects have led to a few takeaways, including that the mitigation sequencing approach is problematic and avoiding impacts is not applicable. Additionally, there is uncertainty around what is "reasonably attainable" and what is "good enough" before moving between tiers.⁶⁵

Overriding Consideration of Public Interest (OCPI)

Background

Under [RCW 90.54.020\(3\)\(a\)](#), withdrawals of water that conflict with minimum instream flows may be authorized "only in those situations where it is clear that overriding considerations of the public interest will be served."

⁶¹ "Surface Water and Ground Water Interaction - Colorado Ground Water Administration"; Kevin Rein, Colorado Division of Water Resources, presentation delivered to the Joint Legislative Committee on Water Resource Mitigation on November 10, 2020.

⁶² Id.

⁶³ "Water Use Mitigation and Water Banking in Idaho"; Remington Buyer, Idaho Water Resources Board, presentation delivered to the Joint Legislative Task Force on November 10, 2020.

⁶⁴ Id.

⁶⁵ "Update on Pilot Projects - Initial 'lessons learned'"; Dave Christensen, Department of Ecology, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on May 24, 2022.

The *Swinomish Indian Tribal Community v. Department of Ecology*, 178 Wn.2d 571, 311 P.3d 6 (2013) (*Swinomish*) decision involved the validity of an amended rule from Ecology to reserve water from the Skagit River system for future year-round out-of-stream uses, even though in times of low stream flows these uses would impair established minimum instream flows necessary for fish, wildlife, recreation, navigation, scenic and aesthetic values. Ecology relied on [RCW 90.54.020\(3\)\(a\)](#) for authority to make the reservations of water despite the existing minimum flows, allowing impairment of stream base flows when OCPI is served. The Court held that Ecology "erroneously interpreted the statutory exception as broad authority to reallocate water for new beneficial uses when the requirements for appropriating water for these uses otherwise cannot be met. The exception is very narrow, however, and requires extraordinary circumstances before the minimum flow water right can be impaired."

After noting the similarities to the *Swinomish* decision, the Court in *Foster* held that Ecology had exceeded its authority in granting the City of Yelm's permit under the OCPI exception, finding that: (1) the OCPI exception only permits temporary impairment of minimum flows; (2) municipal water needs do not qualify as "exceptional circumstances" needed to apply the OCPI exception; and (3) a mitigation plan may not use ecological benefit to correct impairment to a senior water right.

Concepts and ideas discussed by presenters at work sessions

When approving Yelm's permit application, Ecology relied on OCPI for withdrawals that would conflict with base flows "shall be authorized only in those situations where it is clear that overriding consideration of the public interest will be served." RCW 90.54.020(3)(a)⁶⁶

The PCHB considered 12 factors when deciding to uphold the Yelm Permit:

1. The OCPI standard was used when the water use would be for a public purpose.
2. Every feasible in-kind mitigation option was exhausted.
3. All impacts were "fully mitigated and trackable over time."
4. Out-of-kind benefits to fish and stream habitat were "significant and clearly established through sound science."
5. "Permanent and net ecological benefit to affected streams, more than sufficient to offset minor depletion of water."
6. A conservative hydrologic model was used.
7. The model used was external, professional, and peer reviewed.
8. There was a small depletion with zero or minimal impact to water resources.
9. Water added during fish-critical times.
10. The permit application had stakeholder support.
11. The permit application was consistent with watershed plans.
12. There was conservation and use of reclaimed water.

The Washington Supreme Court in *Foster* did not dispute the "12 factors," acknowledged the "net ecological benefit," but held that is not enough for OCPI. The Court concluded that permanent water use cannot interfere with base flows . . . no matter how O-the CPI.⁶⁷

The *Foster* decision eliminates the use of OCPI as a balancing tool for any permanent appropriation of

⁶⁶ "*Foster* (City of Yelm) Mitigated Water Permits"; Robin McPherson, Department of Ecology, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on June 22, 2018.

⁶⁷ Id.

water. This means that OCPI can only be used when issuing temporary water rights. Since Ecology issues temporary water rights infrequently, this tool now has extremely limited applicability.⁶⁸

In the *Foster* decision, the Court held that there is a "legal injury" to adopted instream flows when a new appropriation would impact flows below minimum levels and that de minimis impairment meets this threshold. The Court rejected use of out-of-kind mitigation even if it provides "ecological benefit" and held that OCPI cannot be invoked for any permanent impairment of adopted instream flows.⁶⁹

Concepts and ideas from the chart of topics (from impairment, injury, and impact and public interest/cost benefit categories)

Impairment, injury, and impact:

- Cumulative use/cap on total impact;
- De minimis use;
- Accounting for impact and impairment; and
- Explore de minimis "thresholds" for finding impairment to minimum instream flows, or a pooled cumulative impact buffer similar to other states such as Colorado and Oregon;

Public interest/cost benefit:

- When to be considered; and
- Legislative clarification or revision of the OCPI exemption.

Other Issues Discussed - Modeling, Accountability, Tribal Treaty Rights, and Climate Impacts

Modeling

Concepts and ideas discussed by presenters at work sessions

Groundwater Modeling, Generally.

The steps to building a numerical groundwater flow model are:

1. map the hydrogeologic framework;
2. create model grid, boundaries, features;
3. specify water going into the model;
4. specify groundwater withdrawals; and
5. calibrate the model.⁷⁰

There are limitations and benefits of models. One of the biggest limitations to models is that they are simplifications of reality, but they are useful. Some hydrology models might be only a little wrong, for example the cause and effect may be correct, but the size of the effect is less certain, or the aquifer system behavior is correct, but the many local-scale details and variations of the system are not captured. The models are useful because simplifications of reality help us explain and understand all the interactions between what we have measured and observed and provide an idea of how complicated systems might respond to future conditions (more pumping, warmer climate, less recharge).⁷¹

⁶⁸ "How the *Foster* Decision Affects Our Work"; Dave Christensen, Department of Ecology, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on November 10, 2020.

⁶⁹ "*Foster* Decision Refresher"; Dave Christensen, Department of Ecology; presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on May 24, 2022.

⁷⁰ "Groundwater Modeling to Inform Water Resource Mitigation"; Rick Dinicola, U.S. Geological Survey, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on September 28, 2018.

⁷¹ Id.

The most significant variation in water levels and groundwater discharge to streams is due to variations in recharge, year-to-year and even cumulative changes due to pumping are much less than changes due to year-to-year variation in recharge. Pumping is often a relatively small component of a basin's groundwater budget, but models show it can still have significant effects on seasonal streamflow in small basins. Modest increases in shallow groundwater discharge to streams is not uncommon if pumping is from deeper aquifers, and any increase in pumping will be accompanied by an equivalent decrease in groundwater storage or discharge to somewhere (often Puget Sound).⁷²

Numerical models are perhaps the best, but not the only, tool to evaluate mitigation strategies. Analytical models are limited to analyses of idealized conditions where complexities of a real groundwater system cannot be accounted for, and numerical models provide the most robust approach for determining rates, locations, and timing of streamflow depletion by wells at the WRIA scale.⁷³

The USGS has been developing the Southeast Puget Sound Groundwater Flow Model (SES) to characterize the groundwater-flow system, look at groundwater levels and flow directions, develop a water budget (inflows and outflows), and integrate the information into a numerical groundwater-flow model. The SES Study Area is approximately 885 square miles, with a population of 1.1 million, bounded by Puget Sound, Green River, Cascade foothills and Nisqually River. The SES is also developing scenarios consisting of pumping increases compared to the base model, two of which are being used by two of the pilot projects (Spanaway Water Company and Sumner):

- 3b – All public supply wells in model.
- 3c – All self-supply wells in model.
- 3d – Supply wells for the Spanaway Water Company.
- 3e – Supply wells for Sumner.⁷⁴

The model was calibrated to groundwater levels and stream baseflow and simulates the effects of pumping and drought on stream baseflow and groundwater levels. Although a model may provide the best answers available, there are also limitations such as error and uncertainty because of approximations, assumptions, and simplifications. There is also uncertainty of input and calibration data (e.g., stratigraphic framework, recharge, water use, and baseflow) and the time scale may not represent full range of actual hydrologic variability. Additionally, a regional model has limitations for simulating local-scale processes related to grid resolution and calibration detail at local scales.⁷⁵

Groundwater modeling in Idaho.

Idaho uses models to evaluate impacts attributable to water use changes, and mitigation is required for transfers where:

- modeled depletions in any reach increase by more than 2/acre-feet per trimester;
- modeled depletions in any reach increase by more than 10 percent; and
- modeled depletions in any reach are greater than 10 percent of the sum of all depletions

⁷² Id.

⁷³ Id.

⁷⁴ "Southeast Puget Sound (SES) Groundwater Flow Model"; Wendy Welch and Andy Long, U.S. Geological Survey, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on May 24, 2022.

⁷⁵ Id.

modeled in all reaches.⁷⁶

Groundwater Modeling in the Pilot Projects.

The pilot projects have found that hydrogeologic models can simulate impacts that extend far beyond the ability to physically measure those impacts, adding to the overall challenge of mitigating.⁷⁷

One takeaway from the experiences of the pilot project relates to the use of hydrological models. All models are abstractions, but they are not treated that way in case law. *Postema* and *Foster* elevate potential impacts based on a hydrological model to “demonstration of proof.” There is a need to address how to use and interpret model output that is within the model and measurement uncertainty.⁷⁸

Concepts and ideas from the chart of topics

- Accuracy concerns;
- Can be either up or down; and
- Area of model uncertainty: Modeled results below the model error threshold should not be construed as proof of impact or impairment.

Accountability

Concepts and ideas discussed by presenters at work sessions

Permanent transactions for instream flow restoration typically involve removal of water diversion and delivery infrastructure, unless only a portion of the water right is part of the transaction. There needs to be an easement for monitoring granted to instream flow restoration proponents to allow access to monitor land on annual basis to ensure land is fallowed and infrastructure is not being used. Stream gauges are used for monitoring water instream, typically existing stream gauges. Where not available, new gauges are installed. Instream flow restoration is done in partnership with Ecology, the WDFW, tribes, conservation districts, and others needed to monitor instream flow and enforce against out-of-priority withdrawal. Instream flow restoration works well in basins with lots of collaboration and good knowledge of water rights.⁷⁹

Permanent transactions for agriculture well mitigation typically involve removal of historic surface water diversion and delivery infrastructure and building of new infrastructure for agricultural use. Stream gauges are used for monitoring water left instream in critical reach, typically existing stream gauges. Where not available, new gauges are installed. Agriculture well mitigation is done in partnership with Ecology, the WDFW, tribes, conservation districts, and others needed to monitor instream flow. Agriculture well mitigation works well in basins with lots of collaboration and good knowledge of water rights. Metering of new wells (or other new diversion method) is typically a component of mitigation strategy to ensure that ongoing water use is within limits of mitigating water right and to help agricultural users provide evidence of development of their well use.⁸⁰

⁷⁶ "Water Use Mitigation and Water Banking in Idaho"; Remington Buyer, Idaho Water Resources Board, presentation delivered to the Joint Legislative Task Force on November 10, 2020.

⁷⁷ "Pilot Project Overview and Status Report"; Dave Christensen, Department of Ecology, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on September 10, 2019.

⁷⁸ "Update on Pilot Projects - Initial 'lessons learned'"; Dave Christensen, Department of Ecology, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on May 24, 2022.

⁷⁹ "Implementing and Monitoring Mitigation"; Peter Dykstra, Plauche & Carr, LLP, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on September 28, 2018.

⁸⁰ Id.

For domestic well mitigation, it is critical to monitor the instream flow component of the mitigation program as well as the domestic use component of the program. Instream flow monitoring is like the monitoring done for instream flow restoration and agricultural well mitigation. Metering of new wells is typically a component of mitigation strategy to ensure that ongoing water use is within limits of mitigating water right and to help the counties and water users provide evidence of development of their well use.⁸¹

One takeaway from the experiences of the pilot projects relates to out-of-kind mitigation. There is no consensus around which habitat model(s) are appropriate. These models are needed to determine “Net Ecological Benefits.” There is an added uncertainty on effectiveness and longevity of projects.⁸²

Concepts and ideas from the chart of topics

- Metering, monitoring, enforcement;
- Public notice; and
- Right to appeal decisions.

Tribal Treaty Rights

Concepts and ideas discussed by presenters at work sessions

Tribal reserved water rights may exist on or off the reservation, apply to surface and groundwater, are regulated under federal law, are not lost through non-use, and may be recognized by a treaty or an executive order. Two seminal cases are the bases for these rights:

- *Winters v. United States* (1908) - involved setting aside reservation land, which implicitly included water rights for agriculture. Canons of construction were used in the *Winters* analysis. *Winters* applies where treaty or executive order recognizes the right to engage in a new use (e.g. agriculture for non-farming tribe), priority date is the date of reservation. *Winters* Rights - look to purposes of the reservation of land; construed very broadly.
- *Winans v. United States* (1905) - treaty fishing rights under Stevens Treaty were at issue, private property owners had to allow native fishers to cross their land to access usual and accustomed areas, private property owners could not take all the fish running through a stream by use of a state-licensed fish wheel. *Winans* applies where treaty or executive order recognizes pre-existing uses, rights have a priority date of time immemorial.⁸³

The Treaty right to fish in usual and accustomed areas was recognized by the 1974 *Boldt* decision and affirmed in 2018 in the culverts phase of the *U.S. v. Washington* litigation. Tribes also have instream flow rights for fishing, hunting, and gathering in an amount necessary to supply the tribe with a moderate living (*U.S. v. Adair* (1983)), which should be read to have a water quality component consistent with the culverts case. Similar rights exist under the treaties for water to support hunting and gathering. Non-treaty tribes may have such rights on the reservation pursuant to the executive order creating reservation.⁸⁴

⁸¹ Id.

⁸² "Update on Pilot Projects - Initial 'lessons learned'"; Dave Christensen, Department of Ecology, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on May 24, 2022.

⁸³ "Tribal Reserved Rights"; Ann Tweedy, Muckleshoot Indian Tribe, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on December 14, 2018.

⁸⁴ Id.

Additionally, tribes have a reservation of water for farming purposes on the amount of land physically capable of sustained irrigation and irrigable at a reasonable cost.⁸⁵

Most tribes view the state instream flow rules as set too low to adequately protect fisheries. Yet these state law rules provide a modicum of protection and sometimes enough comfort to allow a tribe to put off seeking a quantification of their rights through the courts.⁸⁶

Concepts and ideas from the chart of topics

- Process to ensure protection of these rights.

Climate impacts

Concepts and ideas discussed by presenters at work sessions

Projected changes are much larger than what have been seen so far and this will worsen existing impacts and bring on new ones that haven't been detected in the past. In the 2050s, Washington state is projected to see warming of +5.8°F (3.1-8.5°F). Washington's primary mechanism for storing water is in the form of mountain snowpack, which is sensitive to warming. Declining snowpack is the major driver of water supply decline; however other factors exacerbate impacts, such as receding glaciers, wildfire, and decreases in summer precipitation.⁸⁷

Warming shifts the timing of streamflows and the largest changes in low flows are projected west of the Cascades. Impacts depend on magnitude of changes and management flexibility. In Yakima, water curtailments for junior users are projected to increase from 14 percent to 68 percent by the 2080s. Statewide there will be increased summer hydropower demand due to air conditioning use and population growth. With less water, water will be warmer and stream temperatures, on average, are projected to increase by +4.0 degrees Fahrenheit to +4.5 degrees Fahrenheit by the 2080s. The number of river miles exceeding thermal tolerances are projected to increase by under 1,000 miles for salmon, and under 2,800 miles for char.⁸⁸

The Climate Impacts Group at the University of Washington concludes that acting now will reduce harm in the future and today's actions shape tomorrow's risks through choices about energy use and fuel type and that today's actions shape tomorrow's risks through deciding whether to plan and manage our communities, economy and ecosystems for the climate of the future or the climate of the past.⁸⁹

Concepts and ideas from the chart of topics

- Shift in timing of flows;
- Increased demand for water as temperature rises; and
- Increased water temperature as a result of warmer air temperature.

Recommendations

The following list of recommendations was compiled from letters and emails from Task Force members or Tribes, and the organization, agency, or tribe that submitted each recommendation is identified. The

⁸⁵ Id.

⁸⁶ Id.

⁸⁷ "Climate Change Impacts on Streamflow and Water Supply"; Guillaume Mauger, Climate Impacts Group, University of Washington, presentation delivered to the Joint Legislative Task Force on Water Resource Mitigation on May 24, 2022.

⁸⁸ Id.

⁸⁹ Id.

letters and one e-mail containing recommendations can be found in the Appendices of this report. The Task Force took executive action on general recommendation topics to include in the report. The Task Force did not take executive action on the specific recommendations under the general recommendation topics.

Majority Recommendations

The following topics were supported by a 60 percent majority of Task Force members.

1. Conservation (vote of 11 to 0)

- a. Association of Washington Cities - The Legislature should consider potential new conservation standards for water systems served by water rights accessed utilizing mitigation such as requiring Washington Department of Health (WDOH) certification that a municipal purveyor is in compliance with the WDOH water conservation statute and rule as a precondition to using the sequenced mitigation standard.
- b. Department of Fish and Wildlife - Washington State should seek ways to incentivize the reuse of wastewater where it is being discharged into the marine environment.
- c. Muckleshoot Indian Tribe - The Legislative Report should recommend that legislation be developed to strengthen conservation targets and goals among all customer sectors, especially high consumption users, require water providers to reduce leakage to below 5 percent (real water leakage reductions, not accounting errors), and make some or all of these measures mandatory. The 2023 session is likely too soon to develop this legislation but any future planning process must involve federally recognized Indian Tribes.

2. Source Switch (vote of 11 to 0)

- a. Trout Unlimited would urge the Joint Task Force to support additional conversations led by Ecology on “source switches” to determine if there is a pathway to allow for broader use of these types of transfers. While we have heard from some cities that this option provides little relief, we believe this approach has the potential to offer an additional option for public water systems and others for approving transfers from surface water to ground water and potentially other sources like aquifer recharge. We are currently working with a city in Central Washington who is looking to move their tributary diversions to wells downstream in an effort to enhance instream flows in the tributary and remove a diversion from the stream while allowing for ongoing use and growth for its water supply.
- b. Sierra Club - Ecology should help facilitate continued discussion among stakeholders on the subject of “source switch” to see if agreement can be reached on a streamlined approach for approving transfers from surface water to ground water.
- c. Muckleshoot Indian Tribe - The definition of this term [source switch] is needed. The comments here are related to changing a source from a surface water to groundwater. More discussion on this topic could be fruitful as long as instream flows rights are not impaired and WDFW, Ecology, and federally recognized Indian Tribes agree with the outcome.

3. Overriding Consideration of Public Interest (vote of 11 to 0)

- a. Washington Water Utilities Council - The Legislature should adopt objective standards in the water code, not subjective tests like the OCPI exception that has proven too unwieldy to have any reliable function for either Ecology or water right applicants.
- b. Washington Water Utilities Council - The Legislature should consider replacing the word “withdrawal” with “appropriation” in the final sentence of RCW 90.54.020(3)(a)). Per *Foster v.*

Yelm, this would remove the Court's determination that OCPI only can be used for "temporary" withdrawals.

- c. Association of Washington Cities - The Legislature should replace the word "withdrawal" with "appropriation" in the final sentence of RCW 90.54.020(3)(a)). Per *Foster v. Yelm*, this would remove the Court's determination that OCPI only can be used for "temporary" withdrawals. However, this should not be the only action the state takes to provide tools for approvable water rights applications.
- d. Trout Unlimited supports engaging in a thoughtful, collaborative effort to clarify and expanding the use of OCPI to allow for the implementation of permanent projects that can show enhancement of instream flows at critical times for fish while allowing for out-of-stream uses that might otherwise be prohibited.
- e. Tulalip [Tribes] sees no room for adjustment for the OCPI. The intention of the policy, which has been confirmed by the judiciary in multiple cases, is to provide a 'short term' and 'emergency' supply of water. Changing words in the policy from 'withdrawal' to 'appropriation' is not an appropriate approach to securing a water supply for any purpose of use.
- f. Sierra Club - Allowing Permanent Projects to Qualify for OCPI Exemption. The *Foster* court ruled that only temporary projects can qualify for OCPI. We support expanding the exemption to allow for permanent projects, such as siting of a hospital, to be considered. Having said that, we do not support expanding the OCPI exemption beyond that change.
- g. The [Muckleshoot Indian] Tribe believes that the *Foster* Court made the correct finding that OCPI is not an alternative to the traditional permitting process and that short term, temporary uses only should fall under that umbrella.

4. *Modeling (vote of 11 to 0)*

- a. Washington Water Utilities Council - Create objective standards for the creation and application of computer groundwater models, including limiting groundwater modeled impacts to areas within the watershed or Water Resource Inventory Area, and not basing permit decisions on impacts that are outside a model's margin of error.
- b. Washington Water Utilities Council - The Legislature should consider directing Ecology to use simplified mathematical models rather than regional models for determining impairment where the applicant elects to use the Legislature's mitigation sequencing method and NEB determination. Net Ecological Benefit determinations at the end of the sequencing process can provide the basin-wide protection that eliminates the need for rigorous computer modelling.
- c. Association of Washington Cities - The Legislature should direct Ecology to undertake rulemaking to establish a process on how to determine the margin of error for hydrological models. Clarify and codify that modeled impacts within the error margin of models shall not be considered impairment.
- d. There was significant discussion at several of the Joint Task Force meetings on the lack of clarity, error thresholds and uncertainty of groundwater modeling and other mechanisms used to help with appropriate mitigation. Trout Unlimited would recommend that Ecology and the WDFW convene a group of technical experts to review existing information, objective standards, and other techniques that could be used to help define what models are the best options. Once there are agreed upon standards for various WRIA's, we would encourage Ecology to pursue rulemaking to provide clarity to project proponents.
- e. Tulalip Tribes - This is a technical issue that likely cannot be solved thorough legislation, as each water resources model is tailored to a specific water appropriation. Models error is fairly well managed within the modeling process. Typically, models are set to estimate water resources

impairments using first principles and if available, data taken from the location where a water right has been requested. Model error allows for a model user and other participants, governmental agencies, Tribes, and stakeholders, to find a band of tolerance for ‘unknowns.’ Typically, these bands of unknowns are agreed to in advance and don’t necessarily benefit the applicant over other stakeholders. The best way for Ecology to manage model error is to have their experts consult with applicants and other governments to ensure agreement. Simplified mathematical models will not address the specificity needed to make water resources management decisions.

- f. Sierra Club - Establishment of an Ecology Technical Advisory Committee to Review the Use of Hydrologic Models and other Mechanisms for Determining Appropriate Mitigation. Questions have been raised regarding the appropriate use of models to determine water mitigation. Ecology should convene a group of technical experts to review models currently in use for this purpose as well as to review other techniques that might be used to determine water mitigation. The group should then make recommendations to Ecology. Ecology should then develop guidance on this topic.
- g. Muckleshoot Indian Tribe - Perhaps a technical group or committee could discuss and clarify the use and uncertainties of models used in water right evaluations; however, in our experience with such processes, participants are heavily weighted toward the potential applicant with their consultants outnumbering neutral members, or resource protection members. Also, consideration should be given to other methods of technical assessments for less complex situations. Of course, strong coordination with federally-recognized tribes must occur. The arguments that modeling is seriously flawed are misleading and sometimes untrue.

Minority Recommendations

The following topics were supported by at least five of the appointed voting members of the Task Force members:

1. Impacts and impairment (vote of 5 to 6)

- a. Washington Water Utilities Council and Association of Washington Cities - The Legislature should clarify and codify two key holdings of *Postema*, as follows: (1) hydraulic continuity between groundwater and a surface water source that is either closed or is not meeting instream flows, is not, in and of itself impairment; and (2) for Ecology to deny an application for groundwater where there is connection between groundwater and a surface water source that is either closed or not meeting flows, there must be an adverse effect on instream resources.
- b. Tulalip [Tribes] recommends leaving the definitions of impairment as they currently stand. Current laws, policies and rules encode protection of stream from further impairment by groundwater withdrawals.
- c. Muckleshoot Indian Tribe - Any legislation to change the results and findings of the *Postema* decision are opposed by the Tribe. The Legislature should not engage in further weakening of case law that protects minimum instream flows for salmon and threatens tribal treaty rights. The Supreme Court properly ruled that impairment was a factual question and disagreed that hydraulic continuity equates to impairment as the PCHB Court did and some Task Force members, and Ecology, have stated or implied. Also, the Court properly found that Ecology can use the best science available to determine impairment. Perhaps the Court should also have found that best professional judgement and common sense be used when evaluating model results – then discussions about “very small impacts shown on far away streams,” which are known to qualified professional MODFLOW modelers as “noise” or “not real” could have been averted.

2. *Mitigation and net ecological benefit (vote of 7 to 4)*

- a. Washington Water Utilities Council - The NEB process was successfully demonstrated in the Yelm Pilot Project that was approved but should be considered for simplification by the Legislature so that mitigation sequencing is more practically achievable.
- b. Washington Water Utilities Council - Allow water right applicants to use mitigation sequencing, which is used in numerous other environmental permitting areas, that follows the accepted sequence of (a) avoiding impacts; (b) minimizing impacts; and then (c) compensating for impacts with both in-kind and out-of-kind mitigation.
- c. Washington Water Utilities Council - Create a transparent technical review board of qualified members that can be used to review complicated water right applications and mitigation plans.
- d. Association of Washington Cities - Recommend Legislature provide authority to Ecology to issue water rights decisions based on mitigation for expected impacts which should include out of time, out of place, and out of kind flexibility.
- e. Association of Washington Cities - Recommend Legislature provide authority to Ecology to issue water rights decisions based on mitigation for expected impacts which should include out of time and out of place flexibility.
- f. Trout Unlimited agrees with WPUDA's recommendation for establishing a state program to help with funding to support achievement of mitigation requirements for projects where public entities are mitigating or supplying water through public systems. Projects could include drought relief pumping storage and aquifer storage, as appropriate. The funding supported by the Streamflow Restoration Program has allowed for creativity and flexibility in developing projects that enhance flows and habitat in many basins in our state, and we need to expand the range of project approaches that would achieve those important outcomes.
- g. Mitigation for a water right should be in place and in time as confirmed in the Foster Decision. Tulalip Tribes can be inconvenienced by the rigorous requirement to mitigate; however, it is in the best interest of the environment and protection of the waters of the State to determine and mitigate water losses by reach. A net ecological benefit approach fails to address the concentration of an impact in one stream reach or geographic area and often does not produce water as mitigation.
- h. Muckleshoot Indian Tribe - These are complex and factual issues that should not be addressed at the Legislative level but discussed among state resources agencies and federally-recognized tribes.

Other Topics Discussed

The following topic was discussed, and recommendations were proposed, but there were not enough votes to reach the threshold of a minority recommendation.

1. *De minimis (vote was 4 to 7)*

- a. Washington Water Utilities Council - Establish a collaborative state-local program so that impacts that are either de minimis, not adverse, or that in combination with existing conditions or other applications could have cumulative adverse impacts, can be mitigated at the watershed or sub-watershed level. The Legislature supported use of public funds (*Hirst* decision fix in Sec. 304 in ESSB 6091) to enable rural growth, and support for water resource mitigation is essential for GMA's primary purpose of enabling urban growth.
- b. Washington Water Utilities Council and Association of WA Cities - The Legislature should also recognize, as other Western states have done, that certain de minimis or insignificant effects of

groundwater appropriations do not constitute an impairment of regulatory instream flow water rights or stream/lake closures. The percentage of insignificance (or percentage of natural variation) should be established for each stream segment and lake based on existing levels rather than for each application, to prevent multiple cumulative impacts from exceeding the level of insignificance.

- c. The Tulalip Tribes find that stream flow and aquatic ecology are already impacted by over century of land use, water resources appropriations and alteration of the landscape. Water resource laws and policies are protecting the current and must altered status of stream flows and ecosystem health for the people of the State. Alteration of the regulatory system that governs protection and allocation of water resources acknowledges neither the impacts already enacted on the waters of the State nor the treaty reserved rights of Tribes.
- d. Muckleshoot Indian Tribe - Any weakening of the de minimis standard of impairment is also opposed, which should be of concern to any senior water right holder. Remember, the *Foster* decision stated, “our State’s long-established ‘prior appropriation’ and ‘first in time, first in right’ approach to water law, ... does not permit any impairment, even a de minimis impairment, of a senior water right.”

Other Comments

The Task Force received the following proposed recommendations that were discussed at the October 27, meeting, but no action was taken:

- a. Trout Unlimited - State Water Plan - While the conversations at the Joint Task Force have been very informative, we believe that taking a play out of the playbook model from California and other states that have built state-wide water plans would help to provide the clarity needed in Washington State. We believe that funding from the WA State legislature to support the creation of a statewide water plan that includes the status and trends of Washington’s water-dependent natural resources, water supplies, and agricultural, municipal and other domestic, and environmental water demands and considers a range of plausible future climate change scenarios.
- b. Many issues related to water supply, mitigation, instream flows, and water rights require local planning. Trout Unlimited would encourage local review boards set up to review mitigation plans including Tribes, the WDFW, senior water right holders, and others to help facilitate development and implementation of these plans.
- c. Department of Fish and Wildlife - Resource managers should incorporate scientific insights about climate change impacts into decisions that have the potential to affect fish, wildlife, and the habitat they need to thrive.

State Water Plan

At the October 27, 2022, Water Resource Mitigation Task Force meeting, Task Force members discussed the possibility of a state water plan. The Yakima Basin Integrated Plan is a regional plan in Washington that could provide insight in developing a state plan. Additionally, some states have already adopted a state water plan. A state water plan could include, among other things, data regarding current and projected future water usage, actions needed to address state water needs, and the impacts of climate change on the state’s water supply. The Yakima Basin Integrated Plan applies to the Yakima River watershed and allows a degree of flexibility in terms of the time and place of mitigation.

Summary of Meetings

June 13, 2018		Meeting Documents
Full Committee		AVCA Recording
Agenda Item	Documents	
1. Briefing on Task Force.	<ul style="list-style-type: none"> • Water Resource Mitigation Task Force • Final Bill Report 6091-S.E 	
2. Election of co-chairs.		
3. Other business.		

June 22, 2018		Meeting Documents
Full Committee		TVW Recording
Agenda Item	Documents	
1. Introduction of Task Force Members.		
2. Briefing on the Foster v. Department of Ecology supreme court decision.	<ul style="list-style-type: none"> • Foster Mitigated Water Permits, Robin McPherson, DOE 	
3. Briefing on pilot projects.	<ul style="list-style-type: none"> • Foster Task Force, Dave Christensen, DOE • Yelm Pilot Project, Michael Grayum, City of Yelm • Sumner Pilot Project, Jason Van Gilder, City of Sumner • Spanaway Pilot Project, Jeff Johnson, Spanaway Water Company • Port Orchard Pilot Project, Thomas A. Hunter, City of Port Orchard • Bertrand Pilot Project 	
4. Discussion of Task Force mission, possible operating procedures, future meeting schedule.		
5. Public comment.		

September 28, 2018		Meeting Documents
Full Committee		TVW Recording
Agenda Item	Documents	
1. Introductions.		
2. Discussion - committee procedures.	<ul style="list-style-type: none"> • Guidelines and Procedures 	

3. Groundwater modeling.	<ul style="list-style-type: none"> • Ground Water Modeling to Inform Water Resource Mitigation, Rick Dinicola, US Geological Survey Washington Water Science Center
4. Mitigation sequencing.	<ul style="list-style-type: none"> • Mitigation Sequencing, Dan Haller, Aspect Consulting
5. Implementing and monitoring mitigation.	<ul style="list-style-type: none"> • Implementing and Monitoring Mitigation, Peter Dykstra, Plauche & Carr LLP
6. Public comment.	

December 14, 2018		Meeting Documents
Full Committee		TVW Recording
Agenda Item	Documents	
1. Report on pilot projects.	<ul style="list-style-type: none"> • Implementing RCW 90.94.090, Dave Christensen, DOE 	
2. Tribal treaty water rights.	<ul style="list-style-type: none"> • Tribal Reserved Rights, Ann E. Tweedy, Muckleshoot Indian Tribe 	
3. Instream flows necessary for fish and mitigation of instream flow rules.	<ul style="list-style-type: none"> • Instream Flows in Washington, Kiza Gates, WDFW • Office of Columbia River's Water Supply & Mitigation Solutions, G. Thomas Tebb, DOE 	
4. The benefits and potential limitations of conservation.	<ul style="list-style-type: none"> • Value of Municipal Water Conservation, Michael Brent, Cascade Water Alliance • Roza Irrigation District • Limits to Use of Conserved Water, Dave Christensen, DOE 	
5. Task Force discussion.		
6. Public comment.		

September 10, 2019		Meeting Documents
Full Committee		TVW Recording
Agenda Item	Documents	
1. Review of previous task force meetings.	<ul style="list-style-type: none"> • Water Resource Mitigation Task Force • Water Resource Mitigation Task Force – 2018 Meetings 	
2. Discussion of mitigation pilot projects.	<ul style="list-style-type: none"> • Pilot Project Overview and Status Report, Dave Christensen, DOE • Discussion of Mitigation Pilot Projects – Yelm • Discussion of Mitigation Pilot Projects - Sumner • Discussion of Mitigation Pilot Projects - Spanaway • Discussion of Mitigation Pilot Projects - Bertrand 	
3. Department of Ecology's net ecological benefit guidance.	<ul style="list-style-type: none"> • Net Ecological Benefit, Dave Christensen, DOE 	
4. Task force discussion.		

5. Public comment.	
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November 20, 2019		Meeting Documents
Full Committee		TVW Recording
Agenda Item	Documents	
1. Review of task force report to the Legislature.	<ul style="list-style-type: none"> • Water Resource Mitigation Draft Report 	
2. Public comment.		
3. Discussion and possible action on task force report to the Legislature.		

November 10, 2020		Meeting Documents
Full Committee		TVW Recording
Agenda Item	Documents	
1. Review of water mitigation options in other states.	<ul style="list-style-type: none"> • Colorado Ground Water Administration, Kevin Rein, CO DNR • Water Use Mitigation & Water Banking in Idaho, Remington Buyer, ID Water Resource Board • Deschutes Basin Mitigation Program, Dwight French, OR Water Resources Department 	
2. Yakima Basin water marketing.	<ul style="list-style-type: none"> • Yakima Basin Water Marketing, Justin Bezold and Lisa Pelly, Kittitas Reclamation District 	
3. Presentation on how the Foster decision affects Department of Ecology's work.	<ul style="list-style-type: none"> • Foster Focus Sheet, Dave Christensen, DOE • Water Resource Program, Dave Christensen, DOE 	
4. Update on the Yelm pilot project.		
5. Task Force discussion		

September 21, 2021		Meeting Documents
Full Committee		TVW Recording
Agenda Item	Documents	
1. Introductions of legislative members.	<ul style="list-style-type: none"> • Water Resource Mitigation Task Force 	
2. Election of Co-Chairs.		
3. Seating and introductions of non-legislative members.		
4. Update on Task Force legislation.		

5. Update on the pilot projects.	<ul style="list-style-type: none"> • Update on Pilot Projects, Dave Christensen, DOE
6. Update on water banking and water transfers.	<ul style="list-style-type: none"> • Water Right Transfers, Water Banking, and Private Investment in Public Water Resources, Dave Christensen, DOE
7. Update on drought impacts to municipalities.	<ul style="list-style-type: none"> • Forks' Experience Since 2015, William Fleck, City of Forks
8. Public testimony. (Remote testimony.)	
9. Task Force discussion.	

November 2, 2021		Meeting Documents
Full Committee		TVW Recording
Agenda Item	Documents	
1. Colorado's approach to conservation and water reuse and recharge.	<ul style="list-style-type: none"> • Perspectives on Colorado Water Efficiency, Kevin Reidy, CO DNR 	
2. Conservation.	<ul style="list-style-type: none"> • Water Use Efficiency in Public Works, Mike Means, DOH • Water Use Efficiency Regional Water Cooperative of Pierce County-Spanaway Water Company, Jeff Johnson, Evergreen Municipal Water Consulting • Seattle Public Utilities Water Conservation Program, Kelly O'Rourke, City of Seattle • Water Supply & Conservation, Scott Revell, Roza Irrigation District • Drought Mitigation, Urban Eberhart, Kittitas Reclamation District • Conservation as a Source for New Uses and Mitigation, Dave Christensen, DOE 	
3. Water reuse and recharge.	<ul style="list-style-type: none"> • Water Reuse and Recharge, Mike Means, DOH • Reclaimed Water Reuse/Recharge and the Water Code, Kasey Cykler, DOE • Cleaning and restoring Water Resources, Matt Kennelly, LOTT • Return Flow and Water Conservation in Agricultural Systems, G. Thomas Tebb, DOE 	
4. Public comment. (Remote testimony.)		
5. Task force discussion		

December 8, 2021		Meeting Documents
Full Committee		TVW Recording
Agenda Item	Documents	
1. Water reuse in the West: western state water reuse governance and programs.	<ul style="list-style-type: none"> • Water Reuse in the West, Michelle Bushman, Western States Water Council • Water Reuse in the West Report, Michelle Bushman, Western States Water Council 	
2. Utilities' perspective on water reuse, recharge, and reclamation.	<ul style="list-style-type: none"> • Water Reuse, Bob Hunter, Kitsap PUD • Port Gamble Reclamation Water Facility, Kitsap PUD • Water Reuse, Morgan Johnson, Silverdale Water District • Airway Heights Reclaimed Water Experience, Kevin Anderson, City of Airway Heights 	
3. Public comment. (Remote testimony.)		
4. Task Force discussion.		

May 24, 2022		Meeting Documents
Full Committee		TVW Recording
Agenda Item	Documents	
1. Introduction of task force members.		
2. Review of task force charter and past task force work.		
3. Review of mitigation options impacted by the Foster decision.	<ul style="list-style-type: none"> • Foster Decision Refresher 	
4. Update on the United States Geological Survey (USGS) groundwater modelling efforts.	<ul style="list-style-type: none"> • Southeast Puget Sound Groundwater Flow Model 	
5. Update on pilot projects.	<ul style="list-style-type: none"> • Wells and Discharge Points Dakota Creek Augmentation • Update on the City of Sumner's Pilot Project • Initial "Lessons Learned" 	
6. Instream flows: purpose and methodology.	<ul style="list-style-type: none"> • Instream flows: purpose and methodology 	
7. Climate change impacts on stream flows and water supply.	<ul style="list-style-type: none"> • Climate Change Impacts on Streamflow and Water Supply 	
8. Public comment. (Remote testimony.)		

9. Task force discussion.	
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June 22, 2022		Meeting Documents
Full Committee		TVW Recording
Agenda Item	Documents	
1. Comparative review of impairment and mitigation in Washington and other western states.	<ul style="list-style-type: none"> • Foster Task Force Presentation • Western States Chart 04272022 	
2. Water conservation requirements in other states.	<ul style="list-style-type: none"> • California Water Urban and Agriculture • Meeting Water Demands in Southern Nevada • State Water Planning & Conservation in Texas • Texas State Water Plan 	
3. Public comment. (Remote testimony.)		
4. Task force discussion.	<ul style="list-style-type: none"> • Compilation for June 22, 2022 Task Force discussion 	

July 13, 2022		Meeting Documents
Full Committee		TVW Recording
Agenda Item	Documents	
1. Task force report development – task force discussion.	<ul style="list-style-type: none"> • Chart of topics Task Force discussion • WRM B. Wishart Comments 071122 • Agriculture Foster Comments 20220711 	
2. Public comment. (Remote testimony.)		

September 23, 2022		Meeting Documents
Full Committee		TVW Recording
Agenda Item	Documents	
1. Task force report development – task force discussion.	<ul style="list-style-type: none"> • Water Resource Mitigation 2022 Report DRAFT 	
2. Public comment. (Remote testimony.)		
3. Possible executive action related to the task force report.		

October 27, 2022

[Meeting Documents](#)

Full Committee

[TVW Recording](#)

Agenda Item	Documents
1. Task force report development – task force discussion.	<ul style="list-style-type: none">• Water Resource Mitigation 2022 Report DRAFT• WRM Task Force Report – Appendices• WRM Recommendations• Ecology Foster Mitigation Plan 2022 Update
2. Public comment. (Remote testimony.)	
3. Possible executive action related to the task force report.	

Appendices

Update from Department of Ecology to the Joint Task Force on Water Mitigation
October 26, 2022

Update from Department of Ecology to the Joint Task Force on Water Mitigation

Dave Christensen

Water Resources Program

October 26, 2022

Background

RCW 90.94.090(13) states, “By November 15, 2019, and November 15, 2022, the department must provide the [Water Mitigation] task force with an update on the mitigation plans based on additional information developed after November 15, 2018.

This update is intended to meet the November 15, 2022 requirement.

Pilot applications that have been approved

City of Yelm

The City of Yelm submitted a watershed mitigation plan to Ecology in April 2021. The mitigation plan uses both in-kind (direct replacement flow) and out-of-kind (riparian protection and habitat improvements) mitigation actions that demonstrate achieving a net ecological benefit (NEB). The significant additions to its former mitigation plan are:

- An updated water right acquisition search.
- Increased recharge at the Cochrane Park reclaimed water facility.
- New in-kind water by securing an additional discharge of water to the Nisqually River at La Grande Dam.
- NEB evaluations on its two out-of-kind projects. Ecology evaluated the proposal and determined that the mitigation achieved a NEB.

Ecology approved the application from the City of Yelm on June 16, 2022.

Pilot project participants still developing mitigation plans

The remaining pilot project applicants continue working to develop their mitigation plans. Each one faces unique circumstances and challenges in developing a mitigation plan that will be supported by Ecology and external interests.

City of Sumner

The City continues development of the White River habitat restoration project along with securing water rights from Cascade Water Alliance to enhance instream flows. Sumner is awaiting the release of the United States Geological Survey's (USGS) Southeast Sound (SES) groundwater model prior to finalizing its mitigation plan.

There have been no changes in the status of their mitigation plan since 2019. Ecology has not received a draft mitigation plan from the City of Sumner.

Spanaway Water Company

Spanaway Water Company is also awaiting the release of the USGS SES groundwater model. However, it is still apparent that there will or could be impacts, in very small quantities, in locations so far afield from the company's service area that mitigation options may not be available.

There have been no changes in the status of their mitigation plan since 2019. Ecology has not received a draft mitigation plan from Spanaway Water Company.

City of Port Orchard

The City of Port Orchard is engaged in talks with external interests to assess which mitigation projects would receive the most support from fisheries co-managers. Port Orchard faces the challenge of addressing impacts to tens of independent streams that discharge directly to saltwater, some of which lie outside of the City's municipal water system.

There have been no changes in the status of their mitigation plan since 2019. Ecology has not received a draft mitigation plan from the City of Port Orchard.

Ag Water Board of Whatcom County

The Ag Water Board of Whatcom has submitted a water right application to Ecology for processing the streamflow augmentation project on Dakota creek and is working with Ecology on the mitigation sequencing steps.

There have been no changes in the status of their mitigation plan since 2019. Ecology has not received a draft mitigation plan from the Ag Water Board of Whatcom County.

Recommendations from Task Force Members and Tribes

September 27, 2022

State Representative Steve Tharinger, Co-Chair
Joint Task Force on Water Resource Mitigation
314 John L. O'Brien Building
Olympia, WA 98504

State Senator Judy Warnick, Co-Chair
Joint Task Force on Water Resource Mitigation
316 Legislative Building
Olympia, WA 98504

RE: Comments & Recommendations to Joint Task Force on Water Resource Mitigation

Dear Senator Warnick and Representative Tharinger:

The Washington Water Utilities Council (WWUC) is the state association of 190 Washington water utilities including cities and towns, water districts, public utility districts, mutual and cooperative water utilities, and investor-owned water utilities. The water systems owned and operated by WWUC members provide drinking water to over 80 percent of the state's population. Our members have committed extensive resources to ensuring viable and sustainable water use conservation programs are in place to conserve scarce water resources. Where possible and practical, our members have developed water reuse and recharge programs.

The WWUC is dedicated to ensuring an adequate quantity of high-quality potable water at the lowest responsible economic cost and smallest environmental impact. The WWUC has received frequent updates from our representative on the Joint Legislative Task Force on Water Resource Mitigation (Task Force) since it began in 2018. We have some comments and recommendations outlined below that relate to the mission of the Task Force.

Foster Task Force Recommendations from the WWUC

1. The Legislature should adopt objective standards in the water code, not subjective tests like the OCPI exception that has proven too unwieldy to have any reliable function for either Ecology or water right applicants.
2. The Legislature should clarify and codify two key holdings of Postema, as follows:
 - a. Hydraulic continuity between groundwater and a surface water source that is either closed or is not meeting instream flows, is not, in and of itself impairment;
 - b. For Ecology to deny an application for groundwater where there is connection between groundwater and a surface water source that is either closed or not meeting flows, there must be an adverse effect on instream resources.

3. The Net Ecological Benefit (NEB) process was successfully demonstrated in the Yelm Pilot Project that was approved but should be considered for simplification by the Legislature so that mitigation sequencing is more practically achievable.
4. The Legislature should also recognize, as other Western states have done, that certain *de minimus* or insignificant effects of groundwater appropriations do not constitute an impairment of regulatory instream flow water rights or stream/lake closures. The percentage of insignificance (or percentage of natural variation) should be established for each stream segment and lake based on existing levels rather than for each application, to prevent multiple cumulative impacts from exceeding the level of insignificance.
5. Establish a collaborative state-local program so that impacts that are either *de minimus*, not adverse, or that in combination with existing conditions or other applications could have cumulative adverse impacts, can be mitigated at the watershed or sub-watershed level. The Legislature supported use of public funds (Hirst decision fix in Sec. 304 in ESSB 6091) to enable rural growth, and support for water resource mitigation is essential for GMA's primary purpose of enabling urban growth.
6. Create objective standards for the creation and application of computer groundwater models, including limiting groundwater modeled impacts to areas within the watershed or Water Resource Inventory Area, and not basing permit decisions on impacts that are outside a model's margin of error.
7. The Legislature should consider directing Ecology to utilize simplified mathematical models rather than regional models for determining impairment where the applicant elects to use the Legislature's mitigation sequencing method and NEB determination. NEB determinations at the end of the sequencing process can provide the basin-wide protection that eliminates the need for rigorous computer modelling.
8. Allow water right applicants to use mitigation sequencing, which is used in numerous other environmental permitting areas, that follows the accepted sequence of (a) avoiding impacts; (b) minimizing impacts; and then (c) compensating for impacts with both in-kind and out-of-kind mitigation.
9. The legislature should consider replacing the word "withdrawal" with "appropriation" in the final sentence of RCW 90.54.020(3)(a)). Per Foster v. Yelm, this would remove the Court's determination that OCPI only can be used for "temporary" withdrawals.
10. Create a transparent technical review board of qualified members that can be used to review complicated water right applications and mitigation plans.

Current water resource policies have resulted in extreme difficulty, and in many cases the impossibility of getting new water rights by many of our members in areas where there are regulatory stream flows. This poses serious challenges when the population of Washington State is estimated to grow between 855,292 (12.11 percent) and 2,571,579 (30.57 percent) between 2020 and 2040 and the Growth

Management Act requires local jurisdictions to plan for that growth. In 2020, survey results among cities showed that 115 cities need new water rights. The results are outlined below. Water districts, PUDs, and non-profit public water systems have similar future permitting needs.

No. of Years When New Water Rights are Needed	Number of Cities Responding
Within 5 Years	18
5-10 Years	14
10-20 Years	24
More than 20 Years	59
Total	115

It is essential that municipal water suppliers support the citizens of the State with access to clean, reliable and affordable drinking water. Thank you for spending your valuable time, for several years, on these issues of critical importance for the people, fish and farms of Washington State in a time of climate change. We appreciate the opportunity to provide comments and recommendations to the Task Force.

Respectfully,



Judi Gladstone
Chair, Washington Water Utilities Council

cc: Members, Joint Legislative Task Force on Water Resource Mitigation
Carrie Sessions, Executive Policy Office, Governor Jay Inslee
Mary Verner, Water Resource Program Manager, Department of Ecology
Holly Myers, Director, Office of Drinking Water, Department of Health
WWUC Members

Recommendations from Carl Schroeder:

Conservation

- The Legislature should consider potential new conservation standards for water systems served by water rights accessed utilizing mitigation such as requiring WDOH certification that a municipal purveyor is in compliance with the WDOH water conservation statute and rule as a precondition to using the sequenced mitigation standard.

Source Switches

Impacts and impairment

- The Legislature should clarify and codify two key holdings of Postema, as follows:
 - hydraulic continuity between groundwater and a surface water source that is either closed or is not meeting instream flows, is not, in and of itself impairment;
 - for Ecology to deny an application for groundwater where there is connection between groundwater and a surface water source that is either closed or not meeting flows, there must be a projected adverse effect on instream resources.

De minimis use

- The Legislature should also recognize, as other Western states have done, that certain de minimis or insignificant effects of groundwater appropriations do not constitute an impairment of regulatory instream flow water rights or stream/lake closures. The percentage of insignificance (or percentage of natural variation) should be established for each stream segment and lake based on existing levels rather than for each application, to prevent multiple cumulative impacts from exceeding the level of insignificance.

Mitigation and net ecological benefit

- Recommend Legislature provide authority to Ecology to issue water rights decisions based on mitigation for expected impacts which should include out of time, out of place, and out of kind flexibility.
- Recommend Legislature provide authority to Ecology to issue water rights decisions based on mitigation for expected impacts which should include out of time and out of place flexibility.

Overriding Consideration of the Public Interest

- The Legislature should replace the word “withdrawal” with “appropriation” in the final sentence of RCW 90.54.020(3)(a)). Per *Foster v. Yelm*, this would remove the Court’s determination that OCPI only can be used for “temporary” withdrawals. However, this should not be the only action the state takes to provide tools for approvable water rights applications.

Modeling

- The Legislature should direct the Department of Ecology to undertake rulemaking to establish a process on how to determine the margin of error for hydrological models. Clarify and codify that modeled impacts within the error margin of models shall not be considered impairment.

Other



State Senator Judy Warnick, Co-Chair
Joint Task Force on Water Resource Mitigation
316 Legislative Building
Olympia, WA. 98504

State Representative Steve Tharinger, Co-Chair
Joint Task Force on Water Resource Mitigation
314 John L. O'Brien Building
Olympia, WA 98504

RE: Comments and Suggestions to Joint Task Force on Water Resources Mitigation

This letter is in response to the request emailed by Karen Epps on Thursday, October 13, 2022, to submit any recommendations to be considered by the Joint Task Force for its final meeting on October 27, 2022. Thank you for the opportunity to provide these comments.

One of the key outcomes of participating in the Joint Task Force is the disturbing reminder that we as Washingtonians are struggling to deal with water challenges in the future to protect our fisheries, economies and growing state and have few easy answers. We remain ill-equipped to seek meaningful responses without a holistic strategy that addresses changes in climate, tribal treaty rights, and growing communities as they pertain to vexing water issues and to help provide clarity to those who work around water. I have appreciated the conversations at the Joint Task Force on the specific issues we have talked about but remain concerned that there is not enough information to make decisions on many of the issues before us.

Trout Unlimited has six recommendations to submit for consideration:

1. State Water Plan- While the conversations at the Joint Task Force have been very informative, we believe that taking a play out of the playbook model from California and other states that have built state-wide water plans would help to provide the clarity needed in Washington State. We believe that funding from the WA State legislature to support the creation of a state-wide water plan that includes the status and trends of Washington's water-dependent natural resources, water supplies, and agricultural, municipal and other domestic, and environmental water

demands and considers a range of plausible future climate change scenarios.

2. Trout Unlimited would urge the Joint Task Force to support additional conversations led by the Department of Ecology (Ecology) on “source switches” to determine if there is a pathway to allow for broader use of these types of transfers. While we have heard from some cities that this option provides little relief, we believe this approach has the potential to offer an additional option for public water systems and others for approving transfers from surface water to ground water and potentially other sources like aquifer recharge. We are currently working with a city in Central WA who is looking to move their tributary diversions to wells downstream in an effort to enhance instream flows in the tributary and remove a diversion from the stream while allowing for ongoing use and growth for its water supply.
3. There was significant discussion at several of the Joint Task Force meetings on the lack of clarity, error thresholds and uncertainty of groundwater modeling and other mechanisms used to help with appropriate mitigation. Trout Unlimited would recommend that Ecology and the Department of Fish and Wildlife (WDFW) convene a group of technical experts to review existing information, objective standards and other techniques that could be used to help define what models are the best options. Once there are agreed upon standards for various WRIA’s, we would encourage Ecology to pursue rulemaking to provide clarity to project proponents.
4. Many issues related to water supply, mitigation, instream flows, and water rights require local planning. Trout Unlimited would encourage local review boards set up to review mitigation plans including Tribes, WDFW, senior water right holders, and others to help facilitate development and implementation of these plans.
5. Trout Unlimited supports engaging in a thoughtful, collaborative effort to clarify and expanding the use of OCPI to allow for the implementation of permanent projects that can show enhancement of instream flows at critical times for fish while allowing for out-of-stream uses that might otherwise be prohibited.
6. Trout Unlimited agrees with WPUDA’s recommendation for establishing a state program to help with funding to support achievement of mitigation requirements for projects where public entities are mitigating or supplying water through public systems. Projects could include drought relief pumping storage and aquifer storage, as appropriate. The funding supported by the Streamflow Restoration Program has allowed for creativity and flexibility in developing projects that enhance flows and

habitat in many basins in our state, and we need to expand the range of project approaches that would achieve those important outcomes.

Sincerely,

A handwritten signature in black ink that reads "Lisa Pelly". The signature is written in a cursive style with a large, looping "y" at the end.

Lisa Pelly,
Trout Unlimited
Director, Washington Water Project



State Senator Judy Warnick, Co-Chair^[SEP] Joint Task Force on Water Resource Mitigation 316 Legislative Building^[SEP] Olympia, WA. 98504

State Representative Steve Tharinger, Co-Chair Joint Task Force on Water Resource Mitigation 314 John L. O'Brien Building^[SEP] Olympia, WA 98504

RE: Recommendations to Joint Task Force on Water Resources Mitigation

Dear Senator Warnick and Representative Tharinger:

Sierra Club proposes the following recommendations for consideration by the Joint Task Force on Water Resource Mitigation:

1. Source Switch

The Department of Ecology should help facilitate continued discussion among stakeholders on the subject of "source switch" to see if agreement can be reached on a streamlined approach for approving transfers from surface water to ground water.

2. Allowing Permanent Projects to Qualify for OCPI Exemption

The Foster court ruled that only temporary projects can qualify for OCPI. We support expanding the exemption to allow for permanent projects, such as siting of a hospital, to be considered. Having said that, we do not support expanding the OCPI exemption beyond that change.

3. Establishment of an Ecology Technical Advisory Committee to Review the Use of Hydrologic Models and other Mechanisms for Determining Appropriate Mitigation

Questions have been raised regarding the appropriate use of models to determine water mitigation. Ecology should convene a group of technical experts to review models currently in use for this purpose as well as to review other techniques that might be used to determine water mitigation. The group should then make recommendations to Ecology. Ecology should then develop guidance on this topic.

Thank you for reviewing our recommendations.

Bruce Wishart
Washington State Chapter Sierra Club

Epps, Karen

From: Kernan, Megan (DFW) <Megan.Kernan@dfw.wa.gov>
Sent: Friday, October 21, 2022 3:45 PM
To: Epps, Karen
Subject: RE: Water Resource Mitigation Task Force - request for recommendations by Friday, October 21

CAUTION: External email.

Hi Karen,

I've got two recommendations for the consideration of the task force.

Under the "conservation" category, WDFW suggests:

1. Washington state should seek ways to incentivize the reuse of wastewater where it is being discharged into the marine environment.

Under "other" or "modeling", WDFW suggests:

2. Resource managers should incorporate scientific insights about climate change impacts into decisions that have the potential to affect fish, wildlife, and the habitat they need to thrive.

Please let me know if you need me to refine or clarify either recommendation.

Best wishes,

Megan

From: Epps, Karen <Karen.Epps@leg.wa.gov>
Sent: Thursday, October 13, 2022 4:57 PM
To: Carla.Carlson@muckleshoot.nsn.us; Schroeder, Carl <carls@awcnet.org>; Christensen, Dave (ECY) <davc461@ECY.WA.GOV>; Sheffels, Evan (AGR) <ESheffels@agr.wa.gov>; Fitzgibbon, Joe <joe.fitzgibbon@leg.wa.gov>; Honeyford, Jim <jim.honeyford@leg.wa.gov>; John Weidenfeller <jweidenfeller@thurstonpud.org>; jslothower@lwbsd.com; Lisa.Pelly@tu.org; Maycumber, Jacquelin <jacquelin.maycumber@leg.wa.gov>; Kernan, Megan (DFW) <Megan.Kernan@dfw.wa.gov>; PeterG@awb.org; Salomon, Jesse <Jesse.salomon@leg.wa.gov>; Tharinger, Steve <Steve.Tharinger@leg.wa.gov>; Van De Wege, Kevin <kevin.vandewege@leg.wa.gov>; Walsh, Jim <jim.walsh@leg.wa.gov>; Warnick, Sen. Judy <Judith.Warnick@leg.wa.gov>; Wishart.bruce@comcast.net
Cc: Banuelos, Cynthia <Cynthia.Banuelos@leg.wa.gov>; Bentzel, Joshua <Joshua.Bentzel@leg.wa.gov>; Bronkema, Tucker <Tucker.Bronkema@leg.wa.gov>; Dodson, Kari <Kari.Dodson@leg.wa.gov>; Elder, John <John.Elder@leg.wa.gov>; Epps, Karen <Karen.Epps@leg.wa.gov>; Fujisawa, Yukimi <Yukimi.Fujisawa@leg.wa.gov>; Hatfield, Robert <Robert.Hatfield@leg.wa.gov>; Hines, Holly <Holly.Hines@leg.wa.gov>; Kumara, Yoshi <Yoshi.Kumara@leg.wa.gov>; Lewis, Rebecca <Rebecca.Lewis@leg.wa.gov>; McWain, Penelope <penny.mcwain@leg.wa.gov>; Richartz, Sandra <sandra.richartz@leg.wa.gov>; Steelquist, Peter <Peter.Steelquist@leg.wa.gov>; Thomas, Dawn <Dawn.Thomas@leg.wa.gov>; Wilburn, Gary <Gary.Wilburn@leg.wa.gov>
Subject: Water Resource Mitigation Task Force - request for recommendations by Friday, October 21

External Email

Members of the Water Resource Mitigation Task Force,

The co-chairs are requesting that you send any recommendations that you would like the Task Force to consider at the October 27 meeting to the Task Force by the end of the day on Friday, October 21.

Recommendations should be submitted under the following topics:

- Conservation
- Source Switches
- Impacts and impairment
- De minimis use
- Mitigation and net ecological benefit
- Overriding Consideration of the Public Interest
- Modeling
- Other

Staff will put all recommendations submitted by Friday, October 21 into one document and send it to task force members on Tuesday, October 25 in preparation for the meeting on Thursday, October 27. Voting on recommendations will occur at the meeting on Thursday, October 27. Recommendations of the Task Force must be made by a sixty percent majority of the appointed members of the Task Force. The representatives of the Departments of Fish and Wildlife, Ecology, and Agriculture are not eligible to vote on the recommendations. Minority recommendations that achieve the support of at least five of the appointed voting members of the Task Force will also be included in the report. The report will also include any recommendation that does not achieve support to be considered a minority recommendations so that the report reflects everything the Task Force considered.

Attached are recommendations that were previously submitted by John Weidenfeller for consideration by the Task Force. Please let us know if there is anything we can do. Thank you!

All the best,
Karen

Karen Epps
Coordinator, Senate Committee Services
Direct line: 360-524-9193

CAUTION: This email originated from outside of the Legislature. Do not click links or open attachments unless you recognize the sender and know the content is safe.



Board of Directors:

Teri Gobin – Chair
Misty Napeahi – Vice Chair
Debra Posey – Secretary
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Mel Sheldon Jr. – Council Member
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Hazen Shopbell - Council Member

6406 Marine Dr
Tulalip, WA 98271-9694
360-716-4500
Fax 360-716-0628

The Tulalip Tribes are federally recognized successors in interest to the Snohomish, Snoqualmie, Skykomish, and other allied tribes and bands signatory to the Treaty of Point Elliott.

October 19, 2022

Senator Judy Warnick, Co-Chair
Joint Legislative Committee on Water Resource Mitigation
P.O. Box 40413
Olympia, WA 98501
VIA EMAIL: Judith.Warnick@leg.wa.gov

Representative Steve Tharinger, Co-Chair
P.O. Box 40600
Olympia, WA 98504-0600
VIA EMAIL: Steve.Tharinger@leg.wa.gov

Re: Task Force Recommendations

Dear Senator Warnick and Representative Tharinger,

The Tulalip Tribes submit these comments to the members of the Joint Water Resource Mitigation Task Force Committee as they consider recommendations for changes in water resources policy. Tulalip urges the Committee to consult with all treaty Tribes to gain meaningful input on impacts to treaty reserved rights and resources prior to finalizing policy recommendations.

The Tulalip Tribes reserved the right to take fish in their usual and accustomed fishing places pursuant to the Treaty of Point Elliot of January 22, 1855 (12 Stat. 927). These usual and accustomed treaty fishing areas include the freshwater areas of the Snohomish-Snoqualmie-Skykomish river basins and certain marine waters of the Puget Sound through which fish propagated in such basins pass. *U.S. v. Washington*, 459 F. Supp. 1020, 1038 (W.D. Wash. 1978); *U.S. v. Washington*, 626 F. Supp. 1405, 1527 (W.D. Wash. 1985), *Aff'd*, 841 F.2d 317 (9th Cir. 1988). The Tulalip Tribes are co-managers of fisheries and fish habitat with the federal government and Washington State. Water rights of appropriate quality and quantity to support habitat for continuation and enhancement of fish runs is essential to the Tribes' treaty fishing rights.

For over a century, the State of Washington has permitted and certified water rights to waters reserved to Tribes for agricultural, industrial, municipal, domestic, and other uses. Water appropriation, land use, culverts and development have ultimately impacted the amount of water in rivers throughout the state; reducing the quality and quantity of salmon habitat and reducing the number of salmon returning to their natal rivers. Minimum instream flows were established to protect remaining intact aquatic environments, reverse the degradation of natural systems, and provide a priority date and thus legal standing against appropriation by junior water users.

Washington State has provided many strong protections for natural systems in law, policy and code. This system has been tested in court and have time and again been confirmed by the judiciary to be as strict and unyielding as necessary to provide for a healthy, functioning natural environment that supports the people

of the State. We should all be proud and thankful for these protections are in place; Washington is a beautiful home which supports our lives and businesses, and will continue to do so as its leaders do their part in protecting the environment. These laws, policies and codes must remain intact and should not be undone.

Recommendations

Impacts and impairment: Tulalip recommends leaving the definitions of impairment as they currently stand. Current laws, policies and rules encode protection of stream from further impairment by ground water withdrawals.

Streams with and without minimum instream flow rules are already impacted and impaired by land use, development, and ground and surface water withdrawals. These impairments are now exacerbated by region-wide variations in precipitation timing wrought by climactic shifts. Withdrawals from groundwater wells that are in hydraulic continuity with surface water impair surface water flow, this fact is established scientifically as well as in case law (*Postema v. PCHB et al.*). The time scale for ground water losses to a stream can be immediate or take months to years. Ground water influences stream volume, regulates temperature, and influences egg to smolt survival. Any removal of groundwater bound for a stream is an impairment of senior instream flows and therefore an adverse effect.

De minimis: The Tribes find that stream flow and aquatic ecology are already impacted by over century of land use, water resources appropriation and alteration of the landscape. Water resource laws and policies are protecting the current and much altered status of stream flows and ecosystem health for the people of the State. Alteration of the regulatory system that governs protection and allocation of water resources acknowledges neither the impacts already enacted on the waters of the State nor the treaty reserved rights of Tribes.

Washington State is unique in recognizing the interconnection between ground water and surface water; California does not recognize the connection, and farmers have mined hundreds of feet of ground water in the Sacramento River valley, creating large reaches of river that lose surface flow to the aquifer, effectively draining the river. Tribes do not want to see Washington take the path of 'death by 1,000 straws' wherein wells are allowed to intercept water destined for rivers, no matter how small the amount. Cumulative impacts between are not considered by Ecology and are not addressed in any mitigation scheme.

Mitigation and Net Ecological Benefit: Mitigation for a water right should be in place and in time as confirmed in the Foster Decision. Tribes can be inconvenienced by the rigorous requirement to mitigate; however, it is in the best interest of the environment and protection of the waters of the State to determine and mitigate water losses by reach. A net ecological benefit approach fails to address the concentration of an impact in one stream reach or geographic area and often does not produce water as mitigation.

Overriding Consideration of Public Interest: Tulalip sees no room for adjustment for the OCPI. The intention of the policy, which has been confirmed by the judiciary in multiple cases, is to provide a 'short term' and 'emergency' supply of water. Changing words in the policy from 'withdrawal' to 'appropriation' is not an appropriate approach to securing a water supply for any purpose of use.

Model Error: This is a technical issue that likely cannot be solved through legislation, as each water resources model is tailored to a specific water appropriation. Models error is fairly well managed within the modeling process. Typically, models are set to estimate water resources impairments using first principles and if available, data taken from the location where a water right has been requested. Model error allows for a model user and other participants, governmental agencies, Tribes and stakeholders, to find a band of tolerance for 'unknowns'. Typically, these bands of unknowns are agreed to in advance and

don't necessarily benefit the applicant over other stakeholders. The best way for Ecology to manage model error is to have their experts consult with applicants and other governments to ensure agreement. Simplified mathematical models will not address the specificity needed to make water resources management decisions.

The Tulalip Tribes appreciate your consideration of our comments and recommendations. Please contact Ryan Miller ryanmiller@tulaliptribes-nsn.gov with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Teri Gobin". The signature is fluid and cursive, with the first name "Teri" being larger and more prominent than the last name "Gobin".

Teri Gobin
Chair, Tulalip Board of Directors

Cc: Tulalip BOD

Task Force Staff Karen Epps Karne.Epps@leg.wa.gov

Ryan Williams rwilliams@tulaliptribes-nsn.gov

Carla Carlson Carla.Carlson@muckleshoot.nsn.us

Greg Haller ghaller@nwifc.org



MUCKLESHOOT INDIAN TRIBE

Fisheries Division

39015 - 172nd Avenue SE • Auburn, Washington 98092-9763
Phone: (253) 939-3311 • Fax: (253) 931-0752



Comments and Recommendations to the Joint Legislative Task Force on Water Resource Mitigation

October 21, 2022

Carla Carlson
Water Resources Analyst

1. CONSERVATION

Conservation is the best tool for water users to use supplies more efficiently. In the water utility arena decades ago, it had been a debated issue as whether conservation can be considered as a method to offset or delay new water supplies. This view has significantly lagged behind that of the energy sector; but is now known to be a key factor in extending supply to meet growing demand, at least by modern water providers. Water for growth is often exaggerated and attempts to take more water away from fish and tribes are ongoing. I do not need to expand further on the dismal state of salmon and Orca populations. Many water suppliers can do more conservation. State funding and grants should be provided to help smaller cities and utilities do so.

Cities and other municipal water providers are required to develop comprehensive water system plans every 10 years (Chapter WAC 246-290-100). These plans evaluate historical and future water use and forecast future demands and population growth and determine if supplies are adequate. Older planning and forecast projections tended to result in over estimation, sometimes in the extreme (see Figure 1 as an example). These over-projections often were the result of future uncertainty, lack of sufficient data, lack of clarity in law for planning criteria, assuming that high per capita water use would continue or increase, assuming higher population growth than occurred, etc. With the development of improved forecasting methods and data collection, forecasting has become more accurate. Also, with the implementation of stricter plumbing codes, heightened public education on water conservation, and more emphasis on increasing water efficiency by utilities, the per capita water use has decreased with population growth in Washington over time (see Figure 2).

Declining trends among the public sector of is real. Both the city of Tacoma (Figure 1) and the city of Seattle (Figure 3) are good examples. Cities that do not show similar trends should institute stricter conservation and demand reduction measures over all sectors of water users. They can look to these cities or others for ideas, such as SPU's Saving Water Partnership, which is a group of 19 local water utilities who collaborate to provide water conservation programs to their customers in Seattle and King County.

The Saving Water Partnership reports that customer water consumption is as low as it was in the late 1950's, even though the population served has grown by more than 80%.

<https://www.savingwater.org/about/>

Likewise, Cascade Water Alliance has achieved significant water savings through its conservation programs with an estimated savings of 37,092 gallons per day among its customers in 2021.

<https://cascadewater.org/wp-content/uploads/2022/02/Cascade-2021-Annual-Report.pdf>

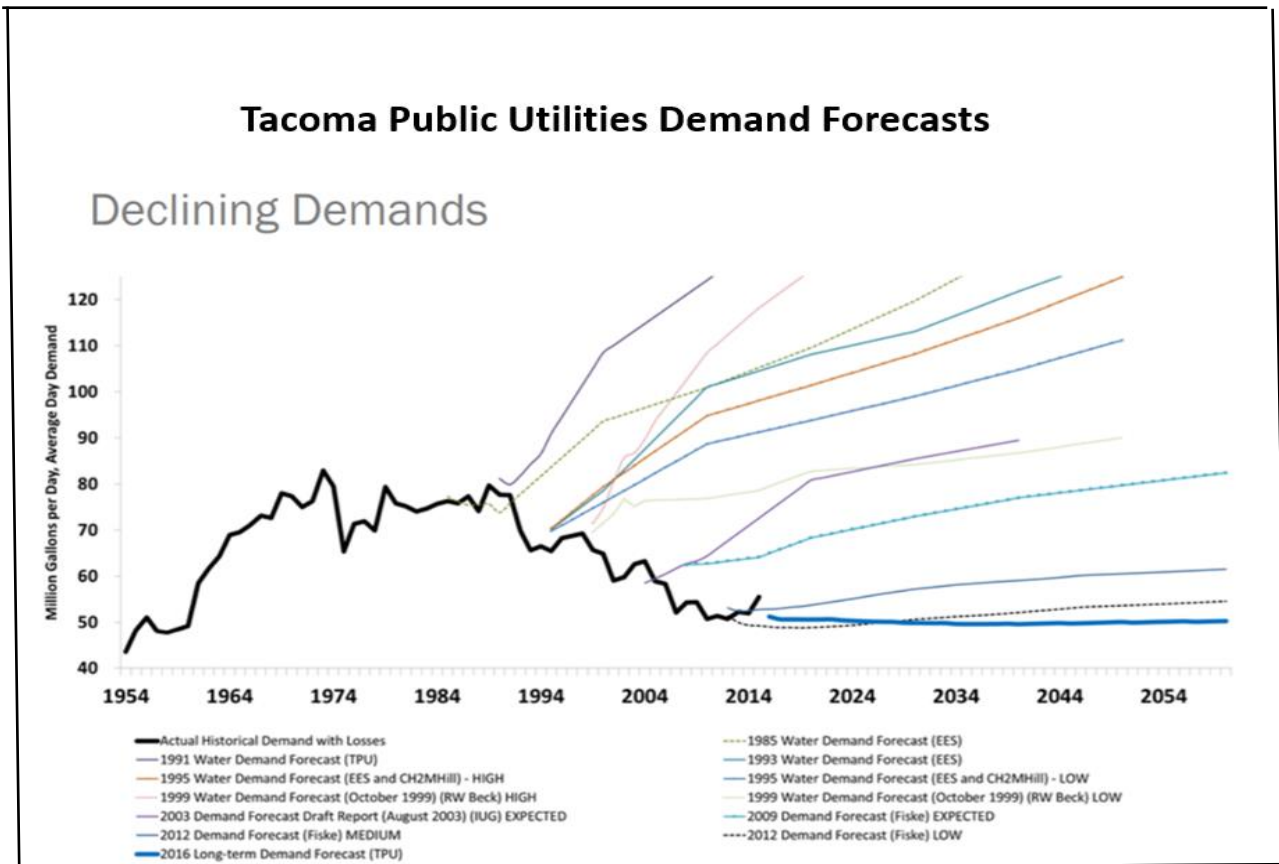


FIGURE 1. TPU demand forecasts over time. Early projections were overestimated and have become more in-line with actual declining demand. Tacoma Public Utilities, 2018 Water System Plan

<https://www.mytpu.org/tacomawater/water-source/water-system-plan.htm>

Therefore, the Legislative Report should recommend that legislation be developed to strengthen conservation targets and goals among all customer sectors, especially high consumption users, require water providers to reduce leakage to below 5% (real water leakage reductions, not accounting errors), and make some or all of these measures mandatory. The 2023 session is likely too soon to develop this legislation but any future planning process must involve federally recognized Indian Tribes.

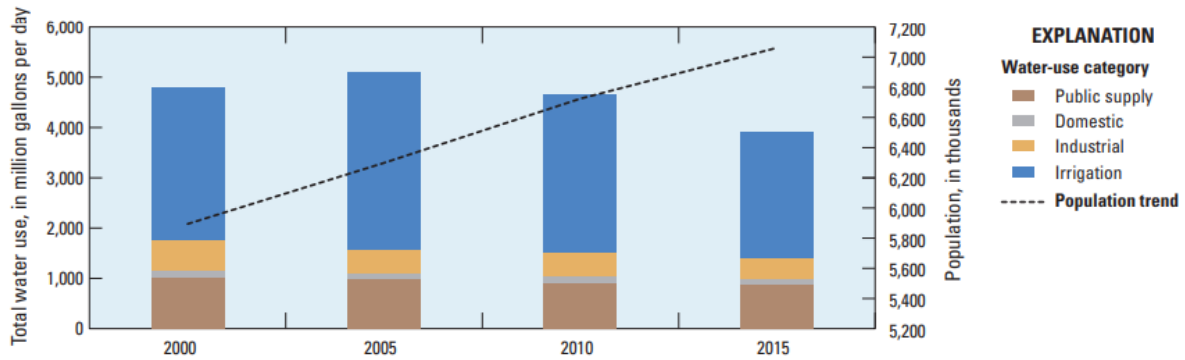


Figure 3. Water use and population trend in the state of Washington, 2000–2015. Population has steadily increased whereas the total water use has decreased. The largest decrease in water use has been in irrigation and industrial areas.

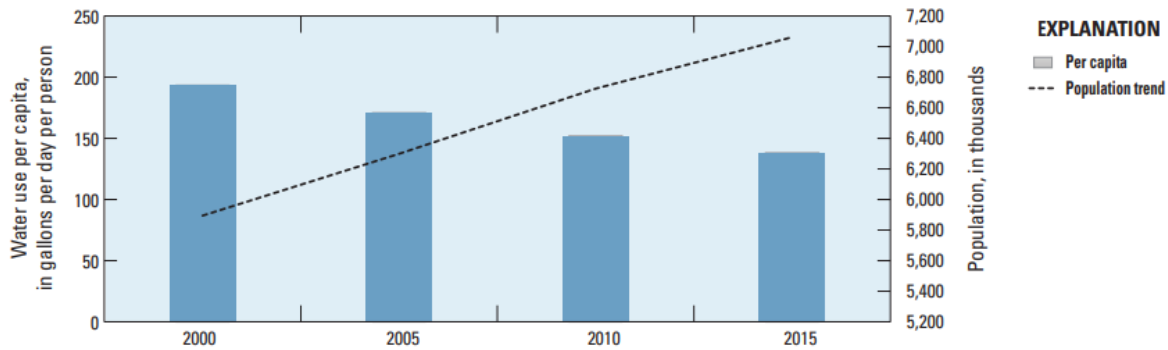


Figure 4. Water use per capita trend in the State of Washington, 2000–2015. Population has increased since 2000, the total amount of water used per capita has decreased during the same time.

Water Use Trends

The State of Washington population has increased steadily since 2000, whereas the total water use has generally decreased (figs. 3 and 4). The most noticeable decrease in water use has been in irrigation, likely because of several factors, including more efficient irrigation methods and less water available in

dry years. Despite the increasing population, total water use for public and domestic supply has also decreased steadily over the past 15 years. The steady decrease in the amount of water an average person uses a day (per capita water use) is primarily due to an increase in water conservation practices and education, as well as water-efficient facilities and appliances.

FIGURE 2. Water use per capita has declined with increasing population in the State per the USGS Water Use in Washington, 2015, report: (<https://pubs.usgs.gov/fs/2018/3058/fs20183058.pdf>):

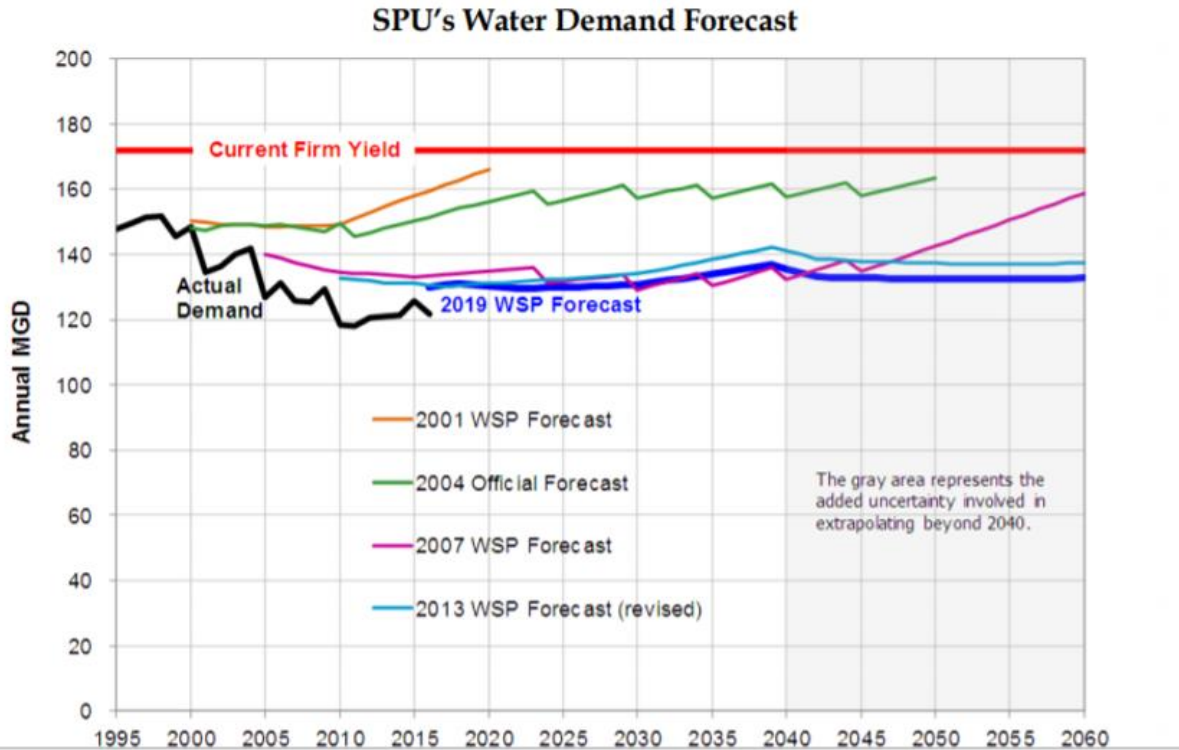


FIGURE 3. Since 1990, total water use has decreased by 28% while the population served has increased also by 28%. Source: <https://www.seattle.gov/utilities/about/plans/water/water-system-plan>

2. SOURCE SWITCH

The definition of this term is needed. The comments here are related to changing a source from a surface water to groundwater. More discussion on this topic could be fruitful as long as instream flows rights are not impaired and WDFW, WDOE, and federally recognized Indian Tribes agree with the outcome.

3. & 4. IMPACTS, IMPAIRMENT AND DE MINIMIS USE

Any legislation to change the results and findings of the *Postema* Decision are opposed by the Tribe. The Legislature should not engage in furthering weakening of case law that protects minimum instream flows for salmon and threatens tribal treaty rights. The Supreme Court properly ruled that impairment was a factual question and disagreed that hydraulic continuity equates to impairment as the PCHB Court did and some Task Force members, and Ecology, have stated or implied. Also, the Court properly found that Ecology can use the best science available to determine impairment. Perhaps the Court should also have found that best professional judgement and common sense be used when evaluating model results – then discussions about “very small impacts shown on far away streams”, which are known to qualified professional MODFLOW modelers as “noise” or “not real” could have been averted.

Any weakening of the de minimis standard of impairment is also opposed; which should be of concern to any senior water right holder. Remember, the Foster Decision stated, “our State’s long-established

‘prior appropriation’ and ‘first in time, first in right’ approach to water law, ... does not permit any impairment, even a *de minimis* impairment, of a senior water right.”

5. MITIGATION AND NET ECOLOGICAL BENEFIT

These are complex and factual issues that should not be addressed at the Legislative level, but discussed among state resources agencies and federally-recognized tribes.

6. OVERRIDING CONSIDERATION OF THE PUBLIC INTEREST

The Tribe believes that the Foster Court made the correct finding that OCPI is not an alternative to the traditional permitting process and that short term, temporary uses only should fall under that umbrella.

7. MODELING

Perhaps a technical group or committee could discuss and clarify the use and uncertainties of models used in water right evaluations; however, in our experience with such processes, participants are heavily weighted toward the potential applicant with their consultants outnumbering neutral members, or resource protection members. Also, consideration should be given to other methods of technical assessments for less complex situations. Of course, strong coordination with federally-recognized tribes must occur.

The arguments that modeling is seriously flawed are misleading and sometimes untrue. For example, Spanaway’s consultant provided an update on the project at one of the Task Force meetings where he stated, the USGS pending model found “small impacts that can’t be mitigated because they are too far away from the service area”. According to modelers involved in the USGS study I have spoken to, those type of findings are “not real” and part of the “noise” of a complex model. Professional knowledge and judgement should not be ruled out in model interpretations.

Likewise, statements about the USGS not knowing about an aquifer in the Kitsap groundwater model for the Port Orchard pilot project, has often been used as justification for why models are not valid. The city’s consultant drilled new deep wells some years after the USGS work. There were no such deep wells present in the earlier USGS work. Modeling is only as good as the data that goes into it - misstatements that have been made about modeling are really just a distraction. They are misleading and damaging to sound scientific analysis. I hope that the final Report does not use this type of rhetoric. I can provide more clarification on the Port Orchard modeling issue if necessary, to provide a more balanced explanation for the Report.

Stakeholder Recommendations



CITY OF PORT ORCHARD Office of the Mayor

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September 19, 2022

Sen. Judy Warnick, Co-Chair
Joint Legislative Committee on Water Resource Mitigation
316 Legislative Building
Olympia, WA 98504

Rep. Steve Tharinger, Co-Chair
Joint Legislative Committee on Water Resource Mitigation
314 John L. O'Brien Building
Olympia, WA 98504

RE: Task Force Recommendations from City of Port Orchard

Dear Senator Warnick & Representative Tharinger:

Thank you for the opportunity to present you with comments and recommendations from the City of Port Orchard (Port Orchard) for your Task Force report to the Legislature. We appreciate the extensive commitment of time and effort that you and others have given to the Foster Task Force over the last five years. As one of the Foster Pilot Projects, we are sharing with you our perspective and experience with flexible mitigation standards and recommending changes to make this a less complicated and more predictable pathway for other water right applications.

Port Orchard has a rapidly growing retail service area in Kitsap County. Our aging water system infrastructure and the integration of the McCormick Woods water system into the city system requires new high-capacity wells situated in deep aquifers where impacts to instream flows and fish resources can best be minimized. Through the Pilot Project applications and associated water system and mitigation planning, we are doing our best to conserve water, to decrease impacts from existing water rights by switching to deeper aquifers, and to mitigate impacts to several creeks in a meaningful manner that is also consistent with the purpose and intent of the Foster Pilot Project authorizations.

We are requesting that your final Task Force Report recommend legislation to broaden the types of mitigation options that cities like Port Orchard can utilize, and to require science-based standards for the use of groundwater models to determine impairment of surface waters. The Legislature could also address regionwide mitigation of cumulative small or *de minimus* impacts from municipal water systems that cannot reasonably be addressed by individual water right applicants.

The Port Orchard Pilot Project and Kitsap Regional Groundwater Model

Port Orchard is one of five designated pilot projects and has provided several presentations about its applications and mitigation plan to the Task Force. The most significant problems encountered by Port Orchard in this process have been with use of the USGS ground water model for the Kitsap basin. Our hydrogeologists have identified numerous errors in the USGS model, including the complete absence of the deep aquifer that was discovered when drilling our new Well No. 13. We have attempted to resolve those errors scientifically by eliminating modeled impacts that our scientists have determined are within the model error limits of the Kitsap model. The Department of Ecology, however, does not agree with this approach and appears to consider erroneous model results as impairments requiring mitigation.

Ground water models are not perfect science, but they are increasingly relied upon by the Department of Ecology to predict impairments to instream flows and closed streams that require mitigation. Models are not precise tools for predicting the effects of long-term ground water withdrawals on surface water flows and levels. Several kinds of errors in models lead to erroneous or imprecise results, including 1) input values that only approximate real world measurements, 2) lack of data, particularly for deeper aquifers, 3) limitations of the modeling algorithm that cannot fully represent natural, physical processes, and 4) errors in parameter estimations selected by the modeler during the calibration process. These types of errors are particularly an issue when Ecology mandates (in our case through preliminary permits) the use of regional models created by the USGS to define small, local impacts from individual applications, a task they were not designed for. More discussion concerning errors in ground water models will be provided in a separate letter to the Task Force by our hydrogeology consultants.

Port Orchard has met with Department of Ecology officials to discuss how model errors in the USGS Kitsap model can be scientifically estimated so that predicted streamflow impacts within “model error limits” can be disregarded in Port Orchard’s mitigation plan for its Pilot Project applications. Ecology officials, however, have informed us that all model results must be considered as impairments requiring mitigation. In other words, even what scientists consider to be model errors will be considered as evidence of impairment by Ecology. This is an unscientific use of the science of ground water modeling because it fails to address errors inherent in the models themselves.

Science used in an unscientific manner is not science, it is policy masquerading as science. The impact of this is to require more and more mitigation without a demonstrable impact to streams.

Ecology’s unscientific use of ground water models could jeopardize approval of Port Orchard’s Pilot Project applications. This issue should be addressed by the Task Force and the Legislature as part of any workable set of reforms to ground water permitting. Specifically, we are requesting action items in your final Task Force report to insure that scientific methods like groundwater models are not used in an unscientific way to require mitigation without proof of impairment.

Using Municipal Water Rights to Augment Instream Flows

A major portion of Port Orchard’s in-kind (Tier 2) mitigation plan is to directly augment the flow of several impacted creeks with water piped from municipal water systems. This mitigation method has been approved by Ecology for Port Orchard’s water system in the recent past, but not since the Foster decision. Streamflow augmentation is the only reasonably available in-kind/in-place/in-time mitigation method for several local creeks that are projected to be impacted by Port Orchard’s requested groundwater withdrawals. However, the Department of Ecology has questioned whether Port Orchard’s already permitted water rights, or those of neighboring water systems, can be used for stream augmentation mitigation without changing their purpose to include mitigation, another set of water right change applications that could take years to process. We believe that Ecology’s interpretation is overly technical, could delay decisions on Port Orchard’s applications for years, or could force Port Orchard to fund more

expensive and less beneficial out-of-kind or out-of-place mitigation in order to meet the Pilot Project mitigation standards.

SPECIFIC REQUESTS/RECOMMENDATIONS

Port Orchard requests that the Foster Task Force recommend that the 2023 Legislature pass legislation: (1) addressing the model error issue and requiring Ecology to use ground water models in a scientifically-sound manner that accounts for model errors and imprecision; and (2) broadening the allowed types of mitigation for pilot projects and other new applications and groundwater permit changes to include streamflow augmentation from municipal water systems without needing to change municipal water rights. Port Orchard also supports making the flexible mitigation standards for the Foster Pilot Projects a state-wide standard or broadening the availability of those standards to other ground water dependent municipal water systems. This would help water purveyors and municipalities throughout the state comply with GMA plans using mitigated water rights and achieve planned urban growth that protects rural areas and watersheds from overdevelopment.

All water right applicants should be allowed to utilize a flexible mitigation sequencing process like the mitigation sequencing currently allowed for the Foster Pilot Projects. This would result in mitigation that can improve stream flows and habitat to benefit instream resources, rather than being limited to the rigid and unworkable “in kind, in time, and in place” *Foster* standard that makes both water supply and beneficial mitigation nearly impossible to achieve.

Our state’s overreliance on groundwater models to determine impairment, without accounting for model errors, is unscientific and dramatically increases the cost and complexity of mitigation. That said, there may small impacts to surface waters from additional groundwater development that do not rise to the level of impairment, and we appreciate the concern that multiple cumulative impacts of this sort across a watershed could impact instream resources over time. The Task Force could address this problem at a larger scale similar to the way it addressed permit-exempt well impacts in SB 6091. In Part 1 of this bill, the Legislature directed significant funding into planning and implementing mitigation to offset exempt well impacts caused by growth in rural areas. We believe that there is a stronger policy rationale for state legislative action to ensure the availability of mitigated water supply necessary for urban growth. This could be achieved through a collaborative process at the watershed or sub-watershed level, focused on mitigating cumulative impacts and working with municipal purveyors to improve stream flows and habitat in a meaningful way.

Please feel free to contact me if you have further questions.

Sincerely,

DocuSigned by:



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CITY OF PORT ORCHARD

Robert Putaansuu, Mayor

cc: Members, Joint Legislative Task Force on Water Resource Mitigation
26th Legislative District delegation
Alison O’Sullivan and Tom Ostrom, Suquamish Tribe
Erica Marbet, Squaxin Island Tribe
Carrie Sessions, Executive Policy Office
Laura Watson, Director, Department of Ecology

September 18, 2022

State Representative Steve Tharinger, Co-Chair
Joint Task Force on Water Resource Mitigation
314 John L. O'Brien Building
Olympia, WA 98504

State Senator Judy Warnick, Co-Chair
Task Force on Water Resource Mitigation
316 Legislative Building
Olympia, WA 98504

RE: Comments to Joint Legislative Committee on Water Resource Mitigation

The Regional Water Cooperative of Pierce County (RWPC) represents 26 public water utilities in Pierce County that serve a population of over 750,000 in Pierce County and nearly 100,000 in eight additional counties. The RWPC supported legislation in 2018 to address the State Supreme Court's *Foster vs. City of Yelm* decision. The legislation that created the Joint Legislative Task Force on Water Resource Mitigation ("Task Force") included two pilot projects by RWPC members, the City of Sumner and Spanaway Water Company. This inclusion reflects the difficulty faced by municipal water suppliers in fast growing areas of the State. John Weidenfeller, Manager of Thurston PUD, a RWPC member, also currently serves as a member of the Task Force representing the Washington Water Utilities Council and municipal water suppliers.

The issues being addressed by this task force have evolved over time and will require legislative action to resolve. Currently, under *Foster*, any new water right application must fully address any and all possible impacts on surface waters with "in kind, in time, in place" mitigation. The 2000 Supreme Court *Postema* decision effectively closed ground water appropriations in any water basin with an instream flow or closure based upon potential hydraulic continuity between ground and surface waters leading to any impairment thereof.

After *Postema*, water right applicants had to show that their requested ground water withdrawal would not impair surface water closures or instream flows, a near impossible standard. This led the Department of Ecology to require that all potential impacts are fully mitigated unless the Department determined that "overriding considerations of the public interests" (OCPI) justified approval of a ground water application that potentially could impact stream flows. The need for OCPI arose, in part, because most instream flows are set at levels that are supportive of multiple species of fish through their life cycles while also understanding that those regulatory flow levels are not anticipated to be met at all times. The Court's *Foster* decision, that

- City of Bonney Lake*
- Camino Water Association*
- Covington Water District*
- City of Fife*
- Firgrove Mutual*
- Fox Island Mutual Water Association*
- Fruitland Mutual*
- Graham Hill Mutual*
- Lake Josephine Riviera*
- Lakewood Water District*
- City of Milton*
- Mt. View-Edgewood Water Co.*
- City of Pacific*
- Parkland Light and Water*
- Peninsula Light*
- Pierce County Public Works and Utilities*
- City of Puyallup*
- Town of Roy*
- Spanaway Water*
- Town of Steilacoom*
- Summit Water & Supply*
- City of Sumner*
- City of Tacoma Water*
- Public Utility District No. 1 of Thurston County*
- Washington Water Service Co.*
- Valley Water District*

“withdrawals” under the OCPI statute, RCW 90.54.020(3)(a) are only considered available for limited temporary use, effectively renders the OCPI statute as written, moot.

What legislative direction should the task force provide? Foremost, as other states have done, allow the Department to make determinations that a stream impact is not, in and of itself, an impairment of a streamflow. In making this determination, identify that de minimis or ground water model error impacts are not considered impairment unless it clearly demonstrates that adding to existing de minimis and or model error cumulative impacts will result in impairment.

Legislation should also provide a means of determining that when the greater interests of the people of the State allow, a regulatory instream flow or closure may be impaired. In making this determination, consideration must be given not only to regulatory streamflow and respective aquatic habitat, but also recognition of existing flow condition and viable aquatic habitat, water needed to address grow management planning, expanding populations, increases in population density, population relocation, economic and industrial sustainability, as well as agricultural food production. This might include a review panel with input from state and local agencies, water utilities, tribes, environmental interests, and other stakeholders under a legislatively established structure.

When an impact is determined to be an adverse effect and therefore impairment under the water code, allow mitigation to best address that impairment in a manner that provides the greatest benefit to the aquatic environment. Ideally, impairment should be avoided. However, if unavoidable, allow mitigation that will improve the aquatic environment in the most effective manner. Requiring replacement flow augmentation in a stream that will continue to be dry downstream even when complete “water for water, in time, in place” mitigation is provided has at best, if any, very little environmental benefit. Like *Hirst* plans addressing exempt wells, mitigation should be allowed to provide aquatic habitat improvements that are effective in improving viable fisheries habitat rather than strict “in kind, in place, in time” mitigation that does not achieve an environmental benefit. Consideration might even be made for out of basin mitigation or aquatic improvements if the mitigation provides an even great aquatic environment benefit. Mitigation, to the degree required, should provide the greatest net benefit. Like a public interest determination, such a determination could be made by a panel of state, local, tribal, environmental, municipal and stakeholder interests.

The Regional Water cooperative of Pierce County appreciates the efforts of the Task Force members over several years. Finding solutions to the issues created by *Foster* and other earlier decisions is not easy and will take compromise by all as we seek to address the needs of the State’s aquatic environments and ever growing population. We look forward to continuing to work with Task Force with respect to our two members’ pilot projects and all our municipal suppliers as the Task Force completes its legislative report and possible legislation in the 2023 Session.

Sincerely,

Jeff Johnson, Executive Director

Larry Jones, President RWPC

cc: Members, Joint Task Force on Water Resource Mitigation

Carrie Sessions, Executive Policy Office, Governor Jay Inslee

Mary Verner, Water Resource Program Manager, Department of Ecology



September 19, 2022

Sen. Judy Warnick, Co-Chair
Joint Legislative Committee on Water Resource Mitigation
316 Legislative Building
Olympia, WA 98504

Rep. Steve Tharinger, Co-Chair
Joint Legislative Committee on Water Resource Mitigation
314 John L. O'Brien Building
Olympia, WA 98504

RE: North Bend Water Supply and Task Force Recommendations

Dear Senator Warnick & Representative Tharinger:

The City of North Bend would like to express its appreciation for the time and effort that you and others have devoted to the Foster Task Force. As North Bend has experienced for over the past 20 years, water rights permitting and mitigation is an extremely complex subject from both the legal and technical perspectives. North Bend's current situation is unique and urgent, and we are providing these comments to request that the final Task Force Report recommends legislation to broaden the types of mitigation options that purveyors like North Bend can utilize. Further, we believe there is an important role for the State to play in mitigating cumulative or even *de minimus* impacts that cannot reasonably be addressed at the individual permit level.

BACKGROUND - CITY OF NORTH BEND'S MITIGATED GROUNDWATER APPROVAL

In 2008, Ecology approved a mitigated groundwater permit for North Bend's Centennial Well location. This permit approval was a significant achievement as one of the first mitigated groundwater rights for a municipal purveyor in Washington State in a collaborative process with treaty Tribes that focused on matching mitigation timing and quantity with minimum instream flows set by rule. The mitigated permit included approval of two mitigation sources that North Bend could purchase from other water purveyors to offset impacts to the Snoqualmie River. The two approved mitigation sources were: (1) Hobo Springs, owned by Seattle Public Utilities in the Cedar River system, for

which North Bend has a long-term water supply agreement; and (2) wells near Rattlesnake Lake owned by the adjacent Sallal Water Association, which to date has refused to negotiate a water supply agreement in good faith with North Bend.

Ecology's 2008 permit decision also contemplated additional future mitigation sources, including two different options from Seattle Public Utilities' Tolt Reservoir. In addition, in 2018, with the support of Ecology, North Bend purchased a portion of the Cascade Golf Course, including its water rights in order to use the golf course water rights as an additional mitigation strategy.

FOSTER DECISION PREVENTS CERTAIN MITIGATION OPTIONS FOR NORTH BEND

The Hobo Springs mitigation option in Ecology's 2008 decision has been implemented, not because it complies with the *Foster v. City of Yelm* decision, but because Ecology specifically approved it as a mitigation strategy prior to the *Foster* decision. The Sallal wells mitigation option has not been implemented because of the refusal by Sallal Water Association to enter into a water supply agreement with North Bend (even though North Bend would agree to supply treated municipal water to Sallal above and beyond Sallal's supply of mitigation water). Like the Hobo Springs mitigation source, the Sallal wells were approved by Ecology prior to the *Foster* decision and would not meet the current *Foster* standard of perfect mitigation, although Ecology considers this source to be grandfathered in by its 2008 permit decision.

The *Foster* decision in 2015 has eliminated other mitigation options identified by both Ecology and North Bend in the 2008 permit approval. Specifically, using water supply from the Tolt Reservoir system to replace water in the Snoqualmie River system would not result in the exact "in kind, in time, and in place" mitigation required by the *Foster* decision. Similarly, the Cascade Golf Course water right could partially offset certain instream flow impacts during the summer months, but it does not meet the "perfect" mitigation standard required by *Foster* because of the seasonal nature of irrigation water rights and its nearby but different location than the City's Centennial Well.

MITIGATION NEEDED FOR GROWTH INSIDE THE URBAN GROWTH AREA

North Bend has devoted nearly 20 years and millions of dollars in technical studies, reports, legal review, and capital costs to obtain sufficient mitigation for its Centennial Well permit. Additional water supply is needed simply to enable North Bend to meet its obligations under the Growth Management Act (GMA) to serve residential and commercial growth inside its Urban Growth Area (UGA). Municipal water purveyors like North Bend have a duty to serve within their designated water system service areas. Because of the lack of approvable mitigation options under *Foster* standard, North Bend is now restricting

new water supply only to its incorporated city limits rather than supplying water service within the entire UGA, contrary to the policy of the GMA.

The adjacent Sallal Water Association, whose service area includes areas inside North Bend municipal boundaries and its UGA, recently adopted a water connection moratorium, and has a history of drinking water quality violations including e. coli resulting in boil water advisories. Unfortunately, Sallal has been unwilling to work with North Bend on mutually beneficial water supply and mitigation agreements that would improve water supply for both purveyors.

For North Bend, this means that our GMA goals for affordable new housing, commercial development to provide services to residents, and industrial growth for job creation are going unrealized. For example, there is pending interest from landowners for new housing and mixed commercial development along North Bend Way that cannot currently proceed because of water supply issues. Further, the Washington National Guard has planned for the construction of a new Readiness Center in the area around I-90 Exit 34, the major exit West of Snoqualmie Pass. Water supply is needed for this significant project of statewide importance, and also to ensure water supply for new commercial facilities at this critical interstate exit that serves truck and passenger traffic over Snoqualmie Pass.

SPECIFIC REQUESTS/RECOMMENDATIONS FROM NORTH BEND

North Bend requests that the Foster Task Force recommend that the 2023 Legislature pass legislation broadening the allowed types of mitigation for new or changed groundwater permits that would otherwise impair minimum instream flows or closed streams. Ironically, North Bend requires that it be allowed to implement the types of mitigation that Ecology's 2008 mitigated groundwater permit envisioned 15 years ago, prior to the *Foster* decision.

Based on our experiences in groundwater mitigation, we believe that water right applicants should be allowed to go through a mitigation sequencing process, similar to the mitigation sequencing currently allowed for those water right applicants proceeding as Foster Pilot Projects. This would result in mitigation that can improve streamflows and habitat to actually benefit instream resources, rather than being limited to the rigid and unworkable "in kind, in time, and in place" *Foster* standard that makes both water supply and beneficial mitigation nearly impossible.

Further, we believe the Foster Task Force should identify the need to allow for, and then address at a larger scale, *de minimus* or computer-modeled impacts that may not actually impair instream resources. Our state's overreliance on groundwater models and their "mathematically possible impacts", rather than actual harm to fish or instream

resources, frustrates GMA planning and impedes mitigation efforts that could provide actual benefit.

In SB 6091, which addressed the *Hirst* GMA/exempt well decision and created the Foster Task Force and pilot projects, the Legislature acted to direct significant funding into planning and implementing mitigation to offset exempt well impacts caused by growth in rural areas (the type of growth that the GMA purportedly discourages). North Bend, and many other cities and municipal water purveyors require additional water supply simply to serve growth inside the UGA – as required by law. If the Legislature can support legislation and funding to provide mitigation of exempt well water supply for rural growth, there is surely a much stronger policy rationale for state legislative action to ensure the availability of mitigated water supply necessary for urban growth. This could be achieved through a collaborative process at the watershed or sub-watershed level, focused on mitigating cumulative impacts and working with municipal purveyors to improve streamflows and habitat in a meaningful way.

Please feel free to contact me if you have further questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Rob McFarland', is positioned above the typed name.

Rob McFarland, Mayor
City of North Bend

cc:

Members, Joint Legislative Task Force on Water Resource Mitigation
5th Legislative District delegation
12th Legislative District delegation
Matt Baerwalde, Snoqualmie Indian Tribe
Anne Savery and Kurt Nelson, Tulalip Tribes
Carrie Sessions, Executive Policy Office
Laura Watson, Director, Department of Ecology

September 19, 2022

Sen. Judy Warnick, Co-Chair
Joint Legislative Committee on Water Resource Mitigation
316 Legislative Building
Olympia, WA 98504

Rep. Steve Tharinger, Co-Chair
Joint Legislative Committee on Water Resource Mitigation
314 John L. O'Brien Building
Olympia, WA 98504

RE: Task Force Recommendations

Dear Senator Warnick & Representative Tharinger:

Lakewood Water District (LWD) appreciates the extensive commitment of time and effort that you and others have given to the Foster Task Force over the last five years. These recommendations to the Task Force come from LWD's extensive experience with water rights permitting and mitigation. Throughout this period, we have witnessed evolving legal and technical problems that make groundwater permitting for growing communities frustrating, unduly expensive, and unpredictable.

LWD has both a growing retail service area south of Tacoma, and a wholesale service area encompassing most of Pierce County that is rapidly running short of water. We are also experiencing some of the worst problems with groundwater contamination from PFAs and PFOs due to our location adjacent to the Joint Base Lewis/McChord. Groundwater contamination from PFAs and PFOs and new state and federal drinking water regulations are resulting in the need to move water sources to deeper aquifers in our region in order to protect the health of our retail and wholesale customers, and security of our public water systems.

We are requesting that the final Task Force Report recommend legislation to broaden the types of mitigation options that retail and wholesale purveyors like LWD can utilize and for science-based standards when groundwater models are used to determine impairment of surface waters. We also believe there is an important role for the State to play in mitigating cumulative or even *de minimus* impacts that cannot reasonably be addressed at the individual permit level.

BACKGROUND

LWD has a portfolio of 33 water rights authorizing wells in four different aquifers to serve a population of over 60,000 persons in its retail service area alone. In 2002, to meet a growing demand for water supply in the rapidly growing suburban area southeast of Tacoma, LWD contracted to acquire and transfer 6 million gallons per day (GPD) of water rights from the old Tacoma Newsprint Plant to its deep aquifer wells. That change application took five years to process to a decision before the *Foster v. Yelm* decision, and was supported by a numerical groundwater model developed by hydrogeologists at Robinson & Noble, Inc. A mitigation algorithm and mitigation sources were included as conditions to the transfer, and now all 6 MGD and another 3 MGD of LWD's water rights are committed by contract to wholesale customers, including the Town of Steilacoom, Summit Water and Supply, Spanaway Water Company, Firgrove Mutual Water, and Washington Water Service Company (formerly Rainier View Water Company).

Projected growth in South-Central Pierce County is 2.1% per year from 2020 to 2040, which will increase demands for additional water supply from LWD. In 2011, LWD filed groundwater application G2-30571 for an additional 2,200 gallons per minute and 3,550 acre-feet per year to meet this increased demand. At the time, the Department of Ecology supported and encouraged this application because it would draw from the deepest aquifer closest to the Puget Sound and thus had the least potential for impacting instream flows and lake levels in the basin. However, the 2015 *Foster* decision changed the standards for mitigation of groundwater applications, which has delayed and complicated LWD's application to the point of near impossibility.

THE FOSTER DECISION AND ECOLOGY'S UNSCIENTIFIC USE OF GROUNDWATER MODELS IS PREVENTING APPROVAL OF LWD'S APPLICATION

LWD acquired several water rights to use as mitigation for application G2-30571 and can also manage its own extensive portfolio of groundwater rights to mitigate impacts on streams and lakes. These efforts have focused on nearby creeks and lakes within a reasonable distance of the proposed well sites near Steilacoom. However, the *Foster* decision and a much-delayed USGS regional groundwater model have made it nearly impossible to adequately mitigate what the regional model projects as theoretical impacts to surface water all across the basin, and even across watershed boundaries.

Ground water models are not perfect science, but they are increasingly relied upon by the Department of Ecology to predict impairments to instream flows and closed streams that require mitigation. Models are rough estimates, not precise tools for predicting the results of long-term groundwater withdrawals on surface water flows and levels. Several kinds of errors in models lead to erroneous or imprecise results, including but not limited to: 1) input values that only approximate real world measurements, 2) limitations of the modeling algorithm that cannot fully represent natural, physical processes, and 3) errors in parameter estimations selected by the modeler during the calibration process. These imprecision or approximation errors can lead to strange and inconsistent results in successive runs of a model. Other types of errors in ground water

models will be described in a separate letter to the Task Force by our hydrogeology consultants.

LWD has met with Department of Ecology officials to discuss how model errors can be scientifically estimated so that predicted streamflow impacts within “model error limits” can be disregarded in LWD’s mitigation plan for its ground water application. Ecology officials, however, have not acknowledged that model errors can be disregarded. In other recent cases, Ecology officials have informed applicants that all model results, including those within model error limits proposed by hydrogeologists, are considered evidence of impairment and require mitigation. This is an unscientific use of the science of groundwater modeling because it fails to address errors inherent in the models themselves.

Science used in an unscientific manner is not science, it is policy masquerading as science, and it is making groundwater permitting impossible. This issue needs to be addressed by the Task Force and the Legislature as part of any workable set of reforms to ground water permitting.

The *Foster* decision also severely constrains LWD’s mitigation options for application G2-30571 by requiring precise “in kind, in time, and in place” mitigation for all modeled impairments of instream flows and closed streams and lakes. LWD has the capability of improving instream flows in Chambers and Clover Creeks when most needed by fish and wildlife, and to improve water temperature conditions using streamflow augmentation from groundwater sources. We are confident that these efforts would meet the Foster Pilot Project standard of “net ecological benefit” in the watershed, but our mitigation efforts do not meet the “perfect” mitigation standard required by *Foster*, especially if Ecology insists on mitigation of modeled impairments below the model error limit. Indeed, LWD can help support those reaches of the Chambers/Clover Creek stream network where habitat and fish passage are still possible. Higher in the basin Clover Creek can exhibit intermittent flows due to the physical nature of the stream course. Even if LWD could do so, adding water to these reaches in response to Ecology’s policy requirements would make no sense as any water added would quickly be lost from the stream system resulting in no benefit.

SPECIFIC REQUESTS/RECOMMENDATIONS

LWD requests that the Foster Task Force report recommend that the 2023 Legislature pass legislation: 1) addressing the model error issue and requiring Ecology to use ground water models in a scientifically-sound manner that accounts for model errors and imprecision; and 2) broadening the allowed types of mitigation for new applications and groundwater permit changes that would otherwise impair minimum instream flows or closed surface waters. Making the flexible-mitigation standards for the Foster Pilot Projects a state-wide standard or broadening the availability of those standards to include LWD’s application G1-30571, would help LWD meet the water demand requirements of our rapidly growing retail and wholesale service areas, and help us to change water sources required by PFAs and PFOs contamination.

Based on our experience with ground water mitigation, we believe that all water right applicants should be allowed to utilize a flexible mitigation sequencing process, similar to the mitigation sequencing currently allowed for the Foster Pilot Projects. This would result in mitigation that can improve stream flows and habitat to benefit instream resources, rather than being limited to the rigid and unworkable “in kind, in time, and in place” *Foster* standard that makes both water supply and beneficial mitigation nearly impossible to achieve.

Further, we believe the Foster Task Force should identify the need to allow for, and then address at a larger scale, *de minimus* or computer-modeled impacts that may not actually impair instream resources. Our state’s over-emphasis on the specific results of ground water modeling as exact determinations of impairment, without accounting for model errors, is unscientific and dramatically increases the cost and complexity of mitigation. Further, it frustrates GMA planning and impedes mitigation efforts that could provide actual benefit to surface water.

SB 6091 included direct funding by the Legislature for mitigation to offset permit-exempt well impacts caused by growth in rural areas. LWD and many other municipal water suppliers need additional water supply to serve urban levels of growth inside planned urban growth areas, as required by the Growth Management Act. If the Legislature can support legislation and funding to provide authorization and mitigation of exempt wells in rural areas, we believe there is a much stronger policy rationale for state legislative action to ensure the availability of mitigated water supply necessary for urban growth. This could be achieved through a collaborative process at the watershed or sub-watershed level, focused on mitigating cumulative impacts and working with municipal purveyors to improve stream flows, water quality, and habitat in a meaningful way.

Please feel free to contact me if you have any questions. I would be happy to appear before the Task Force at your invitation.

Sincerely,



Randall M. Black, General Manager
Lakewood Water District

cc:

Members, Joint Legislative Task Force on Water Resource Mitigation
28th Legislative District delegation
29th Legislative District delegation
Carrie Sessions, Executive Policy Office
Laura Watson, Director, Department of Ecology



September 19, 2022

Sen. Judy Warnick, Co-Chair
Joint Legislative Committee on Water Resource Mitigation
316 Legislative Building
Olympia, WA 98504

Rep. Steve Tharinger, Co-Chair
Joint Legislative Committee on Water Resource Mitigation
314 John L. O'Brien Building
Olympia, WA 98504

RE: Task Force Recommendations Concerning Groundwater Model Error

Dear Senator Warnick & Representative Tharinger:

Thank you for the opportunity to present you with comments and recommendations for your Task Force report to the Legislature. I appreciate the time and effort that you and others have given to the Foster Task Force over the past several years. I am a Washington State Licensed Hydrogeologist with over 37 years of experience in the State. I have been active with groundwater modeling over most of that time. I am currently providing hydrogeologic expertise and groundwater modeling services to the Cities of Port Orchard and Sumner for their Foster Pilot Projects and previously provided such services to the Spanaway Water Company for their Foster Pilot Project. In this regard, I'd like to share with you my perspective on groundwater modeling and its use in defining streamflow impairment for the Foster Pilot Projects as well as for other non-Foster water right projects.

I am requesting that your final Task Force Report recommend legislation to require the imprecision of groundwater modeling be considered when such models are used to determine impairment of surface waters and that *de minimus* impacts and other modeled impacts below reasonable model error limits not be addressed by individual water right applicants. Rather, such impacts, if they truly represent impairment, should be addressed in a more holistic manner by the State.

The Use of Groundwater Models for Water Rights

In most basins in the State, new water right applications for groundwater will not be approved without defining how the groundwater withdrawal will impair regulated or closed streams and providing mitigation for those impairments. The Department of Ecology (Ecology) is increasingly requiring the use of groundwater modeling to define streamflow impairment. In fact, where a regional groundwater model designed by the USGS exists, Ecology mandates the use of that model for impairment definition as part of Preliminary Permits issued for the water rights application. For example, the Preliminary Permit issued by Ecology for the City of Port Orchard's new water right applications that are part of the Foster Pilot program states "production from the proposed new point (or points) of withdrawal **shall be** integrated in the Kitsap Groundwater Model developed by the USGS" (emphasis added). Our other water rights clients in Kitsap County, including the City of Bremerton and Kitsap PUD, have received similar requirements in their Preliminary Permits.

Such USGS models are not ideal for defining streamflow impairment due to proposed water rights. These models are regional in nature and are most suitable to regional-scale groundwater issues, while individual groundwater withdrawals are a unique combination of factors that vary on local and semi-regional to regional scales. The imprecision of groundwater models must be factored into results; if a modeled impact is within the model error, the model is actually silent on whether the impact occurs or not. Large impacts are certainly real, but very small ones could be totally fictitious. Yet, through my work on the Port Orchard Foster Project, Ecology seems to now be considering all modeled impacts, no matter how small and without any regard to model error, as impairment that must be mitigated.

Types of Model Error

All groundwater models, even small-scale models designed specifically for a water right application, produce model error. However, in general, the more regional the model, the larger the amount of imprecision. Groundwater models are not an exact science. They are built from (often thousands upon thousands of) estimates and, therefore, provide estimated results. There are several types of model errors, or imprecision. One is approximation errors, which are a consequence of a model not fully representing the real world. This type of error results from: 1) input values that only approximate real-world measurements; 2) a lack of data, particularly for deeper aquifers, resulting in the use of average values over large areas; and 3) errors in parameter estimations selected by the modeler during the calibration process.

Another source of error is sometimes called truncation error. Numerical models (such as MODFLOW models) are generally considered the most accurate of groundwater models. Numerical models use a complex algorithm, incorporating all the estimated property values discussed in the paragraph above, to estimate the solution. Please note I said estimate, not solve. Numerical models never reach an answer; rather, they repeatedly estimate an answer, theoretically getting closer and closer with each iteration until the modeled values fall within the criteria set by the modeler, but never actually reaching the answer. Because of this, if a model is stopped after a few iterations, it will give a different result than if the same model is run for many iterations. Similarly, if even one input (and such models have tens of thousands of estimated inputs) is slightly different between model runs (even in a portion of the model not near the subject water right), the model will produce a different result. So, even this "most accurate" of model only produces estimated answers, with very small changes producing differing results.

Other types of model error also exist, such as those caused by limitations of the modeling algorithm that cannot fully represent natural, physical processes. For example, wells are simulated as drawing water from the complete aquifer thickness, when in reality they typically do not. There are many other such examples.

The result is that models have several sources of error and only produce estimated, imprecise results. Because of this, small values should not be trusted as being accurate or correct.

Definition of Model Error

Because of the many sources of potential imprecision, it is impossible to fully define model error. However, it can be estimated. One method, for example, is to repeatedly run a numerical model that theoretically should produce the same result and compare the differences in the answers. Those differences represent the degree of model error. We used this method to estimate model error for the Port Orchard Foster Pilot Project, and in that case, found that changes in streamflow of less than 0.01 cubic feet per second or less than 0.5% of the baseflow could

not be relied upon. Therefore, we defined these very small modeled “impacts” as not rising to the level of impairment. Ecology, however, does not agree with this approach and has informed us that all modeled impacts must be considered as impairments requiring mitigation. (Note that Ecology appears willing to accept the omission of positive modeled impacts to stream flows, whether they are above the model error threshold or not, just not negative modeled impacts.) They acknowledge that model error exists but refuse to allow it to be used as a part of the definition of impairment.

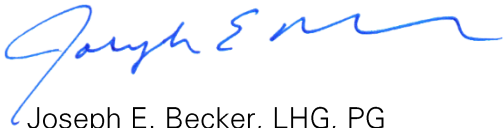
Requests and Recommendations

Groundwater modeling may be the best available science to use in defining impairment, but it is not a perfect science, and its imprecision must be taken into account when defining impairment. Groundwater modeling cannot determine if very small impacts are real or not. If modeled impacts that fall beneath model error limits are actually real, they are *de minimus*. And while *de minimus* impacts from multiple water rights can over time add up to true impairment, such very small values should not be the responsibility of the individual water rights holders but rather by society as a whole.

As an experienced groundwater scientist and modeler, I request the Foster Pilot task force recommend to the Legislature to pass legislation that addresses this model error issue and requires Ecology to account for model errors and imprecision. Additionally, to account for the additive effect of *de minimus* impacts that cannot be reliably determined by groundwater models, and therefore cannot be assigned to a single water right holder, legislation should develop basin-wide stream improvement projects to offset small, cumulative impairments, similar to the way the Legislature addressed permit-exempt well impacts in SB 6091. Requiring water right applicants to mitigate very small impacts that cannot be affirmed through groundwater modeling will not only affect municipalities but also irrigators, industry, small purveyors, and anyone else who needs a water right. The result will be to stifle economic activity in the State with only extremely small ecological benefits.

Thank you for considering my comments. Please feel free to contact me if you have further questions.

Sincerely,
Robinson Noble, Inc.



Joseph E. Becker, LHG, PG
Principal Hydrogeologist

September 15, 2022

State Representative Steve Tharinger, Co-Chair
Joint Task Force on Water Resource Mitigation
314 John L. O'Brien Building
Olympia, WA 98504

State Senator Judy Warnick, Co-Chair
Joint Task Force on Water Resource Mitigation
316 Legislative Building
Olympia, WA 98504

RE: Comments & Suggestions to Joint Task Force on Water Resource Mitigation

The Washington Public Utility Districts Association (WPUDA) represents 28 public utility districts in Washington State, 17 of which provide water supply. WPUDA supported legislation in 2018 to address the harmful and unworkable impacts of the State Supreme Court's *Foster vs. City of Yelm* decision, and while legislation did not pass, supported the creation of the Joint Legislative Task Force on Water Resource Mitigation ("Task Force"). Two PUD water system managers (Bob Hunter, Kitsap PUD and now John Weidenfeller, Thurston PUD) have served as members of the Task Force.

Background – Where Are We?

WPUDA believes that state legislative action is necessary to modify the *Foster* decision, and also to clarify and codify workable standards from the earlier *Postema vs. Pollution Control Hearings Board* case. While the unworkable *Foster* decision was the primary motivation for the creation of the Task Force, the relationship and importance of *Postema* can be explained by the following analogy: if the walls of a house are cracking, the actual solution involves more than just cosmetic drywall repairs if the cause of the cracking is the foundation of the house. So it goes with *Postema* and *Foster* – *Foster* legislation that does not consider how *Postema* should be implemented would be putting spackle and paint on cracking walls while averting attention from the crooked foundation.

The foundational flaws with Ecology's instream flow rules and regulatory closures include that they: (1) were originally adopted to apply only to all surface water, but not to all groundwater applications; and (2) adopted at levels that by design, will not be met by actual flows; and (3) include minimum flows and blanket closures during high flow periods (late fall, winter and spring) where "not achieving the adopted instream flow" has no negative impact on

fish or aquatic life – yet is the basis to deny groundwater applications. The *Foster* decision did not cause these foundational problems - it revealed them. The *Postema* decision, and its application to instream flow rules and closures are a foundational issue that must be included to achieve meaningful legislative solutions.

How Did We Get Here?

Postema and Instream Flow Rules

As to the City of Yelm’s original permit application and mitigation plan, Ecology incorrectly applied *Postema* to conclude that even with the significant in-kind and out-of-kind mitigation, that “impairment” of instream flows would occur. This was an ill-fated conclusion by Ecology that was unnecessary under the *Postema* decision – because there was no adverse impact to instream resources. Ecology’s misapplication of *Postema* resulted in the need for Ecology to resort to a statutory exception, the “Overriding Consideration of Public Interest” exception (“OCPI”) to impairment. And continuing the earlier analogy, the OCPI exception itself was already on a shaky foundation, given the Supreme Court’s rejection of how Ecology applied the OCPI exception to create limited reservations of water for exempt domestic withdrawals in the Skagit Basin Instream Flow Rule. ¹

In the City of Yelm permit decision, Ecology could and should have applied *Postema* to support a finding of no impairment. This is because *Postema* stands for the proposition that absent a showing of an adverse impact, the fact that groundwater and surface water are connected is not impairment:

“Additionally, we reject the premise that the fact that a stream has unmet flows necessarily establishes impairment if there is an effect on the stream from groundwater withdrawals.

...

We hold that hydraulic continuity of an aquifer with a stream having unmet minimum flows is not, in and of itself, a basis for denial of a groundwater application.”

Postema v. PCHB, 142 Wn.2d 68, 93 (2000).

Despite these clear statements in *Postema* that an “effect” on a surface water does not necessarily result in legal “impairment,” Ecology nonetheless saddled the City of Yelm with a

¹ Ironically, the use of OCPI in the amended Skagit Rule, like in the City of Yelm application, was also strange given that the amended Skagit Rule achieved what Ecology said was the effect of the original Skagit Rule when first adopted: “Ecology has not proposed to limit the statutory right to develop an exempt well.” (Ecology 2001 Skagit Rule, Explanatory Statement p. 24)

finding of impairment, necessitating the use of the already tenuous OCPI exception, ultimately resulting in the *Foster* litigation and Supreme Court decision that has caused a de facto moratorium on groundwater permitting in Washington State.

Postema and Closed Surface Water Bodies

Despite the Supreme Court's recognition in *Postema* that groundwater pumping affecting a stream does not necessarily cause adverse impacts on instream resources, the Court drew a categorical distinction between minimum instream flows and surface water closures:

“. . . a stream closure is not an appropriation, but is rather a recognition that the water in the stream is insufficient to meet existing rights and provide adequate base flows. Thus, where a proposed withdrawal would reduce the flow in surface waters closed to further appropriations, denial is required because water is unavailable and withdrawal would be detrimental to the public welfare. . . .

Stream closures by rule embody Ecology's determination that water is not available for further appropriations. Since this is a basis on which a water permit application must be denied under RCW 90.03.290 independent of the question whether a withdrawal would impair an existing right, we hold that a proposed withdrawal of groundwater from a closed stream or lake in hydraulic continuity must be denied if it is established factually that the withdrawal will have **any effect** on the flow or level of the surface water.”

Postema v. PCHB, 142 Wn.2d 68, 94-95 (2000) (emphasis added).

The *Postema* court's language with respect to surface water closures was overbroad (to say the least) and heedless of the circumstances and intent underlying many stream closures. Ecology has routinely closed surface waters in basin regulations that were explicitly intended *not* to foreclose groundwater withdrawals.

For example, the Deschutes Basin rule explicitly does not apply to groundwater permit applications “unless it is verified that such withdrawal would clearly have an adverse impact upon the surface water system contrary to the intent and objectives of this chapter.” (WAC 173-513-050.) The Pollution Control Hearings Board has reconciled this rule language with the *Postema* “any effect” standard by holding that a stream closure applies to groundwater applications only where groundwater withdrawals “produce any effects which adversely impact the values identified in [the Deschutes Basin Rule].” *Squaxin Island Tribe v. Ecology, et al.*, PCHB No. 05-137 (Modified Findings of Fact, Conclusions of Law, and Order, November 20, 2006) at ¶¶97-103. The PCHB explained:

“A reduction in stream flow does not necessarily equate to harm in the quality of the natural environment. If a reduction in stream flow occurs only during the winter months when there is ample flow in a particular stream, for example, it is difficult to see how the water is not ‘available’ for appropriation”

Id., ¶100.

Again, rather than determining whether there would be any adverse impacts on fish, wildlife, recreation, water quality, or other instream resources in closed surface water bodies, in *Foster Ecology* simply resorted to an unnecessary and questionable OCPI exemption which was struck down by the Supreme Court.

Key Findings from Van Ness Feldman Presentation

In combination, the application of Ecology’s instream flow rules to groundwater applications; the adoption of flow levels that cannot be met; the agency’s year-round closure of many streams; Ecology’s incorrect application of *Postema* to find “impairment” whenever there is an “effect,” and the mitigation limitations of the *Foster* decision create impossible groundwater permitting requirements.

The key conclusions from the presentation by law firm Van Ness Feldman to the Task Force, which surveyed numerous other Western prior appropriation states with similar regulatory instream flow programs, should be no surprise to Task Force members:

“Washington is the only state that specifically characterizes impairment of regulatory flows to include de minimus impairment.

Washington is the only western prior appropriation state with regulatory flows that has affirmative law requiring that mitigation to offset impairment be in kind, in time, and in place.

In some of the other studied states, like Colorado, the state water regulatory agency has discretion in determining whether to accept mitigation (even when that mitigation is not in kind, in time, and in place).”

Presentation to Foster Task Force 6/22/22, Slide No. 15.

Foster Task Force - Recommendations from WPUA

1. The Legislature should adopt objective standards in the water code, not subjective tests like the OCPI exception that has proven too unwieldy to have any reliable function for either Ecology or water right applicants.
2. The Legislature should clarify and codify two key holdings of *Postema*, as follows:
 - a. hydraulic continuity between groundwater and a surface water source that is either closed or is not meeting instream flows, is not, in and of itself impairment;
 - b. for Ecology to deny an application for groundwater where there is connection between groundwater and a surface water source that is either closed or not meeting flows, there must be an adverse effect on instream resources.
3. Create objective standards for the creation and application of computer groundwater models, including limiting groundwater modeled impacts to areas within the watershed or Water Resource Inventory Area, and not basing permit decisions on impacts that are outside a model's margin of error.
4. Create a transparent technical review board of qualified members that can be used to review complicated water right applications and mitigation plans.
5. Establish a collaborative state-local program so that impacts that are either *de minimus*, not adverse, or that in combination with existing conditions or other applications could have cumulative adverse impacts, can be mitigated at the watershed or sub-watershed level. If the Legislature can allow and then mitigate for exempt well impacts (The *Hirst* Fix), it should do the same for water rights necessary to implement the requirements of the Growth Management Act and the clear statutory preferences for water supply through public water systems, not private wells. It is inconceivable that the Legislature would support use of public funds to enable rural growth – but not support water resource mitigation necessary for GMA's primary purpose of enabling urban growth.
6. Allow water right applicants to use mitigation sequencing, which is used in numerous other environmental permitting areas, that follows the accepted sequence of (a) avoiding impacts; (b) minimizing impacts; and then (c) compensating for impacts with both in-kind and out-of-kind mitigation.

WPUDA greatly appreciates the level of interest and commitment that all Task Force members have shown over the past three years. We look forward to continuing to work with the Task Force as it prepares its final report to the Legislature, and on legislation in the 2023 Session.

Sincerely,

George M. Caan

George Caan, P.E.
Executive Director

cc: Members, Joint Task Force on Water Resource Mitigation
Carrie Sessions, Executive Policy Office, Governor Jay Inslee
Mary Verner, Water Resource Program Manager, Department of Ecology
Members, House Rural Development Ag & Natural Resources
Members, Senate Agriculture, Water, and & Natura Resources

13603 Jordan Trails Rd
Arlington, WA 98223

September 23, 2022

Dear Members of the Joint Legislative Task Force (JLTF) for Water Resources Mitigation:

In the sunset report you are preparing for the Legislature, it is important to identify:

Problem Statement. Conflicts involving water are universal, but Washington is the only State that the JLTF has identified that has found itself painted into a corner regarding water right mitigation like this one. Water is needed for beneficial uses, and often times a water right appropriation could result in impairment of instream flows and other water rights. However, ***impairments are defined—or assumed—so precisely that no mitigation may be designed to adequately remove the impairment.***

Causal Factors? The predicament the State finds itself in is not the fault of the Legislature, nor of any stakeholder, nor even the Courts. It is not that the State has done things wrong while all other states have done things right. Rather, the conundrum stems from the State of Washington doing a lot of things ahead of the curve, and not as a result of lagging behind. (I offer a few examples attached to this letter as Exhibit A.) Akin to my middle schooler outgrowing his clothes, we’re experiencing growing pains. Bottom line: I think it is important to ***clarify there is no “blame game” here, but there are certainly problems to be addressed.***

Action Items for Resolution

1. **Define terminology consistently.**

Yes, there’s complexity in water rights, but the fundamentals are all the same. ***Require uniform application of water right definitions to all water rights***, including established minimum instream flows.

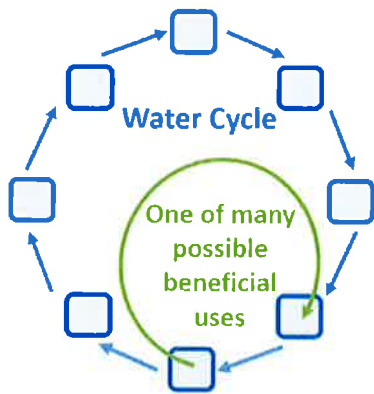
While many terms, such as instantaneous quantity, priority date, and place of use are consistently applied

across water rights, other terms, such as consumptive, non-consumptive, and impairment are not. Whether by statute or a statement of intent, the Legislature must insist on fair, uniform and consistent use of these terms. For example, consumptive water use is a beneficial use (appropriation) of water that involves all three of the following:

- 1) *diversion* (withdrawal; translocation) of water which results in the
- 2) *diminishment* of the quantity, quality, flow rate, and/or availability of the source water, and
- 3) creation of some geo-spatial *bypass reach*, where that water is unavailable for use.

Impairment, for example, is the loss of function or ability of a water source to provide the water which has been authorized and appropriated under valid water rights. If its measured in molecules for one use (which it should not), then it’s measured in molecules for all uses.





2. Acknowledge the water cycle.

The water cycle is the physical basis for establishing a quantitative water balance. It forces the recognition that appropriations of water require a reconciling of debits and credits for water sources, uses, and receiving waters. Perhaps akin to double entry accounting practices, **it increases the integrity of the process, and refines the resolution of impairment determinations.**

The water cycle also facilitates recognition of the translocation of beneficially managed water. In doing so, it becomes evident that **not all consumptive uses are equal. In fact, even some**

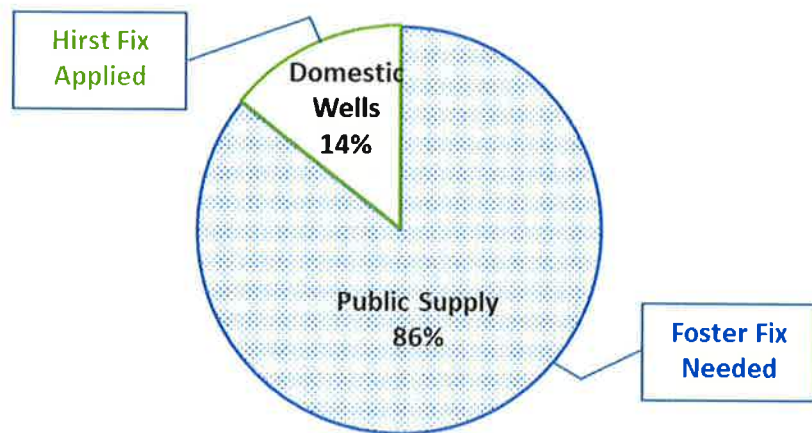
“traditional” consumptive uses do not generate significant bypass reaches and are predominately non-consumptive in nature. For example, facility siting, operational efficiencies, plumbing improvements, water conservation, and water reuse might create opportunities for implementation and use of traditional potable waters in a non-consumptive manner.

[Reference Ecology policy 1020.] But understand that in doing so, at the molecular level, there may no longer be any completely *non*-consumptive water uses.

3. Let the Hirst fix influence the Foster fix.

In 2018, the legislature passed ESSB 6091, codified as RCW 90.94, to remedy the Hirst court’s recognition that permit exempt wells cannot be allowed to impair instream flows and other senior water rights. Committees, which recognized return flows as offsets against consumptive withdrawals, quantified all domestic

Water Sources for Washington Citizens

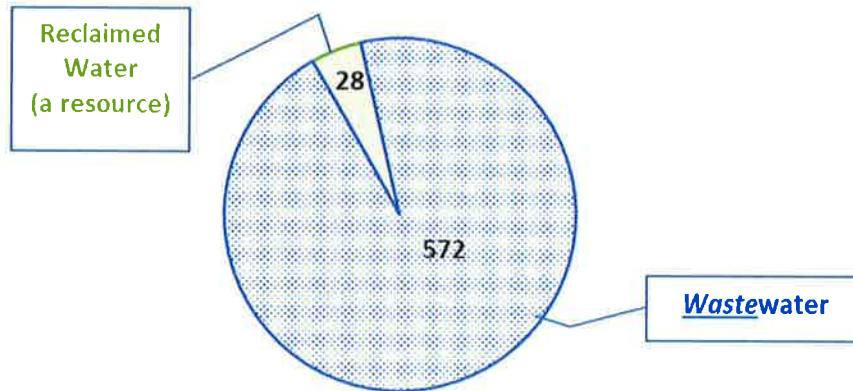


consumption over 20 year period as a small fraction of the total withdrawals. In WRIA 7, for example, only 1 cfs of the average annual flow of 2,500 cfs would be impaired, for which in-kind mitigation was achievable. Recognize non-consumptive municipal water rights, or **non-consumptive portions of water right portfolios, will be necessary to achieve resolution in the conflicts surrounding water right mitigation for municipal and other uses.** This is the approach with which the Hirst fix was successful for 14% of the State’s population. **Without it, the much greater need for a water right mitigation “fix” for the Foster court case will not be achievable.**

4. **Reduce, reclaim, return.**

There are upwards of 600 wastewater treatment plants in our state. In 1992, the Legislature envisioned that high quality effluent could prove to be a substantial resource to offset future demands. Yet 30 years after initial passage of a reclaimed water law, only about 28 facilities (less than 5%) reclaim some of their water—not the resource the Legislature intended. One

**Wastewater Treatment Facilities in WA
30 Years After the 1992 Reclaimed Water Law**



significant reason for this are 13 words in RCW 90.46.130 that the Legislature most certainly did not intend as Ecology implements them: “facilities that reclaim water under this chapter shall not impair any existing water right downstream from any freshwater discharge points”. In practice, Ecology provides no reclaimed water incentive to keep water instream. Rather they favor the dewatering and impairment of streams by encouraging “diverting high” in a basin and “discharging low” to marine environments or the Columbia River. On the contrary, however, many appropriations for potable water utilize septic systems, return flows, infiltration galleries, wetlands, and reuse of reclaimed water to offset diverted water quantities, resulting in a much smaller consumptive water footprint. Some may even come close to a net zero water balance for the water cycle components they affect.

Provide, in statute, incentives for utilities to reduce aquifer and instream impacts by returning reclaimed water to the source of withdrawal or diversion. Incentives should recognize reclaimed water is appropriate for and quantifiably equal to the development of new consumptive water rights. Accordingly, reclaimed water volumes and rates of flow returned to the source(s) are considered offsets (reductions) against the total consumption allowed under the water right.

Thank you for the opportunity to comment.

Sincerely,

Mike Wolanek

Exhibit A

The conflict the State of Washington finds itself in is, in part, a consequence of the tension caused by a number of things the State is doing right. The State, and the Legislature in particular, is doing a number of actions that numerous other states have not yet even considered. Solutions to water resource mitigation are needed, but there is certainly no blame to be placed on any of these contributing factors.

1. **Growth Management.** Only 13 states have growth management legislation that attempts to contain urban growth, including Washington. First established in 1990 as the 8th state to do so, Washington's GMA has been densifying communities with population growth longer than many others. See <https://vault.sierraclub.org/sprawl/resources/challenge/state.asp>.
2. **Rate of Growth.** Washington is among the fastest growing states. From 2016 to 2017, the State ranked fourth in both numeric population growth, and percent rate of increase. See page 2 of <http://www.futurewise.org/assets/resources/A-Beginners-Guide-to-the-GMA.pdf>.
3. **Instream Flows.** Fully one-third of states have not established minimum instream flow legislation. Washington is one of the two-thirds that has. Colorado, Nevada, and New Mexico are three western states with no significant instream flow protections. See <https://www.freshwaterinflow.org/summary-specific-us-state-statutes/>.
4. **Water Use Efficiency.** Some states have not advanced potable water use efficiency standards. Washington has. A representative from Nevada testified to the JLTF that that state has a goal of significantly reducing demand and using 100% of this conservation to supply growth over the same planning cycle. Yet a 2017 USGS report indicates that Washington State (74 gpcd) is nearly 3 times more efficient than NV (213 gpcd). See **Figure A-1** and <https://pubs.usgs.gov/of/2017/1131/ofr20171131.pdf>.
5. **Diversity of Interests.** Some states do not have many Tribes or other environmental interests. Washington has the fourth most number of federally recognized Tribes. After Alaska and California, and with seven times more Tribes than the median state, Washington is second only to Oklahoma in the number of unique Native American Tribes. To their credit, many of Washington's Tribes are active in water and other environmental interests. See **Figure A-2** and <https://www.ncsl.org/legislators-staff/legislators/quad-caucus/list-of-federal-and-state-recognized-tribes.aspx>.
6. **Water Reclamation.** Not many States have legislation supporting the reclamation of municipal wastewater. Washington is one of the few. See <https://ecology.wa.gov/Water-Shorelines/Water-quality/Reclaimed-water>.
7. **Court System.** Some would suggest that Washington's courts are more progressive than other states. See the second paragraph of <https://slate.com/news-and-politics/2021/03/washington-supreme-court-drug-possession-police-biden.html>.

Figure A-1.

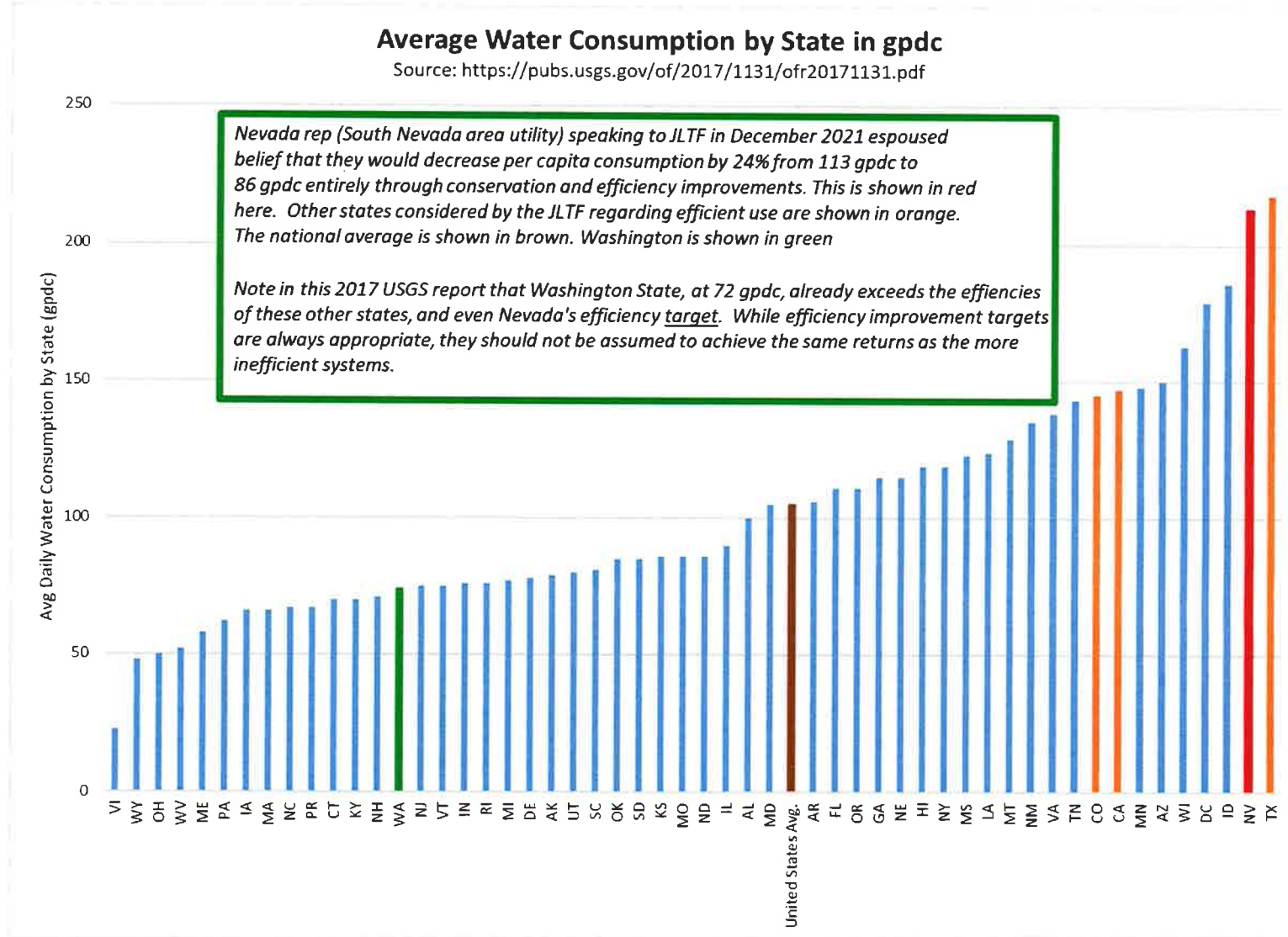
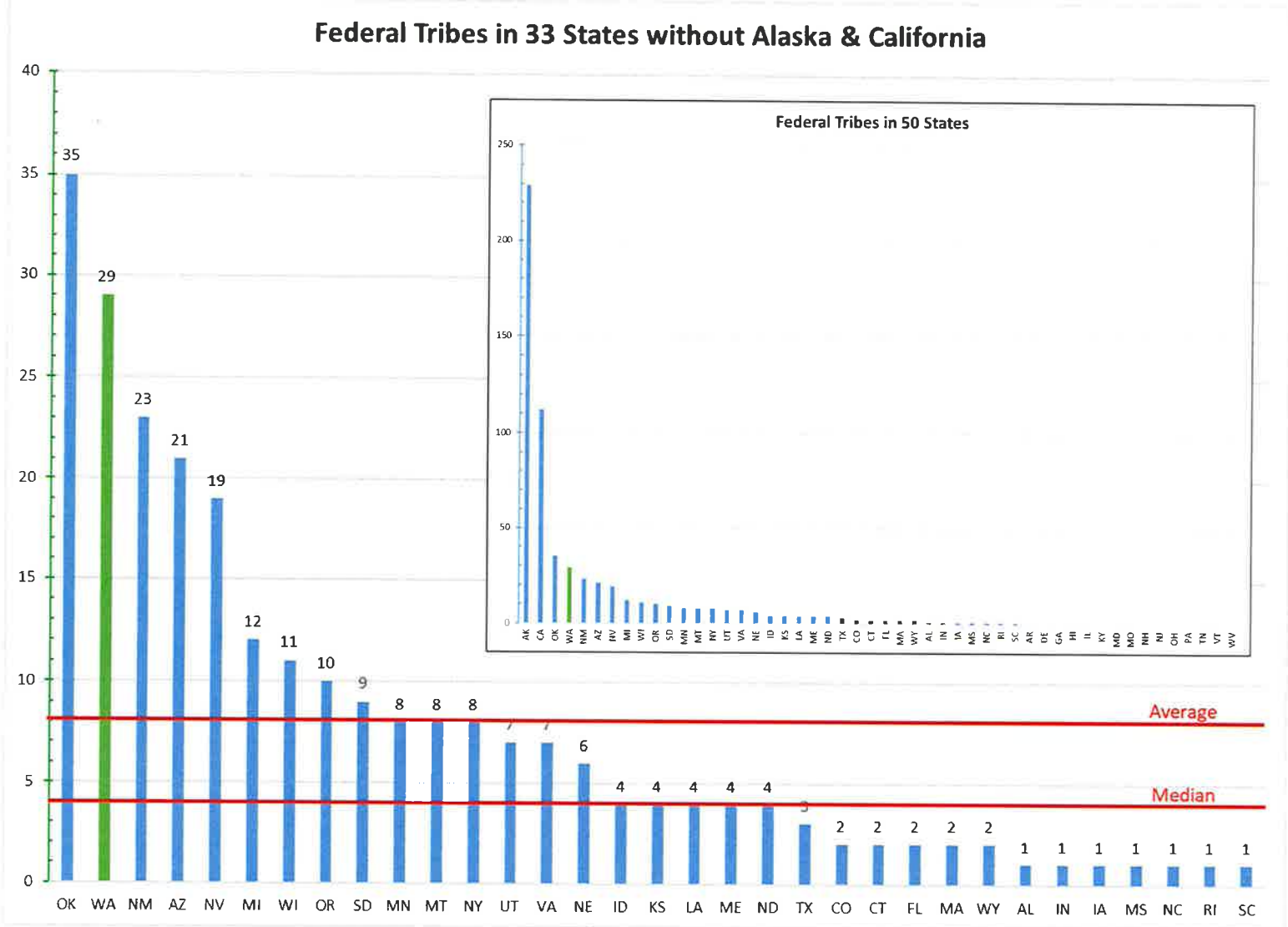


Figure A-2.



Comments from Task Force Members and Tribes on Recommendations

November 4, 2022

State Representative Steve Tharinger, Co-Chair
Joint Task Force on Water Resource Mitigation
314 John L. O'Brien Building
Olympia, WA 98504

State Senator Judy Warnick, Co-Chair
Joint Task Force on Water Resource Mitigation
316 Legislative Building
Olympia, WA 98504

RE: Comments and Recommendations on the Joint Task Force on Water Resource Mitigation (JLTF or Task Force) Recommendations in the Report to the Legislature

Dear Senator Warnick and Representative Tharinger,

On behalf of the Washington Water Utilities Council (WWUC), the state association of 190 Washington municipal water utilities, I would like to make some comments and recommendations on the topics that were and were not approved for inclusion in the JLTF Report to the Legislature. It has been an honor to serve on the JLTF and a lot of very good discussion and work was accomplished. As our Co-Chairs you did an incredible job!

I was pleased that a majority of the JLTF members were willing to ask the Legislature, in the JLTF Report, to explore creative solutions to **Mitigation and Net Ecological Impacts**, the potential for the Legislature to evaluate adoption of objective standards in the Water Code to replace the **Overriding Consideration of Public Interest (OCPI)**, or the return to some equivalent or a modified version of OCPI. It was also very promising that the JLTF members that voted were open to the Legislature considering and evaluating the challenges, complications, and interpretations of **Hydrogeological Computer Modeling** and ask the Legislature to explore ways to seek clarity, address the margin of error thresholds, and to address the uncertainty of groundwater modeling.

However, it was unfortunate that I, as an advocate was not able to adequately explain or persuade a sufficient number of my fellow JLTF members to support further exploration of **Impacts and Impairment** and how focusing on **De Minimis** impacts to stream flows could help Ecology manage our state's water resources for people, fish and farms. Over the next 20 years, in survey conducted in 2020 by the Association of Washington Cities, 115 cities have stated they do not have the water rights to be able to serve the new people arriving in the next 20 years. The concepts of **Impacts and Impairments** and **De Minimis** impacts, as used in other Western states, could be a valuable tool to help manage the State's water resources. Municipal Water Purveyors serve over 98% of the State's population and our members hold that prudent and thoughtful analysis of **Impacts and Impairments** and that the scientific use of **De Minimis** impacts in the allocation of the State's water resources has an important place in Ecology's tool kit for managing water resources. I respectfully request that this letter be included with the report, or as a minority report to address the following:

I. THE LEGISLATURE SHOULD CONSIDER CLARIFYING AND CODIFICATION OF TWO KEY FINDINGS OF THE *POSTEMA* SUPREME COURT CASE INTO STATE WATER LAW AS NOTED BELOW. THE SUPREME COURT PROVIDED THIS DIRECTION AND FLEXIBILITY, BUT IT IS VERY INFREQUENTLY USED AS A TOOL TO MEET THE NEEDS OF GROWING COMMUNITIES.

- ❖ Hydraulic continuity between groundwater and a surface water source that is either closed or is not meeting instream flows, is not, in and of itself impairment; and
- ❖ For Ecology to deny an application for groundwater where there is a connection between groundwater and a surface water source that is either closed or not meeting flows, there must be an adverse effect on instream resources.

These concepts would not constitute an “abrogation” of the *Postema* decision, or the creation of a new impairment standard.

II. WASHINGTON STATE IS THE LONE WESTERN STATE NOT CONSIDERING IMPACTS AND IMPAIRMENTS AND DE MINIMIS IMPACTS AS TOOLS TO HELP MANAGE WATER RESOURCES.

On June 22, 2022, members of the law firm VanNess Feldman LLP made a presentation to the JLTF. The presentation was called *Water Resources Laws Regarding Impairment and Mitigation of Regulatory Instream Flows in Other States Compared to Washington State*, prompted by the Ecology Publication 20-11-083 (July 2020) on the Washington Supreme Court’s *Foster* decision.

The study notes, that in Washington, the *Foster* decision requires a “perfect” mitigation requirement **for any, even de minimus**, depletions of regulatory set minimum stream flows. This makes new water rights to serve growing communities almost impossible to secure and means that a city or town, PUD, water district, non-profit community system, or a cooperative must supply mitigation that is:

- ❖ In kind (wet water mitigation—and not other types of mitigation, like habitat improvements);
- ❖ In time (at the same time as the modeled or actual impairment); and
- ❖ In place (in the same location within the water body).

The study reviewed regulatory standards for impairment of instream flows in the states of California, Colorado, Idaho, Kansas, Montana, Nevada and Oregon as compared to Washington. Some of the more compelling aspects were:

In Colorado:

- ❖ The state water regulatory agency may accept impairment to an instream flow if:
 - i. Through mitigation, it can continue to preserve or improve the natural environment to a reasonable degree notwithstanding the injury, **or**
 - ii. It is a de minimis impact to an instream flow (i.e., has a 1% or less depletive effect).
- ❖ The state water regulatory agency has discretion in determining whether to accept mitigation, even where that mitigation is not in kind, in time, and in place

- ❖ Well-developed regulatory scheme

In Oregon:

- ❖ The state water agency can approve a transfer that would injure an instream flow if (1) that instream flow was created through a request from a state agency, and (2) the state agency consents to the injury
- ❖ In issuing the consent, the state agency can include conditions necessary to ensure a continued net benefit to resources consistent with the purposes of the instream water right
- ❖ Well-developed regulatory scheme

In Montana:

- ❖ State law recognizes that the creation of an instream flow may impair existing water rights and provides a time-limited remedy
- ❖ No clearly identifiable statute, regulation, or case law provides a specific impairment standard for regulatory flows
- ❖ Minimal regulatory or case law text addressing these standards

In **California, Idaho, Kansas, and Nevada**, there is no clearly identifiable statutory or regulatory language or case law on impairment standard for regulatory flows.

Summary of VanNess Feldman Study

- ❖ **Washington is the only state that specifically characterizes impairment of regulatory flows to include *de minimis* impairment.**
- ❖ **Washington is the only western prior appropriation state with regulatory flows that has affirmative law requiring that mitigation to offset impairment be in kind, in time, and in place.**
- ❖ **In some of the other studied states, like Colorado, the state water regulatory agency has discretion in determining whether to accept mitigation (even when that mitigation is not in kind, in time, and in place).**

III. **Tools can be developed to allow Ecology to measure and authorize Impacts and Impairment and De Minimis impacts to stream flows to support Tribal rights and protect salmon.**

- a. Impacts and cumulative impacts can be measured, managed, and addressed.
- b. Modeling, conservation, and where appropriate, water reuse and recharge can help restore stream flows and support the growing communities in our state.
- c. There is tremendous potential for creatively monitoring and allowing impacts and impairment where de minimis or unmeasurable changes occur.
- d. De Minimis impacts can be evaluated and aggregated, and then mitigation can be developed at the watershed scale in a manner that is far more beneficial to instream resources than the current system.

IV. **ESSB 6091 Fixed the Hirst Exempt Well Problem for Counties. There must be a Foster Fix for Municipal Water Systems.**

- a. Revising the *Foster Decision* is essential to ensure growing communities in the Urban Growth Areas under the Growth Management Act (GMA) have the resources to support the population that is projected to live in Washington state.
- b. **Table I** uses Washington State Office of Financial Management (OFM) data to project population between 2020 and 2040, and using the OFM model to project low, medium and high population estimates. The state’s population is expected to grow from between **855,292** people, a growth rate of **12.11%** at the low end, to **2,571,579** more people on the high end, a growth rate of **30.57%**. The growth projections are reflected in Table I below.
- c. We need to plan and prepare for this growth now so fish, people and farms can peacefully coexist and so we can develop and implement strategies that work. *Impacts and Impairment* and *De Minimis* impacts need to be part of this strategy. Ecology must have adequate tools in their tool kit to allow them to plan and solve the complicated puzzle presented by climate change, tribal water rights, reduced fish harvests, huge population increases, and inadequate municipal water rights to comply with State GMA regulatory requirements.
- d. A technical group can be established to monitor the effects of *Impacts and Impairment* and the cumulative effects of *De Minimis decisions over time*.
- e. **Table II** presents a summary of 115 Washington state cities that need new water rights between now and 2040. Although it has not been surveyed, I anticipate that water districts, PUD’s, cooperatives, and non-profit municipal water purveyors have similar future water right needs to serve the urban population in cities, towns and other suburban growth management areas.

Table I – Washington States’ Population Projections*

Estimates	Years				2020-2040 Estimate	
	OFM Base Year 2017	OFM 2020 Projected	2030 Projected	2040 Projected	Population Change	Change %
Low	7,310,300	7,065,384	7,551,759	7,920,676	855,292	12.11%
Medium	7,310,300	7,638,415	8,503,178	9,242,022	1,603,607	20.99%
High	7,310,300	8,413,401	9,757,009	10,984,980	2,571,579	30.57%

* Projections based on OFM 2020 Estimated Population estimates and past growth trends

Table II – Survey of Washington State Cities Needing New Water Rights

No. of Years When New Water Rights are Needed	Number of Cities Responding
Within 5 Years	18
5-10 Years	14
10-20 Years	24
More than 20 Years	59
Total	115

IN SUMMARY:

1. I would greatly appreciate your inclusion of my letter addressing these two essential aspects of water law that are critical to municipal water purveyors. An exploration of ***Impacts and Impairment*** and how focusing on ***De Minimis*** impacts to stream flows could help Ecology manage our states water resources for people, fish and farms. This is necessary in order to achieve state policy in favor of safe and adequate water supply for urban and suburban communities, which account for the vast bulk of expected growth from 2020 to 2040 and beyond. Within our state, 115 Washington cities have stated they do not have the water rights to be able to serve the new people arriving in the next 18 years.
2. The VanNess Feldman Study found three things that should be considered by the legislature: (1) Washington is the only state that specifically characterizes impairment of regulatory flows to include de minimus impairment; (2) Washington is the only Western prior appropriation state with regulatory flows that has affirmative law requiring that mitigation to offset impairment be in kind, in time, and in place, and (3) In some of the other studied states, like Colorado, the state water regulatory agency has discretion in determining whether to accept mitigation (even when that mitigation is not in kind, in time, and in place).
3. Tools can be developed to allow Ecology to measure and utilize reasonable accountable ***Impacts and Impairment*** and ***De Minimis*** impacts to stream flows to support Tribal rights and endangered salmon species, and to enable the municipal water purveyors to comply with the GMA and meet the drinking water needs of the Washington state population that is coming and estimated to range from 855,292 to 2,571,579 new people. The Legislature should consider how potential ***De Minimis*** impacts could be quantified, aggregated, and then mitigated to ensure that ***De Minimis*** impacts do not result in cumulative adverse impacts to instream flows. Municipal water purveyors, Ecology, and Indian tribes should work together to ensure that ***De Minimis*** impacts can be mitigated over time. We need to plan responsibly for water resource management now and we need to provide the Department of Ecology the tools to manage the water resources of the state for people, fish and farms and require accountability to ensure it is done.
4. The existing status of Foster and the perfect mitigation requirement is unprecedented among Western states and makes Washington an outlier. It also conflicts with the Legislature's goals of allocating water for people as well as for fish and environmental values (RCW 90.54.020). Some restoration of flexible authority is necessary for Ecology or the Legislature to address and practicably mitigate small effects on instream flow water rights that were established by regulation rather than by the Water Code's permit application process. There should be no change to how impairments to other water rights are considered or mitigated in the application process. The Foster decision needs to be addressed and fixed by the Legislature in order to achieve state policy in favor of safe and adequate water supply for urban and suburban communities, which account for the vast bulk of expected growth from 2020 to 2040 and beyond. These communities and the public water systems that serve them

were left out of the Hirst fix in 2018 but could benefit from a similar approach that will also benefit stream flows and fish habitat.

The municipal water utilities of Washington state have made it a high priority to request that the State empower Ecology to analyze and apply considerations of *Impacts and Impairments* and *De Minimis* impacts when approving new water rights. These concepts have a place and a use in the allocation of the State's water resources by Ecology. The municipal water purveyors need the support of our Legislature in these matters to care for and support the citizens of Washington state with access to clean, reliable, and affordable drinking water. I appreciate the opportunity to provide comments and recommendations and hope you will include this minority position in the records of the Task Force.

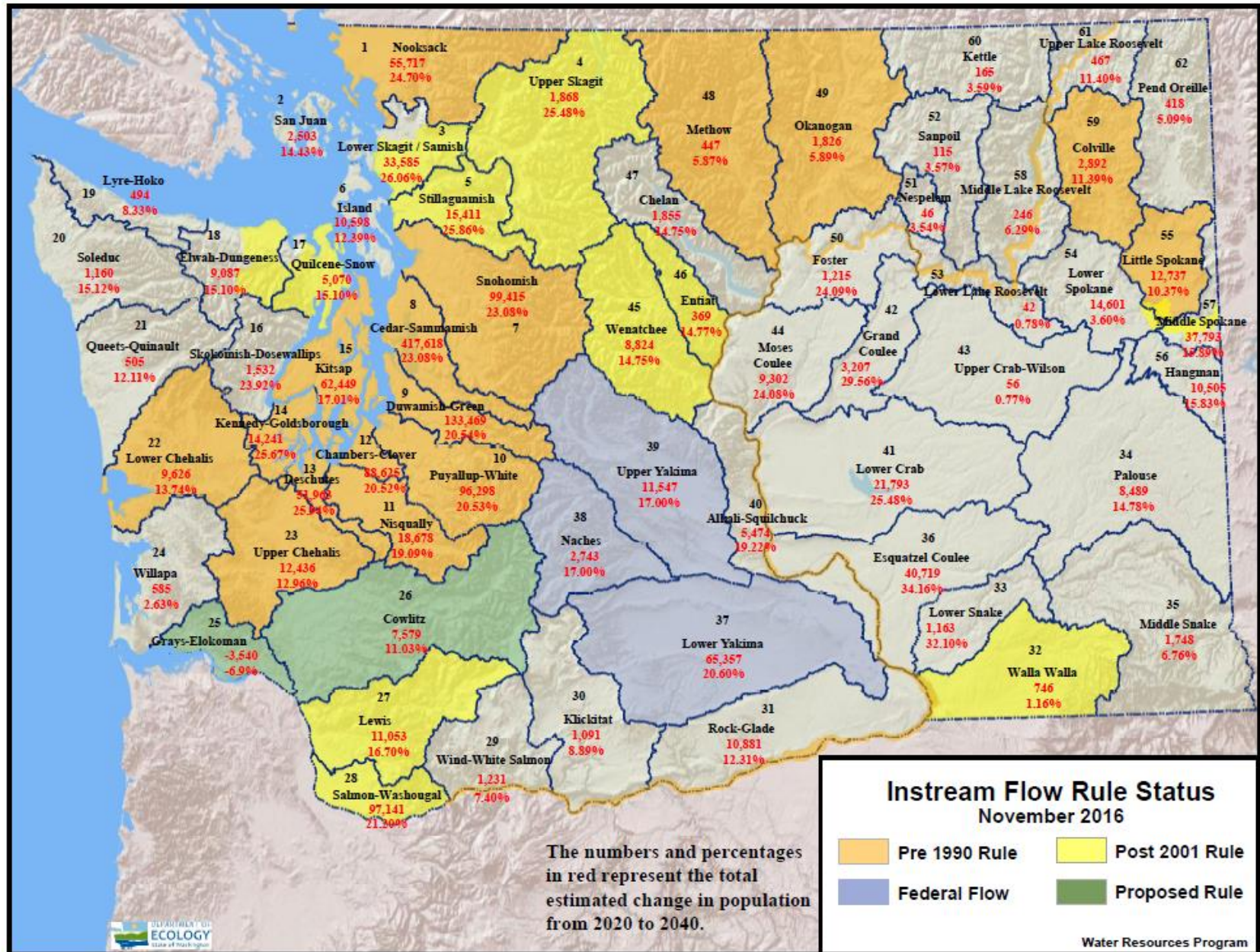
Respectfully,

A handwritten signature in blue ink that reads "John Weidenfeller". The signature is written in a cursive style and is positioned above a light blue rectangular background.

John Weidenfeller
Municipal Water Purveyor Representative to the JLTF on Water Resource Mitigation

Attachment: Map Projecting Population Growth by 2040 by WRIA

Attachment: Map Projecting Population Growth by 2040 by WRIA



WRIA_NM	Estimated change in population 2020-2040	Estimated change 2020 2040 %
Nooksack	55,717	24.70%
San Juan	2,503	14.43%
Lower Skagit - Samish	33,585	26.06%
Upper Skagit	1,868	25.48%
Stillaguamish	1,411	25.86%
Island	10,598	12.39%
Snohomish	99,415	23.08%
Cedar - Sammamish	417,618	23.08%
Duwamish - Green	133,469	20.54%
Puyallup - White	96,298	20.53%
Nisqually	18,678	19.09%
Chambers - Clover	88,625	20.52%
Deschutes	51,963	25.94%
Kennedy -	14,241	25.67%
Kitsap	62,449	17.01%
Skokomish -	1,532	23.92%
Quilcene - Snow	5,070	15.10%
Elwha - Dungeness	9,087	15.10%
Lyre - Hoko	494	8.33%
Soleduc	1,160	15.12%
Queets - Quinault	505	12.11%
Lower Chehalis	9,626	13.74%
Upper Chehalis	12,436	12.96%
Willapa	585	2.63%
Grays - Elochoman	-3,540	-6.90%
Cowlitz	7,579	11.03%
Lewis	11,053	16.70%
Salmon - Washougal	97,141	21.20%
Wind - White Salmon	1,231	7.40%
Klickitat	1,091	8.89%
Rock - Glade	10,881	12.31%
Walla Walla	746	1.16%
Lower Snake	1,163	32.10%
Palouse	8,489	14.78%
Middle Snake	1,748	6.76%
Esquatzel Coulee	40,719	34.16%
Lower Yakima	65,357	20.60%
Naches	2,743	17.00%
Upper Yakima	11,547	17.00%
Alkali - Squilchuck	5,474	19.22%

WRIA_NM	Estimated change in population 2020-2040	Estimated change 2020 2040 %
Nooksack	55,717	24.70%
Lower Crab	21,793	25.48%
Grand Coulee	3,207	29.56%
Upper Crab-Wilson	56	0.77%
Moses Coulee	9,302	24.08%
Wenatchee	8,824	14.75%
Entiat	369	14.77%
Chelan	1,855	14.75%
Methow	447	5.87%
Okanogan	1,826	5.89%
Foster	1,215	24.09%
Nespelem	46	3.54%
Sanpoil	115	3.57%
Lower Lake Roosevelt	42	0.78%
Lower Spokane	14,601	13.60%
Little Spokane	12,737	10.37%
Hangman	10,505	15.83%
Middle Spokane	37,793	15.83%
Middle Lake Roosevelt	246	6.29%
Colville	2,892	11.39%
Kettle	165	3.59%
Upper Lake Roosevelt	467	11.40%
Pend Oreille	418	5.09%

Total estimated change in population for WA State 2020-2040 based on "Medium" OFM population projections	1,535,276
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State Senator Judy Warnick, Co-Chair^[SEP] Joint Task Force on Water Resource
Mitigation 316 Legislative Building^[SEP] Olympia, WA. 98504

State Representative Steve Tharinger, Co-Chair Joint Task Force on Water Resource
Mitigation 314 John L. O'Brien Building^[SEP] Olympia, WA 98504

RE: Final Comments on Water Mitigation Task Force Recommendations (October 26
Draft)

Dear Senator Warnick and Representative Tharinger:

Thank you for the opportunity to provide comments on the draft report and also for helping to steer the discussion around this complicated and controversial issue. Sierra Club recognizes that both population growth and climate change will place added strain on water supplies in Washington State. Unfortunately, these problems will certainly grow over time. Historic low flows experienced in many areas throughout the state last month underscore the threat. It's our view that, while we can make some adjustments to mitigation requirements, any changes must ensure protection of tribal treaty rights and ESA listed salmon and steelhead stocks.

We have the following comments on the recommendations offered by various stakeholders:

Conservation

We believe that, in order to meet the growing demand for water, it is essential that local governments and other out of stream users enhance and expand water conservation with a particular focus on outdoor watering. It was our view, however, that the Task Force should focus on the complicated issues surrounding mitigation, focus on that set of issues rather than take on both topics at once.

While we support the suggestion in Recommendation 1(a) that new conservation standards for water systems be considered, we do not agree with the example given, which concerns compliance with the existing 20 year old DOH water conservation program. The DOH program is essentially a voluntary approach, allowing water systems to set their own goals and timelines for compliance. We need to completely rethink that approach and consider innovative, new programs such as those in use in Nevada and California. Again this is a big topic that may not be ready for 2023 legislative session.

We support Recommendation 1(b) incentivizing the reuse of wastewater where it is discharged into marine waters. We also support recommendations in 1(c) including updating of the water leakage standard from 10% to 5%.

Source Switch

We support continued dialog on the topic of Source Switch. Department of Ecology launched this discussion as a possible way to serve the needs of all the stakeholders involved in this discussion and we think it has that potential.

Impacts and Impairment

We strongly object to Recommendation 3(a) calling for a new impairment standard for instream flows. First, we do not agree with the suggestion that these changes represent a “clarification” of holdings in the *Postema* case. Second, this approach would require the Department of Ecology and others seeking to protect instream flows to demonstrate harm to fish in order to declare an impairment of the instream flow. That is a much higher standard than the current impairment standard and would be impossible to demonstrate in many cases until after water is appropriated. It would relegate instream flows to a second class water right and result in many fish dying.

We support comments in 3(b) and (c).

De Minimus

We oppose recommendations 4(a) and (b). We do not have agreement among stakeholders around what constitutes a de minimus impact. In many cases due to growing water scarcity, every last drop of water is important, particularly when we consider cumulative impacts over time. In other cases, it might be a case-by-case decision that is complex and costly to determine. While some other western states have adopted 1% standards, they are somewhat arbitrary, not based on science, and can result in significant impacts to stream flows over time. We do not agree with the conclusions of the Van Ness law firm on this matter.

Mitigation and Net Ecological Benefit

We object to 5(a)-(e). These recommendations would overturn the decision in the *Postema* case, which has stood for over 20 years.

To begin with, we do not support the use of out-of-kind mitigation under any circumstance due to the cost, complexity, and scientific uncertainty around these determinations. The Department of Ecology indicated during our discussions that they too cannot support this approach. We support water-for-water mitigation only. We have indicated that we might support out of time mitigation in certain defined instances such as the “source switch” discussion noted above. We would

not, however, support a broad delegation of authority to Ecology in this area. In addition, we do not support the mitigation sequencing approach outlined here. True “avoidance” should require aggressive conservation and demand management. We support the use of public funds to assist water system achieving existing mitigation requirements as suggested in 5(f). We support comments in 5(g) and (h).

Overriding Consideration of Public Interest

We support expansion of OCPI to include permanent projects as well as temporary projects. Under the *Foster* decision, the court held that the terms “withdrawal” and “appropriation” had different meanings and, based on that, only temporary projects qualified for this exemption. Having said that, we do not support further expansion of OCPI.

Modeling

We support the creation of an Ecology technical advisory committee to review and recommend the appropriate use of models to determine mitigation. We agree that Ecology should develop guidance or rules on this subject. See recommendations 7(d)-(g). Ecology has existing authority to accomplish this and legislation is not required although the legislature needs to provide funding for this work. This should be a technical rather than a policy discussion.

We cannot support language in 7(a)-(c) which directs Ecology to limit mitigation to sub-basins, prevents mitigation within a model’s margin of error, or otherwise presupposes recommendations that the technical advisory committee might make.

Other

We support all three recommendations in this section.

Thank you for reviewing our comments.

Bruce Wishart
Sierra Club

November 4, 2022

State Senator Judy Warnick, Co-Chair
Joint Task Force on Water Resource Mitigation
316 Legislative Building
Olympia, WA. 98504

State Representative Steve Tharinger, Co-Chair
Joint Task Force on Water Resource Mitigation
314 John L. O'Brien Building
Olympia, WA 98504

RE: Comments for the Joint Legislative Task Force on Water Resource Mitigation

Dear Senator Warnick and Representative Tharinger:

The Washington Department of Fish and Wildlife (WDFW) appreciates the hard work, collaborative spirit, and thoughtful insights shared by the members of the Joint Legislative Task Force on Water Resources Mitigation (Task Force). WDFW submits these comments in response to the Task Force meeting on October 27, 2022 to emphasize the important implications of climate change impacts on the future of Washington's rivers, streams, and other water resources.

Instream water is essential habitat for the state's fish and aquatic species. In many Washington watersheds, inadequate streamflow is already a limiting factor to the sustainability of our state's salmon and steelhead populations.¹ We must continue to protect existing habitat and work to prevent its further degradation. Climate change will alter Washington's streamflow patterns: models generally project widespread increases in winter streamflow and declines in summer streamflow. The anticipated summer streamflow declines are associated with elevated stream temperatures and will reduce habitat quantity and quality for many native aquatic species, including salmon.

Washington's resource managers must begin to incorporate scientific insights about climate change impacts into decisions that have the potential to affect fish, wildlife, and the habitat they need to thrive. This is particularly important with respect to water, where significant up-front investments are made to develop the resource and in-perpetuity property rights are created as a result. We must continue to work together to identify solutions that provide reliable water supplies for the state's diverse users, including instream uses.

Sincerely,



Megan Kernan
Water Policy Section Manager

¹ Smith, Carol J. (2003). *Salmon Habitat Limiting Factors in Washington State*. Washington State Conservation Commission.



Stillaguamish Tribe of Indians

PO Box 277 . 3322 236th St. NE
Arlington, WA 98223

4 November 2022

Senator Judy Warnick, Co-Chair
Joint Legislative Committee on Water Resource Mitigation
P.O. Box 40413
Olympia, WA 98501
Judith.Warnick@leg.wa.gov

Representative Steve Tharinger, Co-Chair
P.O. Box 40600
Olympia, WA 98504
Steve.Tharinger@leg.wa.gov

Re: Task Force Recommendations

Dear Senator Warnick and Representative Tharinger,

The Stillaguamish Tribe is pleased to submit the following comments to the Joint Water Resource Mitigation Task Force Committee as they consider recommendations for changes to water resources policy. As with all issues that may affect Tribal Treaty Rights, the Stillaguamish Tribe requests that the Committee consult with all impacted Treaty Tribes and to engage in meaningful discussion with those Tribes prior to finalizing policy.

The Stillaguamish Tribe is comprised of descendants of the Stoluck-wa-mish Tribe, signatory of the 1855 Point Elliot Treaty. Since time immemorial, the Tribe has served as stewards of the natural resources in the Stillaguamish Watershed. Federally protected treaty rights enable tribal members to fish, hunt, gather, and harvest traditional foods and resources from Usual and Accustomed areas, namely, the Stillaguamish Watershed. The Tribe continues to work as co-managers with Washington State and the federal government on protecting these rights for future generations. It is because of this that the Stillaguamish Tribe wishes to provide comments to the Joint Water Resource Mitigation Task Force Committee to ensure that there is an appropriate quantity and quality of water to support necessary habitat for treaty protected resources now and for future generations.

Impacts and Impairment

The Stillaguamish Tribe is opposed to any legislation that would change the results and findings of the *Postema* Decision . We therefore recommend that the definition of impairment should be as it currently stands. All groundwater eventually makes its way to surface water and any

withdrawal with thusly impair surface water flow. It is just a matter of timescale; whereas the impairment from a surface water diversion may be immediate, impairment from a ground water withdrawal may take days, months or even years. We request the Legislature not weaken case law that protects instream flows and Tribal Treaty Rights.

De minimis

The Stillaguamish Tribe is opposed to any weakening of the de minimis standard of impairment. The current status of rivers and streams is one that is already impacted and impaired due to land use changes and water appropriation over the years since settlement. We are therefore concerned of any further impairment to water resources. As the senior water right holder in the Stillaguamish Watershed, we recommend against the Legislature in defining any amount of impairment that would affect our Treaty resources.

Overriding Consideration of Public Interest (OCPI)

The Stillaguamish Tribe is opposed to any changes to OCPI. We believe the Foster Case as well as *Swinomish v. Ecology* case were correctly ruled that OCPI can only be used narrowly and temporarily. OCPI is not an alternative to the traditional permitting process. OCPI has been used to create a permanent impairment to instream flows and the State Supreme Court has correctly ruled against that.

Source Switch

The Stillaguamish Tribe requests further discussion of this. Switching from surface water to ground water will not be without impacts and impairments, but we believe this is a decision to be made within local watershed boards and with the input from affected Tribes.

Mitigation and Net Ecological Benefit

The Stillaguamish Tribe believes that any mitigation for a water right should be in place and time as determined in the Foster Decision. The net ecological benefit approach fails to address specific impacts in one area that may be detrimental to Treaty resources.

Washington State water law relies on a 'use it or lose it' and a 'first in time, first in right' policy. Oftentimes, little attention is made to conservation programs that can be used to stretch water needs for the growing demands of the State. All the while, more water is withdrawn from rivers and streams affecting fish, wildlife and Tribes. Tribes are the senior water right holders in the State. Tribal needs should always be considered when drafting water policy that will directly affect Tribal governments and the Treaty protected resources they rely on.

Thank you for your time and consideration of our comments and recommendations.



Eric White
Chair, Stillaguamish Tribe Board of Directors
Stillaguamish Tribe of Indians
PO Box 277
Arlington, WA 98223

Comment from Stakeholder on Recommendations



Public Services

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LISA H. FREUND – Director

Nov 2, 2022

Rep. Steve Tharinger
Sen. Judy Warnick
Joint Legislative Task Force on Water Resource Mitigation

Dear Representative Tharinger and Senator Warnick;

I would like to provide comment on the Water Resource Mitigation Task Force Report, the recommendations in that report, and more broadly the materials and presentations that the Task Force has reviewed over the last 4+ years. I currently work for Yakima County, and was largely responsible for the design and implementation of the Yakima County Water Resource System (YCWRS) – a County Utility that provides mitigation for new building permits and subdivisions in Yakima County as required by the *Hirst* decision – and before that I worked for the Clallam County Department of Community Development and was, like Rep Tharinger, intimately involved in the development of the various watershed plans, comprehensive flood hazard management plans, that County’s response to the listings of salmon under ESA, and the County’s Critical Areas Code. I am not making these comments as representing the policy stance of Yakima County, rather I hope to provide a more practical/technical input from a local government perspective on these issues from someone who has to deal with these issues on a daily basis.

My career in local government has always included a significant amount of direct involvement with Boards of County Commissioners, where I have attempted to provide those Boards with the largest possible “decision space” regarding natural resources inclusive of both the legal and technical structure of local, state, and federal laws. My employment by Counties has been coincident with the Washington State Growth Management Act, and the goals and objectives of GMA relative to management of future growth has been the major driver of my career. Over the last 20 years, the largest changes to the legal environment regarding management of the water resources of the State of Washington have been Growth Management Act Supreme Court Decisions, *Kittitas County* and *Hirst*. *Hirst* resulted in formation of the Task Force through the “Hirst fix” legislation. My familiarity the requirements local governments must meet under *Hirst* is very high since it also drove the timing of the implementation of YCWRS consistent with GMA and the tools Yakima County had available for implementation. Such a program necessarily generates an ongoing controversy and I have had to repeatedly harken back to the Supreme Court decision that required its formation. Even the underlying basis of *Foster* is a group of Cities attempting to meet requirements under GMA to extend urban services into their urban growth areas, Cities need firm water rights to pass a straight face test under GMA in the earliest phases of the County-wide planning processes that they have the required water to serve planned growth. Those Supreme Court decisions generally infer that “things need to hang together” between the water code

Yakima County ensures full compliance with Title VI of the Civil Rights Act of 1964 by prohibiting discrimination against any person on the basis of race, color, national origin, or sex in the provision of benefits and services resulting from its federally assisted programs and activities. For questions regarding Yakima County’s Title VI Program, you may contact the Title VI Coordinator at 509-574-2300.

If this letter pertains to a meeting and you need special accommodations, please call us at 509-574-2300 by 10:00 a.m. three days prior to the meeting. For TDD users, please use the State’s toll free relay service 1-800-833-6388 and ask the operator to dial 509-574-2300.

and GMA when local governments are making decisions regarding future growth. When things do not hang together, the risk to local governments – which extends to the economy and regulatory stability of the state and to the rights of private landowners as evidenced by *Kittitas*, *Hirst*, and *Foster* – is the risk of being held for ransom at the point of making decisions about growth or supplying water to support growth.

Based on the premise of things needing to hang together, my review of the materials presented to the Task Force, and the comments in the meetings themselves, three issues stand out.

- 1) The lack of focus on the requirements of the Growth Management Act/the exclusive focus on the water code.** To some degree, this is reflective of the provisions in ESSB 6091, and how other elements of that legislation – the Streamflow Restoration Act and Watershed Planning - have been implemented by Ecology which leads to disconnects in space and time between these new sections of the Water Code and GMA. The lack of required inclusion of City and County Comprehensive Plans in developing priorities for protection of streamflow results in a spatial disconnect between where future growth occurs and its effect on future streamflow. While the updated Watershed Plans and GMA Comp Plans have a 20-year planning horizon, the Comp Plans are updated every 10 years, meaning that by the time of beginning the Comp Plan, update, the 20-year time frame for the updated watershed plans will no longer be sufficient for local governments to rely on under GMA. The near-term focus by the legislature and Ecology on the impacts of *Hirst* to rural residential development, and not on the long-term effects of *Hirst* on Comp Plans, including all permit decisions by local governments does little to reduce those legal risks that arise from the intersection of GMA and the Water Code. The Task Force process would have been immeasurably improved by the participation of Commerce to assist in making the connections between GMA and the Water Code, such as anticipating the relative significance of future growth impacts of the state or watershed and comp plan update timelines across the state.
- 2) Focus of the Task Force was largely retrospective, and not prospective in terms of growth, climate change, and the new legal environments which result from *Kittitas*, *Hirst*, and *Foster*.** It is this contrast which I find most jarring since most of my daily focus is on these three cases which all center on current conditions and future effects of growth. The flow values which compose Instream flow rules are based on channel measurements, hydraulic models which related those channel characteristics to habitat values at different flows, and salmon life histories at the time the models were developed. Those physical and biological conditions are assumed to continue into the future if no further anthropogenic development occurred or if the effects of development are mitigated. These inputs then are used to develop an “idealized” annual hydrograph for the river reach which is the subject of the rule. In the absence of mitigation, and with changes we now realize are not mitigatable or forecastable – for instance the cumulative effect of Climate Change on precipitation and streamflow, changes in forest fire frequency and severity, the reduction and loss of summer flows from glaciers - the physical and biological conditions will change. Channel characteristics will reflect new flow and sediment regimes, salmonid life histories are forced to dramatically change by changes in flow for migration and rearing, and water temperature during egg incubation. This understanding of the effects of climate change results in the understanding that “stationarity is dead” i.e., no

environments will persist in their current state through protection. *Foster* is an example of the ineffectiveness of this approach which harkens back to a prior physical and biological condition and assumptions regarding persistence of those conditions into the future – instream flow rules are not a management tool; they are a protection strategy. Mitigation is a management tool that necessarily incorporates current condition and the best available predictive power about future conditions in the watershed, which was the case in *Foster*. The farther current and forecasted conditions which cannot be effectively mitigated are from the original conditions under which the Instream Flows were generated, the less practically effective the Instream Rules and the more unstable the legal environment. This, in turn which stifles decision making, development of enhancement and mitigation plans which are essentially societal goals for water resources and leads to further degradation. Mitigation actions must be tied to the future and not the past, the Task Force report does not recognize this need.

The legal environments have also changed. In those areas of the state with instream flow rules, and in the Yakima Basin, all new water rights will require mitigation. The requirements for periodic updates of Comp Plans are now irretrievably linked to determinations of adequate water supply by *Kittitas*, *Hirst*, and *Foster* and ESSB 6091. In the areas of the state required to do watershed planning under 6091 may partially rely on Ecology for that determination for exempt well residential uses, but as mentioned before the planning horizons for those plans and the status of implementation of plan actions at the time that determination is made may limit Ecology's ability to make those determinations in a way that withstands legal scrutiny. In the Yakima Basin, the Wenatchee, and the Dungeness Watershed, I anticipate that the determination regarding water availability for exempt well supplied residential uses will be made by the Counties. For all the Counties in the WRIs with instream flows and in the Yakima Basin, I see no other path than the Counties will each individually have to make the determination that water is available for all of the other uses allowed under the Comp Plan – commercial, industrial, governmental, recreational - and implementing ordinances in the County (likely inclusive of the cities), whether those uses are exempt under the Water Code or require a certificated water right. How Ecology and Counties will make these determinations, and where/how/how much water is required for mitigation to make a determination in a given Comp Plan that water will be available for all uses over the 20-year planning horizon is currently an unknown. In my opinion defining how these determinations will be performed and defended is the largest current water resource mitigation question before the Legislature but does not appear in the latest version of the Task Force report.

- 3) **The Practical Mechanics of Water Resource Mitigation under the Water Code** – From a local government perspective, there was some discussion that there is an unclear relationship between the need for mitigation and how those rights will be managed under the Municipal Water Law. I would go farther and say that there will undoubtedly need to be significant changes to the Municipal Water Law and Ecology's Policy guidance. The premise of how municipal rights are acquired – the water itself is free, the use is inchoate and the full water withdrawal does not occur until well after appropriation, and that this process will repeat itself as needed – will no longer be applicable to municipal rights in the areas of the state where the majority of the state's population resides. The water itself and other mitigative actions to grant the right will be a significant cost, the rights will have been exercised in the past and could be

exercised for other purposes until ultimately devoted to municipal uses, and the acquisition of water rights for municipal uses will be an ongoing, and not a periodic process, in perpetuity. Determinations of the suitability of water rights for mitigation use in particular areas, with particular diversion points, and particular use patterns will be a major focus of this ongoing process into the future. As in *Foster*, current and future physical and biological conditions will be a strong driver of how and where the water is used, with the potential for the regulatory instream flows to inhibit development of mitigation plans unless the statutory scheme for those rights are changed. These processes will be the major mitigation actions in terms of space, time and quantity of water transferred as the state moves forward, the Task Force report should present the different aspects of this issue relative to certainty of instream flow goals (not necessarily consistency with instream flow rules as they currently exist) and certainty of supply for municipal users.

The nature of the rights acquired also impacts many other aspects of municipal rights. Any right acquired for mitigation for any purpose will likely include a maximum consumptive use quantity. Currently, municipal rights are based on the quantity diverted and not on consumptive use, unlike the remainder of water rights. Conservation of municipal rights generally includes maintaining the same diversion rate or quantity, while increasing the consumptive use. For example, relining of a groundwater-fed water supply system to reduce leakage is a conservation measure that likely will reduce both groundwater withdrawal and return flow to streams. Water rights that are mitigated by retirement of senior rights with a given consumptive use will need to track consumptive use in perpetuity to ensure consistency with the underlying rights. These specifics could either be added in the RCWs or WACs, but either way the legislature needs to recognize that we have these new species of municipal rights moving forward and the kinds of management actions those rights will require.

As you can see, my bias is that it is critical that the legislature consider changes to the water code, specifically these mitigation issues, in the context of GMA and possibly concurrently with changes to GMA. 6091 made some changes to GMA but did not fully resolve those issues, resulting in a variety of different GMA issues and local government duties depending on where you are in the state – the Dungeness, the Wenatchee, the Yakima, the jurisdictions subject to RCW 36.70.692 - which are substantively and procedurally unclear. Addressing these issues only through the water code and only with the consultation of Ecology is trying to fix the problem with one hand tied behind your back given the specific requirements in *Hirst* for independent determinations of water availability for all building and subdivision permits for issued by local governments planning under GMA, not just permits for rural residential uses (“new permit-exempt domestic groundwater withdrawals” in 6091) supplied by exempt wells. At a minimum, amending the Municipal Water Law to make acquisition and holding of water rights for future mitigation should be included as a “governmental purpose”, this would allow jurisdictions, regardless of whether they operate utilities currently, to acquire water rights as they become available, and not only in “crisis mode” at the County wide Planning Policy phase of Comp Plan development.

Comments on Recommendations in the Report

Conservation – The report should be more clear-eyed regarding the benefits of conservation. Projects which truly reduce consumptive use are true conservation projects with (possibly) perpetual benefits.

These likely are projects similar to those being implemented in Las Vegas and Phoenix to reduce outdoor watering but would only be true conservation for water systems which will not expand in the future. For instance, the City of Yakima is basically hemmed in by the City of Union Gap, Nob Hill Water association and the County's Terrace Heights water system. Therefore, the City does not see much expansion into the future, the Cities Xeriscaping program is a true conservation action. If the same action were undertaken in a water system which expects growth, the conservation action would only be temporary in nature as any savings from conservation would still eventually be used in the system – such project would however have long term energy and maintenance benefits.

Source switch – this should include consideration of moving from a shallower aquifer to a deeper aquifer, which would likely be the case in most of the state. In the irrigated portions of the state, there are many places where the reverse would be true when irrigation induced recharge causes groundwater rise and increased streamflow above natural levels or creates entirely artificial stream systems. These areas generally are less prone to long term decline, while the underlying aquifers are subject to decline.

Impairment – Specific to instream flows and instream flow rights, I think the Legislature should consider changing the statutory structure of that program. Ecology currently has its hands tied by statute and the (appropriate in my view) loss of OCPI. Ecology lacks any management capability for these flows, and I suggest that Ecology, or some other entity (DNR?) could have a true “Trust Doctrine” duty for management of water rights held by the State for instream flows. This would allow the setting of future goals based on best technology and the status of fish populations or other criteria and allow changes to flows that would benefit the trustees. I can see in the future when there are higher winter flows (which still may not meet the Instream Flow Targets but are not currently or forecasted to limit productivity) and lower summer flows which preclude certain life histories, that mitigation projects which shifted flow toward the limiting time period would have benefits to the public and should be protected with the most senior rights available. Based on my comments above, I do not think the current instream flow right structure as workable to maximize benefits to citizens of the state.

De minimis – I do not think that Ecology should have an increased unilateral ability to allow for de minimis impairment. I do think that standards for de minimis impacts should be developed. If, during an impairment analysis a de minimis impact is determined likely on a given water right, Ecology should have the right to ask the affected water rights holders if that is OK. If the overall project improves reliability, has a minor negative impact in one time of year but a positive impact in a more critical time of year, I can see where other water right holders could agree that the de minimis impact of a project and issuance of a new associated water right still provided benefits.

Mitigation and NEB - I am a fan of NEB for individual projects and single and complete water resource project suites that result in improved streamflow conditions without impairment. I think the use of NEB at a WRIA scale in the watershed planning process as a threshold for allowance of continued exempt well development where an impairment analysis is not performed is flawed and necessarily results in impairment to privately held surface and groundwater rights. For this reason, I do not think NEB in its current form is applicable to adjudicated basins, since the Watershed Planning process is essentially forecasting generally unrealistically high quantities of water withdrawals in areas of known water shortage in tributary basins, which protects the State's water rights in the mainstem but allows

impairment of private water rights in tributaries – the same kinds of not hanging together as *Hirst* and *Foster*.

Back to the lack of management direction in the sense of a “Trust Doctrine” the existing “in time, in place, in quantity” mitigation goal should not be a straitjacket limiting flexibility for management decisions. In some ways NEB was designed to get around the that straitjacket to allow doing a more sensible thing. There are usually geologic or hydrologic reasons certain basins are more sensitive to flow depletion than other basins of the state. If a given mitigation project has the flexibility or is designed to address supply water to instream flow during those times of year with known limiting flow characteristics, that should not only be allowed, but encouraged as a mitigation priority. In most cases it should not take a full-blown NEB analysis to reach a conclusion that a given project addresses a known limiting flow factor. There may need to be some definition of a significant improvement – the inverse of “de minimis” impairment – but that out of kind and time mitigation is desirable in many areas of the state should not be a question.

OCPI – I would not advise entity to use that process. It is simply a target for folks to shoot at, it would be much better to rectify the disconnects in the water code structure to provide certainty, than use OCPI to paper over the gaps.

Modeling – this is a much larger “Trust Doctrine” issue than presented to the Task Force or referenced in the recommendations. The issue in modeling is not necessarily model accuracy so much as incorporation of uncertainty both in the model inputs and relations, and in the variability of the natural world in perpetuity. The secondary and tertiary effects of climate change on watershed characteristics which will drive future surface water flows and elevations in rivers and estuaries are so large and unpredictable as to make reliance on straight physical models unwise. If the state moved to an active water resource management perspective, and set long term goals based on conservative models, I think the defensibility and reliability of the water resource decisions will improve. I do think there can be a cooperative program to develop models consistently and learn from application of those models, and that would provide valuable information, but I do not think making decisions about water management on the basis of the level of predicted effect relative to the Root Mean Square Error of a model is administratively or technically appropriate.

Thank you for this opportunity to comment.

Sincerely

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