

Editors' Note

The Water Report is publishing a detailed look at issues surrounding protection of instream flows versus water availability for future development in the State of Washington. Two recent Washington Supreme Court decisions have highlighted the contrasting positions in this area, overturned decisions made by the Washington State Department of Ecology, and led to calls for legislation to "fix the problem."

In this issue of **The Water Report**, we present two stand-alone articles that provide a detailed look at the issues from different perspectives. Dan Von Seggern's article posits that the protections for instream flows upheld by the Supreme Court are necessary for environmental protection and that other strategies for re-allocating water are available. This is followed by Thomas Pors providing his views of the "Water Availability Train Wreck" and arguing that changes are needed going forward.

In the next issue of **The Water Report**, each of these authors will respond to the other's article, providing readers with a point/counterpoint view of the issues.

Water Allocation

Increasing Demands

Climate Change Consequences

Wise Allocation

Water Code Principles

Prior Appropriation

LIVING WITHIN OUR WATER MEANS

PROTECTING INSTREAM RESOURCES IN WASHINGTON

by Dan Von Seggern, Center for Environmental Law & Policy (Seattle, WA)

Introduction

Washington's rivers, and the fish and wildlife they support, are under great pressure due to increasing demand for water. The state's water has been diverted for beneficial use out-of-stream for well over 100 years, and now supports productive agriculture, thriving industries, and a growing population. But there are limits to the resource and choices regarding water use must be made. Reduced streamflows are impacting salmon and steelhead runs, implicating both endangered species protections and treaty obligations to Native American tribes. In some cases, the amount of water claimed for out-of-stream uses exceeds the ordinary flow of the river. Because of this history of over-appropriation, in some areas more water cannot be taken out of the system without unacceptable impacts on fish, wildlife and other environmental values. If this means that water is not readily available for development, it is no accident; rather, it is evidence that we have reached a limit to what can be sustainably extracted.

Climate change will add to our water supply difficulties. As the atmosphere warms, more precipitation will fall as rain rather than snow and less water will be stored in the mountain snowpack. Receding glaciers will contribute less water to streams and rivers. Peak streamflows will occur earlier in spring than they do now, water temperatures will be higher, and rivers will be drier in summer. Low summer flows will reduce the water supply available for irrigation and put additional pressure on the fish and wildlife that depend on water instream. (See Mauger, et al.).

Development interests have attempted to frame the issue as a conflict between human use and environmental protection, claiming that basic needs of people are not being met. There have recently been calls to effectively remove any limits on domestic groundwater use. It is simply untrue, however, that human users of water are not being accommodated. A large fraction of the state's water is already being diverted for out-of-stream uses; the issue is actually one of allocating that water. What cannot be accommodated is unlimited water use for increased development anywhere in the state at no cost. Rather than simply trying to "find" more water — which nearly always comes at the expense of fish and the environment — Washington must learn to live within its water means by more wisely allocating the water that has already been appropriated. This is now being successfully addressed through water banking in some river basins. While this is a promising development, further innovative approaches are needed.

This article will review key aspects of Washington water law regarding water allocation and discuss two recent Washington Supreme Court decisions, *Swinomish Indian Tribal Community v. Ecology* and *Foster v. Ecology*, which impact appropriations of water for development. Possible strategies for reallocating water and for mitigating the impact of water withdrawals on streams will also be discussed.

Water: Public Resource in Washington

The Washington Water Code provides that all "waters within the state belong to the public" and that the right to use water may only be acquired by "appropriation for a beneficial use." RCW 90.03.010. (As used here, "Water Code" refers to numerous statutes governing water use, including the Water Code itself (RCW 90.03), the Minimum Water Flows and Levels Act (RCW 90.22), The Water Resources Act (RCW 90.54), and the Groundwater Act (RCW 90.44)). The 1945 Groundwater Code expressly extends application of the Water Code to "the appropriation and beneficial use of groundwaters within the state." RCW 90.44.020. Like other western states, Washington follows the Prior Appropriation Doctrine, which is organized around the central principle of "first in time, first in right." RCW 90.03.010.

Unlike the riparian system used in Eastern jurisdictions, the right to use water is not determined by land ownership or whether one's property abuts a lake or stream. Ownership of land does not give the landowner the right to appropriate water, but once water has been put to beneficial use on a particular

Water Allocation Use Right Beneficial Use Permit Test Permitting Exemptions Authority To Measure Unlimited Groundwater Use Instream Flows	property, the right to use the water becomes appurtenant to the land so long as the beneficial use continues. The first person to appropriate water and put it to beneficial use secures the right to <i>use</i> that quantity of water, but not ownership of it. <i>Lummi Indian Nation v. State</i>, 170 Wn.2d 247, 252, 241 P.3d 1220 (“[g]enerally speaking, there is no private right to own the waters that flow across Washington State”); <i>Ecology v. Abbot</i>, 103 Wn.2d 686, 694 P.2d 1071 (1985) (all riparian rights not perfected within 15 years after passage of Water Act were extinguished); <i>Rigney v. Tacoma Light & Power</i>, 9 Wash. 576, 583, 38 P. 147 (1894) (no property in water itself, but a “simple usufruct while it passes along”). While there are extant riparian water rights in Washington dating from before the Water Code, any new appropriation of water is governed by the “first-in-time” system. Any subsequent (“junior”) user may only appropriate water to the extent that it does not interfere with rights of prior (“senior”) user. A water right is valid only to the extent that the water is put to beneficial use; a rightholder may relinquish his/her right through an extended period of non-use. RCW 90.14.180. Waste of water is also prohibited: an appropriator must make “reasonably efficient” use of water, and acquires no right to water over and above what is needed for his or her actual requirements. <i>Ecology v. Grimes</i>, 121 Wn.2d 459, 471-2, 852 P.2d 1044 (1993). The “reasonably efficient” standard arguably requires that practicable conservation measures be employed in order to avoid using more water than what is necessary. A proposed water user must file an application for a permit to appropriate water with the Washington State Department of Ecology (Ecology). RCW 90.03.250. Before issuing a permit, Ecology must make affirmative findings that: 1) water is available; 2) for a beneficial use; 3) that the proposed use of water will not impair a senior right; and 4) that the proposed use of water will not be detrimental to the public interest. RCW 90.03.290(3). This is known as the “four-part test.” Where there is no unappropriated water available, or where the proposed use would conflict with a senior user or with the public interest, Ecology must reject the application. <i>Id.</i> There is an exemption from the permitting process for certain small withdrawals of groundwater for domestic use. RCW 90.44.050 provides an exemption from permitting — but not from other Water Code provisions — for stock-watering, watering of a lawn or garden no more than one-half acre, or domestic or industrial use not exceeding 5000 gallons/day. While exempt from applying for a permit, these wells are not exempt from the priority system or the other provisions of the Water Code. Water for rural domestic development has largely depended on these “permit-exempt wells.” As of 2001, Ecology estimated that there were from 500,000 to 750,000 such wells in the state, and that it could identify approximately 250,000 of these (<i>see</i> Nathan Bracken, Western States Law Council, <i>Exempt Well Issues in the West</i>, 40 Environmental Law 141 at 202 (2010)). Ecology estimated in a 2014 report that between 2008 and 2014, approximately 17,200 new permit-exempt wells were drilled statewide. <i>Permit-Exempt Domestic Well Use in Washington State</i> (2015), Ecology at 8. Based on Ecology’s reported figures, permit-exempt wells accounted for approximately 16% of municipal and domestic water use. <i>Id.</i> at 12. Ecology has the authority to meter all diversions or withdrawals of water, including permit-exempt wells. RCW 90.03.360, 90.44.060 and 90.44.050. In some cases, including new diversions or diversions in salmon-critical basins, it is obligated to do so. RCW 90.03.360 (Ecology <i>shall</i> meter new rights for diversion of surface water, diversions exceeding one cfs or from streams in salmon-critical regions). A 1996 lawsuit filed by American Rivers, the Center for Environmental Law & Policy (CELP), and several other environmental groups resulted in an order requiring Ecology to meter water users accounting for the top 80% of total water use in 16 Water Resource Inventory Areas (WRIAs) deemed to be Fish Critical Basins. (<i>See</i> www.ecy.wa.gov/programs/wr/measuring/compliance.html). Despite this, little of the water used in Washington (and essentially none of the permit-exempt well use) is actually metered. Ecology has not generally exercised this authority, citing resource constraints and the large number of exempt wells. <i>See Washington Department of Ecology, Responsiveness Summary and Concise Explanatory Statement, Chapter 173-173 WAC, Requirements for Measuring and Reporting Water Use</i> (2001) at 25. If water use is not metered, it is nearly impossible to determine how much water is actually diverted from streams or withdrawn from groundwater in a given river basin. This is especially important given the large number of permit-exempt wells now in use and legal interpretations that allow unlimited groundwater use for certain purposes. The Washington Supreme Court (Court) held in <i>Five Corners Family Farmers v. State</i>, 173 Wn.2d 296, 313, 268 P.3d 892 (2011), that there is no limit on permit-exempt water use for stock-watering; Washington AGO 2009 No. 6 at 9 also states that watering of lawn or noncommercial garden from permit-exempt wells is not limited to 5000 gallons per day. Instream Uses Protected Through Instream Flow Rules Water for instream uses, such as fish and wildlife habitat, recreation, and navigation, is at least theoretically protected by statute. The term “instream flow” as used here includes “minimum flows and levels” as used in RCW 90.22.010, “base flows” as used in RCW 90.54.020, and “instream flows” as used in Chapters 173-501 through 173-563 WAC. The Legislature has provided that the policy of the state includes “retention of waters within streams and lakes in sufficient quantity and quality to protect instream and natural values and rights.” RCW 90.03.005. The Minimum Flows and Levels Act of 1969 gives Ecology authority to set minimum flows or water levels “for the purposes of protecting fish, game, birds or
---	---

Water Allocation

Mandatory Protections

Instream Flow Rulemaking

Hydraulic Continuity

Salmonid Production

Flow Levels

Ecosystem Function

High Flow Protection

other wildlife resources, or recreational or aesthetic values of said public waters whenever it appears to be in the public interest to establish the same." RCW 90.22.010.

The Water Resources Act of 1971 further provides (using the mandatory term "shall") that:

The quality of the natural environment *shall* be protected and, where possible, enhanced as follows:

(a) Perennial rivers and streams of the state *shall* be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values. Lakes and ponds *shall* be retained substantially in their natural condition. Withdrawals of water which would conflict therewith *shall* be authorized only in those situations where it is clear that overriding considerations of the public interest will be served.

RCW 90.54.020(3) (emphasis added).

Ecology sets instream flows by rulemaking under the State of Washington's Administrative Procedure Act, Chapter 34.05 RCW. RCW 90.54.040. Once established, instream flows are water rights and in most respects are treated like any other water right, including protection from impairment by more junior rights. *Postema v. Pollution Control Hearings Board*, 142 Wn.2d 68, 82, 11 P.3d 726 (2000). Where an instream flow has been adopted for a stream or water body, any subsequent permit for withdrawal of waters must be conditioned to protect the instream flow. RCW 90.03.247. Instream flows operate only prospectively; they cannot require that senior users be curtailed in order to return water to the stream. As with any other water right, if water is not available in the stream because of senior users or climate conditions, the full amount of the instream flow is not available.

An instream flow rule may also restrict withdrawal of groundwater. Withdrawal of water from aquifers in hydraulic continuity with the stream has been shown to affect streamflows — for this reason, permit-exempt wells near streams, especially tributaries, can be problematic. *See* Barlow, et al.; and Osborn. A permit for a groundwater withdrawal that would impair a more senior instream flow must not be granted. *Postema*, 142 Wn.2d at 82; *Hubbard v. Department of Ecology*, 86 Wn. App. 119, 125, 936 P.3d 27 (1997). The language of some instream flow rules specifically address this issue, in some instances closing groundwater basins to further withdrawals and in some cases placing conditions on use of groundwater. *See* Groundwater Withdrawals (References, below).

Protection of Instream Values Requires Protecting Occasional High Flows

The statutory scheme recognizes that salmonid production is a central purpose of setting instream flows. RCW 90.22.060 directs Ecology to prioritize rivers for instream flows. The "primary goal" of this prioritization is to be the "achievement of wild salmonid production." It has been shown that fish production is directly related to streamflow. A study spanning more than 40 years showed that streamflow levels and the Puget Sound coho salmon catch two years later were closely related. *See* Matthews, et al.

When deciding on the flow level to incorporate in a rule, Ecology bases its decision partly on the amount of water that will protect fish and other instream values. For a discussion of factors Ecology considers when setting instream flows, see *A Guide to Instream Flow Setting in Washington State*, ed. Lynn D. Geller, (2003) Wash. Dept of Ecology Pub. No. 03-11-007. This process may result in an instream flow level that is not met at times in some, or even most, years. Flow levels are often described in terms of "exceedance flows." For example, a 90% exceedance flow is one that is met on average nine out of ten years, while a 50% exceedance flow is met on average five years out of ten.

This does not mean, however, that instream flows are being set at "theoretical" or "aspirational" levels. Rather, setting a flow that is not met in all years is consistent with preservation of instream resources and overall ecosystem function. The absolute amount of habitat available for fish is increased in high flow years, and there are also other important benefits associated with variable flows. Fish and other wildlife have evolved and adapted to historic streamflow conditions, which include both high and low flow years. The natural flow regime, including both high and low flows, is important for the overall health of river ecosystems. *See* Poff, et al. High flows in particular maintain the natural environment by cleaning stream channels and affecting their shape. High flows are also important in terms of compensating for poor habitat conditions in low-flow years. *See* Geller at 4 and 16.

Ecology routinely issues water permits (for uses other than instream flows) for water bodies that are fully appropriated, conditioning the permits on the instream flow. Over time, this essentially guarantees that the instream flow will become the maximum flow that is ever present in a stream. If an instream flow is set to protect only average habitat conditions, then the above-average conditions in good years will likely be eliminated, with the effect that overall fish production and population will decrease. A 5% exceedance flow would protect occasional high levels of fish production in high flow years and contribute to maintaining a population. Beecher, H.A (1990), *Standards for Instream Flows*, Rivers 1(2): 97 at 104. Adopting an instream flow that protects high flows as well as average- and low-flows is therefore consistent with the command in RCW 90.54.020(3)(a) for "preservation of wildlife, fish, scenic, aesthetic and other environmental values." Such an instream flow may preclude further withdrawals of water from a watershed. When this happens, it is an indication that the limit on what can safely be withdrawn — while protecting instream values — has been reached.

Water Allocation

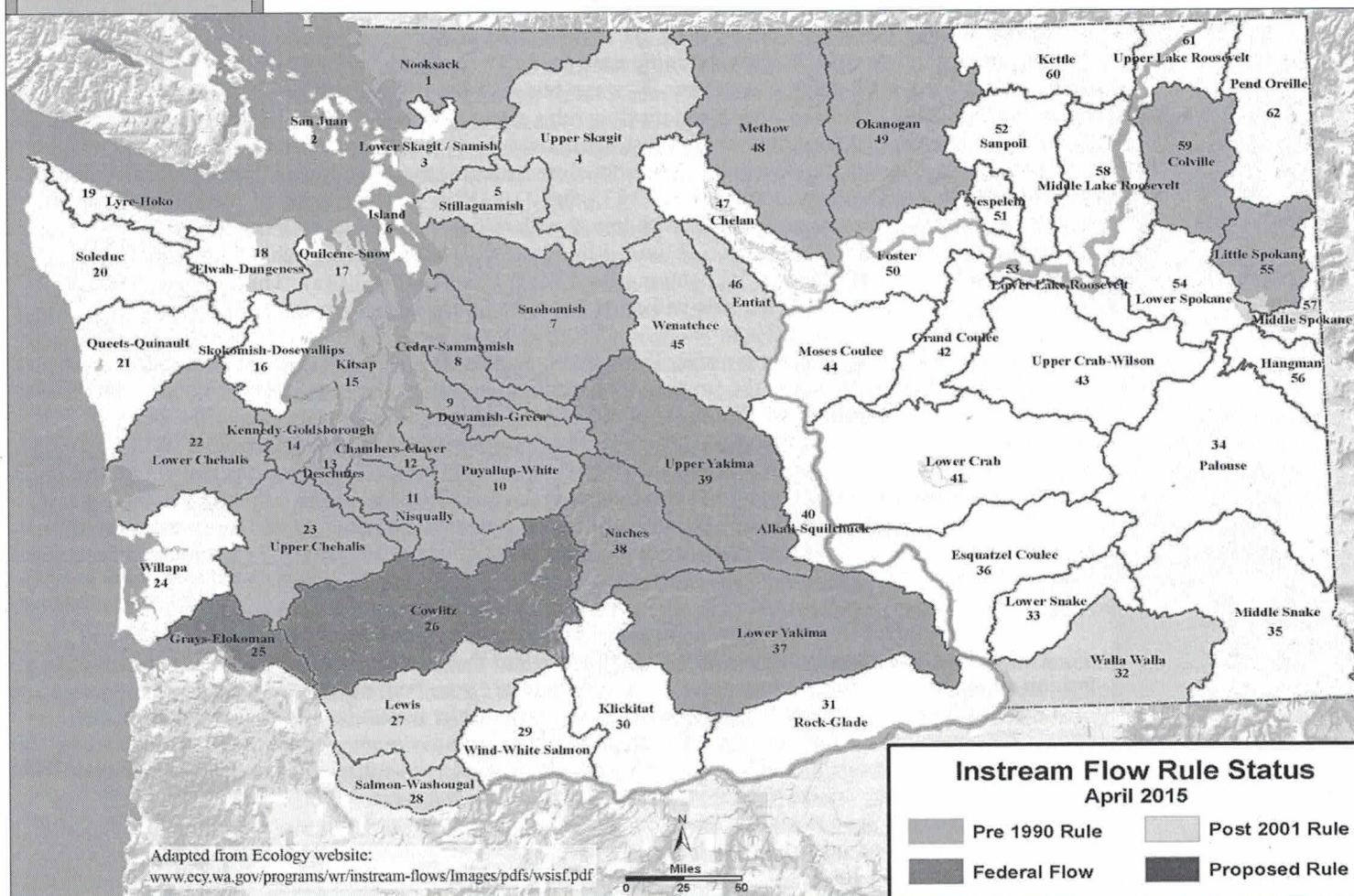
Appropriation History

Dungeness River Flows

Instream Flows Only Protect Water That Has Not Previously Been Appropriated

To understand why instream flows are set at levels that may restrict future appropriations of water, it is important to understand their context. Because of the historical appropriation of water, Ecology's instream flow setting is generally done long after most of the water in the river has already been spoken for. Instream flows established now or in the future will therefore be junior to water rights that account for much of a river's natural flow. Ecology began setting instream flows in 1980, long after the majority of other water diversions were established. Of the 62 Water Resource Inventory Areas (WRIAs) in Washington state, more than half do not have instream flows established as of this writing (*see Figure 1*). If instream flows had been set for the remaining river basins, those flows would now be senior to (and protected from) the large number of permit-exempt wells that have recently been drilled. It may be impossible to protect an amount of water that represents the natural or "original" flow of a river; if so, instream flows can only prevent further degradation of the resource rather than preserving it intact.

As one example, the August-September 50% exceedance flow for the Dungeness River has been reported at 207 cubic feet per second (cfs). An adjudication proceeding in 1924 identified a total of 524 cfs in water rights on the Dungeness River mainstem. More recently, a survey of Ecology's Water Rights Tracking System database in 2000 showed surface water permits and certificates totaling 207.7 cfs. In 2002, another Ecology survey identified surface water permits and certificates allowing withdrawal of 340.66 cfs from the Dungeness mainstem. While there is obviously some uncertainty in these numbers, it is clear that authorized surface water diversions could potentially account for most or all of the flow of the river, particularly in the late summer low flow period (precisely when demand for irrigation water is at its highest). There are also large withdrawals of groundwater in the Dungeness basin. The 2000 Ecology survey showed certificated groundwater withdrawals of 41,089 gallons per minute (equivalent to 91 cfs). Groundwater in the basin is known to be in hydraulic continuity with the river, so it is likely that these withdrawals also reduce streamflow. (*See Elwha-Dungeness Planning Unit, May 2005, at page 2.8-6; at 2.3-10; at 2.3-9; and at 2.3-11*). More recently, under a 2012 *Memorandum of Understanding* with Ecology, the Dungeness River Agricultural Water Users Association agreed to limit its diversions to no more than one-half of the flow of the river, and not to divert water that would diminish flow to below 60 cfs (September 6, 2012, at 3-4). It was in this context, with the river potentially reduced to less than half of its historic flow, that Ecology adopted the instream flow rule to protect the remaining instream resources. WAC 173-518, effective January 2, 2013.



Water Allocation

Over-Allocation

Junior Instream Flows

"In-Kind" Mitigation

Water Banking

New Withdrawals

"Out-of-Kind" Mitigation

"Maximum Net Benefits"

Development

The Wenatchee River provides another example. The September 50% exceedance flow in the Wenatchee River watershed (WRIA 45) is 727 cfs, and irrigation permits and certificates total 594.5 cfs. For Icicle Creek, a major tributary to the Wenatchee River, the September 50% exceedance flow is 134.7 cfs. Irrigation permits and certificates on Icicle Creek total 261.3 cfs, with an additional 53.4 cfs water right for operation of a fish hatchery. (See WRIA 45 Planning Unit, April 2006, *Final Wenatchee Watershed Management Plan* at Table A-4). Even allowing that there may be some duplication of rights or other errors in these amounts, the lion's share of the water has already been allocated for other uses. Here, too, the instream flow — junior to the majority of the irrigation diversions — could only hope to protect a portion of the natural flow in the river. The Wenatchee basin instream flow rule (WAC 173-545) was adopted in 1983, and amended in 2005. The 2005 amendments reserved certain quantities of water for use even though they would impair the instream flow.

The point is that by the time Ecology is able to establish an instream flow, much, perhaps most, of a river's flow has already been appropriated. Ideally, we would be able to protect aquatic resources, including fish, at levels something like what existed pre-European settlement. Beecher (1990) suggested that the period from 1960-1982 might be an appropriate benchmark, as this would cover an adequate period of solar activity and would ensure that good records of streamflows and fish production were available. An instream flow, though, cannot and does not bar other senior uses of water, and it cannot and does not take water from senior users and return it to the stream. It can only protect part of whatever is left after more than a century of unchecked water appropriation. Setting an instream flow is analogous to encountering a person who has single-handedly eaten nearly an entire pie and requiring that he share the surviving slice or two with others.

Mitigation for Diversions or Withdrawals of Water

Where a diversion or withdrawal of water would impair an instream flow, it is sometimes possible to mitigate the impairment. "In-kind" or "water-for-water" mitigation refers to providing replacement water to compensate for a withdrawal. An example of in-kind mitigation is purchasing and retiring a senior water right for an amount of water equal to the new use, so that the total amount of water in the stream remains constant. Water banking generally relies on this strategy. A water bank has the ability to pool water rights and to make mitigation available as credits to buyers; a person who needs to obtain mitigation water can effectively do this through a single transaction with the water bank. Most commonly in Washington, water rights (purchased or donated) are placed into the state trust water rights program. RCW 90.42.080. For a discussion of water banking in Washington, see www.ecy.wa.gov/programs/wr/market/waterbank.html.

The instream flow rules that require mitigation for new water withdrawals generally specify that it be in-kind. In other words, the new water use is "water budget-neutral." See Mitigation Rules. The definition of "mitigation plan" in certain other instream flow rules also suggests that the mitigation contemplated is "in-kind." For example, the Stillaguamish instream flow rule does not require that permit-exempt uses be mitigated but provides that new withdrawals from closed streams may be allowed if the applicant submits a "scientifically sound mitigation plan." WAC 173-505-110(1)(b). The definition of "mitigation plan" in this rule includes a requirement that "the withdrawal with mitigation in place will not impair existing water rights, including instream flow rights..." WAC 173-505-030(7). The Quilcene-Snow instream flow rule contains an identical definition of "mitigation plan." WAC 173-517-030(12)(a). This language is most readily interpreted to mean that the new withdrawal is to be mitigated with water in the river — any other strategy will result in impaired flows.

"Out-of-kind" mitigation, on the other hand, involves providing some type of habitat enhancement or restoration other than water in the stream. By definition, out-of-kind mitigation does not prevent impairment of the instream flow. Examples of out-of-kind mitigation are revegetating streambanks, removing levees that channel a river, or adding large woody debris to improve fish habitat. While there is no doubt value in such habitat projects, the obvious flaw with out-of-kind mitigation is that where fish are concerned, water is simply different: the best habitat in the world is of no use to fish unless there is water in it. For this reason, out-of-kind mitigation is not an acceptable way to compensate for impairment of an instream flow. See the discussion of *Foster v. Department of Ecology*, No. 90386-7 (Washington Supreme Court, October 8, 2015), below.

"Maximum Net Benefits" Must Consider All Water Use - Not Just Unappropriated Water

The Water Code, specifically RCW 90.03.005, provides that the waters of the state are to be used "in a fashion which provides for obtaining maximum net benefits" from both out-of-stream and instream uses:

It is the policy of the state to promote the use of the public waters in a fashion which provides for obtaining maximum net benefits arising from both diversionary uses of the state's public waters and the retention of waters within streams and lakes in sufficient quantity and quality to protect instream and natural values and rights.

RCW 90.54.020(2) contains similar language. It has been suggested that the "maximum net benefits" analysis requires that an instream flow be set at a level low enough so as to allow further appropriations to support development. But these statutes cannot be read in a vacuum. Any consideration of "maximum net

Water Allocation

Historical Context

OCPI Exception

Clarity Lacking

Narrow Exception

"INTERRUPTIBLE WATER RIGHT"

(FROM ECOLOGY WEBSITE)

An interruptible water right is one that — because it is junior in priority to other water rights, including instream flow levels — cannot be reliably used year-round. Senior water rights must be satisfied first, so more junior rights may be limited at certain times of the year. When the Skagit River falls below the instream flow levels, all junior water rights are subject to being turned off (interrupted) until the Skagit River meets the regulatory flow levels. The Skagit River has not met the flow levels prescribed in the rule an average of 95 days in each of the past 28 years. These low flow days are mostly concentrated in the late summer and early fall months.

benefits" when setting an instream flow does not start from a blank slate, because most of the state's water had already been appropriated for out-of-stream use (and was already producing economic benefits) before the instream flow statutes were passed.

Considering maximum net benefits from "use of the public waters," as the Water Code requires, is not the same as considering maximum net benefits from "use of the public waters *that have not yet been appropriated.*" When the out-of-stream benefits that are already being enjoyed through use of previously appropriated water are added to the analysis, "maximum net benefits" clearly demands that instream uses of water, too, be protected. Water was appropriated with no concern for instream or other environmental values for many years, and setting instream flows that are protective of the remaining environmental and other instream values is consistent with maximizing the benefits arising from both in- and out-of-stream uses. To do otherwise would render the protections of an instream flow meaningless.

"Overriding Considerations of the Public Interest" (OCPI) - Narrow Exception

Once established, an instream flow serves as a "water right for the river." Instream flows have the same protection from impairment as other water rights, and a permit for a diversion or withdrawal of water that would impair an established instream flow must not be issued. *Postema*, 142 Wn.2d at 95. The Legislature has provided only a single, narrow exception to this principle, which allows impairment of an instream flow only where "it is clear that overriding considerations of the public interest will be served." RCW 90.54.020(3)(a). This "OCPI" exception is not further defined, and no statute or rule sets forth criteria that are to be used to determine what constitutes an "overriding concern of the public interest." Despite this lack of clarity, Ecology invoked OCPI in rulemaking for several instream flows in order to "reserve" water for future use, even where such future use would impact instream flows and the environment. See WAC chapters 173-505 (Stillaguamish River); 173-517 (Quilcene-Snow watershed); 173-518 (Dungeness watershed); 173- 527 (Lewis basin); 173-528 (Salmon-Washougal basin); and 173-545 (Wenatchee River basin).

Recent Washington Cases Dealing With OCPI and Instream Flows

The contours of the permissible use of OCPI have never been precisely defined. Two recent Washington Supreme Court decisions have partially defined the limits of the exception and discussed how Ecology may apply it. Notably, in both cases the Court stressed that the exception was to be applied narrowly.

The first of these, *Swinomish Indian Tribal Community v. Dep't of Ecology*, 178 Wn.2d 571, 311 P.3d 6 (2013) (*Swinomish*), dealt with the application of OCPI to justify re-allocation of water from streamflows to development in the Skagit River Basin (WRIA 3). The instream flow for the Skagit River was established in a rule that became effective in 2001. WAC 173-503 ("Skagit Instream Flow Rule"). Because the instream flow was *not* met for approximately 100 days each year, any new withdrawals of water (including from permit-exempt wells) would be interruptible and could not provide year-round water supplies that would be used for development. RCW 19.27.097 requires that an applicant for a building permit provide evidence of an "adequate water supply for the intended use of the building." For a residential building, this requires an uninterruptible supply of water.

Skagit County sued to overturn the Skagit Instream Flow Rule. As part of a settlement of the litigation, Ecology amended the Skagit Instream Flow Rule in 2006. The amendments set aside water for various categories of future use in 27 "reservations." (Former WAC 173-503-073; -074 (invalidated by Supreme Court decision October 3, 2013)). A party could apply to beneficially use the reserved water despite the undisputed fact that use of water from the reservations would impair the pre-existing instream flows and adversely affect salmon.

In establishing the Skagit Instream Flow Rule's reservations, Ecology relied on the OCPI exception and used a simple balancing test in which the value of water for new domestic, municipal, industrial, agricultural, and stock-watering uses was weighed against the impact on aquatic resources and recreational uses, including what Ecology called a "small monetary loss to fisheries." *Swinomish*, 178 Wn.2d at 579. In addition to the gained economic productivity from the new beneficial water use, Ecology also cited the fact that new sources of water would otherwise be unavailable as a "benefit" of the reservation scheme. Ecology then concluded that the benefits of the reservations, taken in aggregate, outweighed the impact of the water withdrawals on instream resources. *Id.*

The Swinomish Indian Tribal Community (*Swinomish*) challenged the amended rule in Superior Court, arguing that Ecology's use of the OCPI exception was based on an incorrect interpretation of the statute and that it was improper to consider the benefits of all 27 of the reservations together. *Id.* at 580. After the trial court upheld the amended rule and dismissed the *Swinomish* petition, the Washington Supreme Court (Court) accepted review. Their decision held that Ecology exceeded its statutory authority in amending the rule to establish the reservations. *Id.* at 602. As in *Postema*, the Court again recognized that instream flows are water rights that enjoy the same protection from impairment by subsequent (junior) appropriations as other senior water rights, and that OCPI under RCW 90.54.020(3)(a) provides only a "narrow exception" to the rule preventing impairment of an established instream flow right. *Id.* at 585 (*citing Postema*, 142 Wn.2d

**Water
Allocation****Authority
Limited****Balancing Test
Rejected****Foster Case****"Gold-Plated"
Mitigation****"Out-of-Kind"****"End Run"
Rejected****Temporary
v.
Permanent Uses****Net Ecological
Benefits**

at 81-82). Because Ecology's interpretation of the OCPI exception "fails to give minimum flow water rights the protection the Legislature has determined is appropriate," it was "inconsistent with the statutory scheme." *Id.* at 597.

The *Swinomish* Court considered the OCPI provision of RCW 90.54.020(3)(a) in the context of other related statutes in the water code, and held that OCPI could not be used to simply reallocate water from instream flows to development. *Id.* at 584; 588. The Court specifically noted that the Legislature had not given Ecology "broad authority" to make development possible by reallocating water; rather, OCPI was meant to be applied in "extraordinary circumstances." *Id.* at 599; 576. The Court also held that the OCPI exception was not intended to be an alternative method for appropriating water when the four-part test of RCW 90.03.290(3) could not be met — terming Ecology's use of the exception as an "end-run around the normal appropriation process" that did not accord with the Prior Appropriation Doctrine or with the statutes implementing it. *Id.* at 590.

In addition to finding that the Skagit Instream Flow Rule's reserves did not rise to the level of an "overriding consideration of the public interest," the Court found that Ecology's simple balancing test was inadequate and that economic gains alone did not justify use of OCPI to impair an established instream flow. *Id.* at 600. The majority observed that the desire to find water for rural homes was "virtually assured of prevailing over environmental values" under Ecology's balancing test, and went on to note that the Water Resources Act explicitly contemplated protection of instream as well as out-of-stream uses. *Id.* The Court also observed that beneficial uses of water did not necessarily serve the *public* interest, specifically pointing out that uses such as permit-exempt wells for domestic use were private, not public. *Id.* at 587.

More recently, in *Foster v. Department of Ecology*, No. 90386-7 (Washington Supreme Court, October 8, 2015), the Court addressed the question of what constitutes an "overriding consideration of the public interest" as well as the issue of "out-of-kind" mitigation. In *Foster*, Ecology issued a large new groundwater right to the City of Yelm for future development. It was undisputed that Yelm's withdrawal of this water would reduce streamflows in the Deschutes and Nisqually Rivers as well as Yelm Creek. *Id.* at *2. (The Pollution Control Hearings Board's (PCHB's) decision as to water rights for Olympia and Lacey was not appealed). Together with the cities of Lacey and Olympia, Yelm proposed what was termed a "gold-plated" mitigation package, relying on habitat enhancements rather than on replacement water to mitigate for its full withdrawal. Part of the mitigation package included obtaining replacement water for the stream by purchase and retirement of irrigation rights. The irrigation season extends from April 15 through October 15, so the replacement water was not available in the "shoulder seasons" immediately before and after the irrigation season, times which are important for fish spawning. The habitat enhancements are "out-of-kind" mitigation and would not have fully compensated for the impacts of the water withdrawn (Ecology conceded that streamflows would be impaired at times important for spawning fish). *Foster*, Slip Op. at *2. Despite the undisputed loss of water from the streams, Ecology approved the permit, finding a net ecological benefit. The PCHB affirmed issuance of the permit, and *Foster* appealed to superior court. While *Foster*'s appeal was pending, the Court issued its *Swinomish* ruling. The superior court considered the case in light of *Swinomish* and affirmed the PCHB.

On direct review, the Court overturned PCHB's decision and disapproved the permit, in a decision firmly grounded in its *Swinomish* precedent. *Id.* at *12. The Court noted that *Swinomish* did not allow the use of OCPI as an "alternative method for appropriating water when the requirements of RCW 90.03.290(3) cannot be satisfied." *Id.* at *11. As the Court noted: "Ecology's approval of Yelm's permit and its application of the OCPI exception makes the sort of end-run around the appropriation process that we expressly rejected in *Swinomish*." *Id.* In this analysis, Ecology may not use OCPI to impair streamflows to provide water for development in Yelm, just as the *Swinomish* court held that it could not do so to provide water for development in the Skagit River basin.

Foster also contains an analysis of permanent v. temporary uses of water. Through a line of reasoning based largely on use of the terms "appropriation" and "withdrawal" in parts of the Water Code, the Court found that "appropriation" referred to "assignment of a permanent legal water right," while "withdrawal" referred to "the temporary use of water." See Slip Op. at *9-10. This usage is not in complete accord with the way "appropriation" and "withdrawal" are used as terms of art, and this part of the opinion may lead to some confusion in the future.

Foster also examined the question of what constituted an "overriding consideration of the public interest." In *Swinomish*, the OCPI exception allowing impairment of instream flows was held to be a narrow one: "extraordinary circumstances" were required before an instream flow could be impaired. *Swinomish*, 178 Wn.2d at 576. *Swinomish* did not, however, describe the sort of extraordinary circumstances that would be required. In *Foster*, Ecology argued that the mitigation plan presented by Yelm and the other cities was itself an "extraordinary circumstance" because of the net ecological benefits projected to flow from totality of the in- and out-of-kind mitigation proposed. The *Foster* Court rejected this argument, stating "...the mitigation plan itself is not the 'extraordinary circumstances' meant to justify use of the OCPI exception." *Foster*, Slip Op. at *11. The Court observed that the purpose of the permit application was to provide water for municipal needs, which it noted is "far from extraordinary." ("And

Water Allocation

Replacement Water

Instream Flows Protected

"In-Kind" Requirement

Emergency Circumstances

Difficult Choices

Water Banks

[W]ater banking is broadly defined as "an institutional mechanism that facilitates the legal transfer and market exchange of various types of surface, groundwater, and storage entitlements."

Water banks can be involved to differing degrees in water exchange. Banks have assumed the role of broker, clearinghouse, and market-maker. Brokers connect or solicit buyers and sellers to create sales. A clearinghouse serves mainly as a repository for bid and offer information. A market-maker attempts to ensure there are equal buyers to sellers in a market. Many banks pool water supplies from willing sellers and make them available to willing buyers. Banks can also provide a host of administrative and technical functions.
From Ecology Publication
No. 04-11-011

municipal water needs, far from extraordinary, are common and likely to occur frequently as strains on limited water resources increase throughout the state." *Id.* Finally, *Foster* makes it clear that mitigation for impairment of an instream flow cannot be accomplished through other "ecological improvements." *Id.* The Court noted that the legal injury involved was impairment of a senior water right (i.e., the instream flow), and that the injury was not mitigated by the parts of Yelm's mitigation plan that did not replace the missing water.

Impacts of *Foster* & *Swinomish* on Future Appropriations

Foster and *Swinomish* demonstrate judicial resolve that instream flows must be protected. Although they do not define what does constitute an "overriding consideration of the public interest" these cases do help determine what does not. Together, they hold that the OCPI exception will not justify impairing instream flows for municipal, domestic, or agricultural use simply based on the perceived economic value of the new uses. *Swinomish* also strongly suggested that OCPI may not be used to impair an instream flow to provide water for uses that are generally private, such as providing domestic water, rather than strictly public. Under *Foster*, it is clear that the "overriding consideration" must relate to the need for the water itself, rather than to the totality of a scheme to obtain water, including any benefits that are provided in mitigation.

Foster also holds that water withdrawals impairing senior instream flows are to be mitigated through replacement water (in-kind mitigation). Out-of-kind mitigation, such as the habitat improvements in *Foster*, does not compensate for impairment of instream flows.

What *Swinomish* and *Foster* did not do, however, was to define exactly when OCPI could be used. *Foster's* reasoning that OCPI cannot be used to allow an existing instream flow to be permanently impaired, together with *Swinomish's* holding that OCPI may not be used simply to find water for development, suggests that OCPI should be reserved for emergency circumstances.

Options to Enhance Water Supply

Until recently, water management, especially in rural areas, has largely focused on increasing total appropriations. By doing so, Ecology and water users have been able to avoid making difficult choices about how water will be used. However, the "new" water located invariably comes at the expense of fish and other environmental values. Recent establishment of water banking systems (*see below*) is a promising method of minimizing or avoiding these impacts.

We are now at the point where withdrawal of more water does represent a choice — a choice to harm the instream environment and the fish and wildlife that depend on it. Much — in some cases most — of the flow of our rivers has already been dedicated to out-of-stream uses. The challenge before us is to decide how to live within our means by wisely and efficiently allocating that water, rather than engaging in an ultimately futile attempt to keep finding "more." Even if instream flows and the environment were given no protection whatsoever, the day would still come when there is no more water to be taken. What then?

I submit that the problem is largely one of structural incentives in our water management scheme. Water is currently available at no cost to those with perfected water rights, but may not be available at any price for those (including new users) who lack water rights. There are several areas where changes in policy or possibly new legislation could help to reduce or eliminate disincentives to reallocation of water.

Conservation has great potential to reduce overall water use and to allow more users to share the water that has already been allocated. It will also play a key role in adapting to the reduced water supply that is expected to result from climate change. Key areas that should be explored are use of more efficient plumbing fixtures, low-water use landscaping, and more efficient irrigation techniques. However, current water pricing (or the lack hereof) provides little incentive to conserve. Further, the system has only just begun to address ways (such as water banking) to allow users to benefit financially from making water available for use by others. Opportunities to conserve water are likely to be different in different parts of the state, due to the different uses of water that predominate. For example, agricultural conservation might be stressed in Eastern Washington, while programs to encourage water savings in municipal/industrial uses might be more useful in Western Washington.

Water banking goes hand-in-hand with conservation, by providing a market for water that is conserved and therefore a financial incentive to use less water. Where senior rights can be purchased and placed in trust, a banking system can provide water-for-water mitigation. A one-time payment from a property owner to cover the cost of mitigation can allow development of water on his or her property, which greatly simplifies individual mitigation obligations. Water banks are successfully operating in several regions including the Yakima Basin and the Dungeness River watershed. Use of water banking should be encouraged, and expanded incentives for placing water into trust should be explored. The water banking system must also be transparent, and regulated to ensure that water used as mitigation is truly available at the appropriate times. There must be assurances that the mitigation water will be available at the appropriate times of year and for the lifetime of the mitigated use. For domestic use, mitigation will need to be provided in perpetuity. This may also require building in a margin of safety to guard against reductions in streamflow caused by climate change.

Water Allocation

Relinquishment Disincentive

Growth Management

Storage Options

Reclaimed Water

Metering

Measurement Accuracy

Water Unavailability

Disincentives to conservation or reallocation of water should be eliminated where possible. Water rights attached to property may make up a significant part of the value of that property. Water rights or parts of water rights that are not used (generally for five consecutive years) can legally be considered relinquished. RCW 90.14.180. This means that using less water may result in diminishment of a water right, which would reduce the value of the property. This results in disincentives for conservation, and indirectly makes less water available for other uses. This is an area where new legislation might be useful in encouraging agricultural users to conserve water, which could then be made available for domestic use.

The problem is also largely one of distribution. The issues with domestic water availability in particular are largely due to population growth in areas that lack adequate water and are not served by municipal water systems. The State of Washington's Growth Management Act (GMA) was intended to direct growth to areas where services could be readily provided and to prevent sprawl. RCW 36.70A. The GMA should be followed so that growth is channeled to areas that can be served by water or that have an adequate groundwater supply. This is especially important considering the growth of Washington's population; counties simply cannot continue to avoid the issue of water availability by failing to consider protection of water resources in their zoning decisions. This issue is the subject of a case currently under consideration by the Washington Supreme Court. *Hirst v. Western Washington Growth Management Hearings Board* (No. 91475-3) addresses the extent of a county's obligation to include provisions in its Comprehensive Plan that protect water resources.

In areas where senior water rights cannot be found for purchase, local storage of water in cisterns or through aquifer storage and recharge (ASR) may allow mitigation of groundwater use. Streamflows in most parts of the state fall below adequate levels for only part of the year. Storage of water at times when flows are high, either for domestic use or for streamflow augmentation during the dry season, might provide local mitigation options. Ecology should work aggressively to develop methods for protecting instream flows through storage. A bill providing for study of storage options in the Skagit River basin has been passed by the 2016 Legislature (SB 6589; as of this writing, the bill is awaiting the governor's signature). ASR also offers the potential to mitigate water use, but there are issues relating to water quality and Washington State Health Department regulations that must be resolved. Here, too, legislative action might be of use in setting forth a framework for use of this method. In some cases, use of reclaimed or "recycled" water from wastewater treatment may be appropriate in the ASR setting. Ecology has restarted the process of rulemaking to provide regulations for use of reclaimed water, which was initially directed by the Legislature in 2005. Documents relating to Ecology's reclaimed water rulemaking process are located at www.ecy.wa.gov/programs/wq/ruledev/wac173219/0612documents.html.

Finally, metering of water use is a key piece of the puzzle. There has been significant resistance to metering, particularly for agriculture or permit-exempt wells. However, we cannot allocate water wisely, assess the progress of conservation efforts, or properly mitigate water use unless we know how much water is actually being used. Some, but not most, instream flow rules require metering of new permit exempt water use. See Metering Rules. In the absence of metering, use must be estimated. For permit-exempt wells, these estimates vary widely. Ecology has used estimates ranging from 15 – 800 gallons per day for consumptive use from permit-exempt wells. See Consumptive Use Estimates. Some users object that these numbers are too high, but in the absence of accurate information Ecology is wise to use conservative assumptions.

It is also likely that use from permit-exempt wells is higher than the average in summer, exactly when instream flows are most likely to be unmet. If use by permit-exempt water users were underestimated, then water-for-water mitigation plans would fail to fully mitigate for the impact of water use, resulting in impairment of streamflows and more frequent conflict with other water right holders. On the other hand, if consumptive use were over-estimated, then excessive mitigation would be required of property owners. As discussed above, Ecology already has the authority to meter all water uses (including permit-exempt uses), and indeed is required to meter certain new diversions. The actual cost of metering is relatively low compared to the cost of drilling a well or developing a property and should not be a barrier (for example, the cost to install a meter on a domestic connection in the City of Bellingham is less than \$1000. Eric Hirst, personal communication, February 20, 2016). Ecology should be encouraged to increase use of metering and to collect data on actual water use. However, Ecology's ability to enforce limitations on water use is currently hamstrung by substantial reductions in funding for enforcement staff. This may be another area where legislative action, including providing Ecology with additional resources, could be of benefit.

Conclusion

The current issues of water unavailability in some parts of Washington simply reflect the hard truth that withdrawals of water, primarily for development and agriculture, have reached the limit of what the resource can support. The majority of water in most streams has already been taken for other uses. Further appropriations will endanger instream resources, in conflict with treaty obligations, Washington law, and the imperative for recovery of threatened and endangered species. To the extent that particular water users are unable to find reliable supplies of water, the issue is largely one of how we choose to prioritize and distribute the water that is available for use. Simply appropriating more and more water at the expense of

Water Allocation

the environment is not the answer. Indeed, even allocating our entire water supply to human use would only delay the date at which that supply becomes inadequate. A solution will only be found when methods for efficiently allocating and using the water, that is already dedicated to human use, are developed and employed.

The author thanks Rachael Osborn, Trish Rolfe, Eric Hirst, and Dave Monthie for helpful comments on the draft of this manuscript.

FOR ADDITIONAL INFORMATION:

DAN VON SEGGERN, Center for Environmental Law & Policy, 206/ 829-8299 or dvonseggern@celp.org

Ecology's Instream Flow website at: www.ecy.wa.gov/programs/wr/instream-flows/isfhm.html

Dan Von Seggern is a staff attorney at the Center for Environmental Law & Policy (CELP), working on legal matters involving instream flows, water quality, and water policy advocacy. After graduating from the University of Washington Law School in 2007, he worked as a public defender and in civil litigation, joining CELP in 2015. Prior to his legal career, Dan spent 20 years working in chemistry, molecular biology, and gene therapy. Dan is a member of the Washington State Bar Association.

REFERENCES

- Elwha-Dungeness Planning Unit, May 2005, *Elwha-Dungeness Watershed Plan, Water Resource Inventory Area 18 (WRIA 18) and Sequim Bay in West WRIA 17*. (Published by Clallam County) at page 2.8-6; at 2.3-10; at 2.3-9; and at 2.3-11.
- Matthews, S.B. and F. W. Olson (1980), *Factors affecting Puget Sound Coho Salmon (Onchorynchus kisutch) Runs*, Can. J. Fish. Aq. Sci. 37: 1373-8.
- Mauger, G.S., J.H. Casola, H.A. Morgan, R.L. Strauch, B. Jones, B. Curry, T.M. Busch Isaksen, L., Whitely Binder, M.B. Krosby, and A.K. Snover, 2015. *State of Knowledge: Climate Change in Puget Sound*. Report prepared for the Puget Sound Partnership and the National Oceanic and Atmospheric Administration. Climate Impacts Group, University of Washington, Seattle, at Ch. 3 generally.
- Poff, N.L., J.D. Allan, M.B. Bain, J.R. Karr, K.L. Prestegard, B.D. Richter, R.E. Sparks, and J.C. Stromberg (1997), *The Natural Flow Regime*, Bioscience 47(11):769-784.

Consumptive Use Estimates: The Dungeness instream flow rule assumes consumptive use of 150 gallons/day (gpd) from a permit-exempt domestic well (or 15 gpd if the user is on a septic system: Ecology assumes that much of the water withdrawn ultimately recharges groundwater if the user employs a septic system rather than a sewer connection) WAC 173-518-080(5). The Stillaguamish instream flow rule assumes an average of 350 gpd. WAC 173-505-090(6)(a). The Watershed Plan for the Wenatchee River (WRIA 45) assumes use of 380 gpd. WRIA 45 Planning Unit, April 2006, Final Wenatchee Watershed Management Plan at 14. The Lewis River rule assumes a standard amount of 240 gpd, but adds another 560 gpd if "septic recharge is known not to occur." WAC 173-527-130(3).

Groundwater Pumping and Streamflows: see Barlow, P.M. and S. A. Leake, *Streamflow Depletion by Wells – Understanding and Managing the Effects of Groundwater Pumping on Streamflow*, USGS Circular 1376 (2012). The evolution of Washington law regarding hydraulic connectivity is described in Rachel P. Osborn, *Hydraulic Continuity in Washington Water Law*, 47 Idaho L. Rev. 23-49 (2010).

Groundwater Withdrawals: For example, WAC 173-510-050 (certain groundwater withdrawals in Puyallup watershed to be regulated like surface waters); WAC 173-517-100 (Quilcene-Snow watershed closed to groundwater withdrawals affecting closed surface waters); WAC 173-527-080 (groundwater withdrawals in Lewis River basin may not affect closed surface waters); WAC 173-532-040 (aquifers in continuity with Walla Walla River closed to groundwater withdrawal except for permit-exempt wells); WAC 173-539A-040 (no new groundwater uses in Upper Kittitas Valley unless water budget-neutral); WAC 173-548-050 (no withdrawals of groundwater in continuity with closed surface waters in Methow watershed); WAC 173-557-060 (Spokane River instream flows to be protected from permitted or permit-exempt groundwater withdrawals).

Metering Rules: WAC 173-505-090(2)(h) (Stillaguamish basin; metering required for non-domestic users of permit-exempt wells); WAC 173-517-180 (Quilcene-Snow watershed, all new permit-exempt well users must meter); WAC 173-518-060 (Dungeness watershed, all new users must meter); WAC 173-539A-070 (Upper Kittitas valley, all groundwater users must meter); WAC 173-545-090 (Wenatchee River basin, all water use from reservation must be metered).

Mitigation Rules: WAC 173-518-070 (Dungeness River; water use "may be mitigated" through credits purchased from water exchange); WAC 173-527-110(2)(b) (Lewis River basin; streamflow depletions to be offset with water to "maximum extent practicable" and for "at least half" of depletion); WAC 173-528-110(2)(b) (Salmon-Washougal basin, same as for Lewis); WAC 173-532-050(6) (Walla Walla River basin, certain new permit-exempt well users must provide "water-for-water" mitigation); WAC 173-539A-050(2) (Upper Kittitas; water user is to identify water rights that will offset new use of water).