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CHANGING COURSE: REVISITING INSTREAM FLOW RULEMAKING IN WASHINGTON STATE FOLLOWING *SWINOMISH v. ECOLOGY*

Haylee J. Hurst

Abstract: Since the adoption of Washington’s Water Resources Act in 1971, legal recognition of instream water uses to preserve fish, wildlife, and other environmental values have become firmly entrenched in Washington water law. By establishing “instream flow rules,” rules that require a certain amount of water to be left in streams before water may be withdrawn for any new uses, the Washington State Department of Ecology (Ecology) must protect the environment while also managing water to achieve “maximum net benefits” for the people of Washington State. Ecology may only allow new withdrawals of water that will impair established instream flows if it finds that “overriding considerations of the public interest” will be served. In two recent cases, *Swinomish Indian Tribal Community v. Washington State Department of Ecology* and *Foster v. Washington State Department of Ecology*, the Washington State Supreme Court invalidated Ecology’s reliance on this statutory exception in authorizing water rights that will impair instream flows, instead, interpreting the language of the exception very narrowly.

This Comment analyzes instream flow rulemaking in light of these cases, concluding that the decisions constrain Ecology’s ability to adapt existing rules to changing conditions, and that current law is therefore inadequate to address future challenges, including limited water availability and climate change. To better address these challenges, instream flow rules should be both more precise and more responsive to future conditions. To this end, Washington law should require instream flow rules to conform to a “best available science” standard tailored toward achieving healthy fish populations. In addition, investment in infrastructure for Washington’s existing Trust Water Rights Program to help expand water banking activities throughout the state, is needed to facilitate market transfers of water to supply unmet instream flows and new out-of-stream uses.

INTRODUCTION

Washington water law is at a crossroads. While water in the Pacific Northwest is generally viewed as plentiful, Washington State exhibits a common truth about water: it is not available at the times and in the places where it is most needed.¹ While Washington is known as the

1. WASH. STATE DEP’T OF ECOLOGY, PUB. NO. 12-01-014, 2013–2015 STRATEGIC PLAN 8 (2012), <https://fortress.wa.gov/ecy/publications/documents/1201014.pdf> [hereinafter ECOLOGY, STRATEGIC PLAN] (“Washington . . . is typically viewed as a water-rich state. This is changing. In[] many areas, our state lacks water where and when it is needed”); see also Charlton H. Bonham, *Perspectives from the Field: A Review of Western Instream Flow Issues and Recommendations for a New Water Future*, 36 ENVTL. L. 1205, 1207 (2006) (noting that “[w]ater defines the West either by its abundance or its scarcity”); Stephanie Lindsay, Comment, *A Fight to the Last Drop: The*

“Evergreen State,”² east of the Cascade Mountains, the state is very dry.³ Statewide, the demand for water is often greatest in areas where water is scarce. For example, major irrigation projects in the Yakima⁴ and Columbia River⁵ basins of Eastern Washington allow the arid region to produce many high-value crops, including seventy percent of the nation’s apples, contributing billions of dollars to the state’s economy.⁶ In Western Washington, population growth has put increased pressure on water resources, particularly in rural areas where landowners lack access to public water supplies and must therefore locate a private supply.⁷

Adding to the challenge, demand for water peaks during the late summer and early fall seasons when the least amount of water is available.⁸ Melting snowpack feeds many of Washington’s rivers and

Changing Approach to Water Allocation in the Western United States, 31 S. ILL. U. L.J. 689, 689 (2007) (quoting Benjamin Franklin as saying, “[w]hen the well is dry, we know the worth of water”).

2. See, e.g., MARY W. AVERY, WASHINGTON: A HISTORY OF THE EVERGREEN STATE 3 (1965).

3. See *id.*

4. See generally U.S. DEP’T OF THE INTERIOR, BUREAU OF RECLAMATION, THE STORY OF THE YAKIMA PROJECT (2011), <http://www.usbr.gov/pn/project/bochures/fullyak.pdf> (describing the history and scope of the Yakima Bureau of Reclamation Project).

5. See generally U.S. DEP’T OF THE INTERIOR, BUREAU OF RECLAMATION, THE STORY OF THE COLUMBIA BASIN PROJECT (2008), http://www.usbr.gov/projects/ImageServer?imgName=Doc_1357226577889.pdf (describing the history and scope of the Columbia Basin Bureau of Reclamation Project).

6. See WASH. STATE DEP’T OF AGRIC., AGR. PUB. 103-126 (R/2/15), AGRICULTURE – A CORNERSTONE OF WASHINGTON’S ECONOMY (2012), <http://agr.wa.gov/AgInWa/docs/126-CropMap2015-ForCopier.pdf> (depicting the economic value of the crops produced by each county in Washington); *Agriculture: A Cornerstone of Washington’s Economy*, WASH. STATE DEPARTMENT AGRIC., <http://agr.wa.gov/AgInWA/> (last updated May 14, 2015) (noting that Washington produces seventy percent of the nation’s apples).

7. While the rate of population growth throughout the state is similar, in Western Washington, growth more frequently occurs outside of cities. See WASH. STATE RECREATION & CONSERVATION OFFICE, GOVERNOR’S SALMON RECOVERY OFFICE, 2014 STATE OF SALMON IN WATERSHEDS EXECUTIVE SUMMARY 9 (2014) [hereinafter 2014 STATE OF SALMON], <http://www.rco.wa.gov/documents/gcro/2014StateofSalmonExecSummary.pdf> (“The Washington Department of Fish and Wildlife’s 2012 analysis of land use, showed the rate of land changes from development in and near cities is similar in eastern and western Washington, but outside cities, the rate of change due to development is more than eight times higher in western Washington.”) It is especially difficult to find water for rural domestic uses, because water is often not available once an instream flow rule has been set. See WASH. STATE DEP’T OF ECOLOGY, PUB. NO. 15-11-007, FINDING RURAL DOMESTIC WATER SOLUTIONS WHILE PROTECTING INSTREAM RESOURCES (2015), <https://fortress.wa.gov/ecy/publications/documents/1511007.pdf> [hereinafter ECOLOGY, RURAL WATER SOLUTIONS] (discussing this challenge and potential solutions).

8. See, e.g., WASH. STATE DEP’T OF ECOLOGY, PUB. NO. 11-11-006, FOCUS ON WATER AVAILABILITY: NOOKSACK WATERSHED, WRIA 1, at 1 (2012), <https://fortress.wa.gov/ecy/publications/documents/1111006.pdf> [hereinafter ECOLOGY, NOOKSACK WATERSHED]

streams throughout the spring and early summer.⁹ As snowpack declines, groundwater takes the place of snowmelt, supplementing lower stream flows.¹⁰ Natural stream flows reach their lowest point in late summer and early fall after the snowpack melts and the weather remains dry.¹¹ During this time, demand for water increases for both agriculture and domestic uses.¹² At the same time, sufficient water must be left in streams to sustain salmon and steelhead as they migrate inland to their spawning grounds.¹³ After years of decline, Washington's salmon populations now represent only a fraction of historic populations.¹⁴ In addition to the cultural and economic impact of salmon,¹⁵ as an

("[G]roundwater and surface water are least available when water demands are the highest."); WASH. STATE DEP'T OF ECOLOGY, PUB. NO. 11-11-043, FOCUS ON WATER AVAILABILITY: UPPER YAKIMA WATERSHED, WRIA 39, at 1 (2014), <https://fortress.wa.gov/ecy/publications/documents/1111043.pdf> [hereinafter ECOLOGY, UPPER YAKIMA WATERSHED] (same).

9. See, e.g., WASH. STATE DEP'T OF ECOLOGY, PUB. NO. 11-11-023, FOCUS ON WATER AVAILABILITY: ELWHA-DUNGENESS WATERSHED, WRIA 18, at 1 (2012), <https://fortress.wa.gov/ecy/publications/documents/1111023.pdf> [hereinafter ECOLOGY, ELWHA-DUNGENESS WATERSHED] ("These . . . rivers are fed by melting snowpack in spring and early summer, but later summer and fall flows rely on water moving from groundwater to surface water . . ."); ECOLOGY, NOOKSACK WATERSHED, *supra* note 8, at 1 ("During the summer, there is little rain and many streams and rivers are dependent on groundwater inflow."); ECOLOGY, UPPER YAKIMA WATERSHED, *supra* note 8, at 1 ("During the summer, the snowpack is gone, there is little rain, and naturally low stream flows are dependent on groundwater inflow.").

10. See, e.g., ECOLOGY, NOOKSACK WATERSHED, *supra* note 8, at 1 ("During the summer, there is little rain and many streams and rivers are dependent on groundwater inflow."); ECOLOGY, UPPER YAKIMA WATERSHED, *supra* note 8, at 1 ("During the summer, the snowpack is gone, there is little rain, and naturally low stream flows are dependent on groundwater inflow."); ECOLOGY, ELWHA-DUNGENESS WATERSHED, *supra* note 9, at 1 ("These . . . rivers are fed by melting snowpack in spring and early summer, but later summer and fall flows rely on water moving from groundwater to surface water . . .").

11. See sources cited *supra* note 10.

12. See, e.g., ECOLOGY, NOOKSACK WATERSHED, *supra* note 8, at 1 (noting that "groundwater and surface water are least available [in the summer] when water demands are the highest"); ECOLOGY, UPPER YAKIMA WATERSHED, *supra* note 8, at 1 (noting that in the summer, the "demand for water for human uses, including irrigation are at the yearly maximum").

13. See generally 2014 STATE OF SALMON, *supra* note 7 (discussing the importance of salmon in Washington State, and challenges and efforts to restore salmon and steelhead populations). Steelhead are an anadromous trout that go to sea, like salmon. See *Salmon/Steelhead Species Information*, WASH. DEPARTMENT FISH & WILDLIFE, <http://wdfw.wa.gov/fishing/salmon/steelhead.html> (last visited Nov. 11, 2015).

14. See *id.* at 3 (discussing historical causes of salmon decline and the current state of salmon populations). Fifteen evolutionarily significant salmon or steelhead populations, which can be found throughout seventy-five percent of Washington State, are listed as endangered or threatened under the Endangered Species Act. STATE OF WASH. GOVERNOR'S SALMON RECOVERY OFFICE, STATEWIDE STRATEGY TO RECOVER SALMON 4, 8–9 (2006), <http://www.rco.wa.gov/documents/gfro/2006StatewideStrategy.pdf>.

15. See 2014 STATE OF SALMON, *supra* note 7, at 2, 4 ("Salmon are special to the people of Washington. They provide jobs, food to eat, sport, and cultural identity.").

“indicator species,” salmon populations reflect the overall health of an ecosystem and are therefore used as a basis for protecting environmental values in Washington’s rivers and streams.¹⁶

Managing Washington’s water in light of these competing demands for a limited and variable resource is a challenge. During the summer of 2015, a season of record warm temperatures and uncommonly low snowpack resulted in a “severe” drought declaration throughout Washington State.¹⁷ With climate change, decreased snowpack, and continued population growth presenting additional future challenges,¹⁸ Washington must manage its water with ever-increasing thoughtfulness. Thus far, Washington State has been an innovator in water resource management and has existing tools to help it meet these challenges.

This Comment begins in Part I by describing Washington’s existing legal framework for managing its water resources. From its origins in prior appropriation doctrine, which allocates water based on a priority system of “first in time, first in right,” the State adopted legislation establishing a comprehensive planning process for water resources and setting forth principles for allocating water among competing uses.¹⁹ Washington law now requires minimum amounts of water known as “base flows,” “minimum flows,” or “instream flows,”²⁰ to be left in its

16. See WASH. STATE DEP’T OF ECOLOGY, PUB. NO. 98-1813-WR, SETTING INSTREAM FLOWS IN WASHINGTON STATE 3 (2014), <https://fortress.wa.gov/ecy/publications/documents/981813wr.pdf> [hereinafter ECOLOGY, SETTING INSTREAM FLOWS]; Guido Rahr, *Why Protect Salmon and Their Strongholds?*, WILD SALMON CENTER, <http://www.wildsalmoncenter.org/about/whySalmon.php> (last visited Oct. 29, 2015) (discussing the relationship between salmon and river ecosystems).

17. See, e.g., Nat’l Drought Mitigation Ctr., *U.S. Drought Monitor: Washington*, U.S. DROUGHT MONITOR, <http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?WA> (last visited Aug. 13, 2015); *Record Low Snowpack in Cascades, Sierra Nevada*, U.S. DEPARTMENT AGRIC. (Mar. 11, 2015), <http://www.usda.gov/wps/portal/usda/usdahome?contentid=2015/03/0062.xml>; *Washington Drought 2015*, WASH. STATE DEPARTMENT ECOLOGY, <http://www.ecy.wa.gov/drought/> (last visited July 29, 2015); Nick Wiltgen, *Northwest Heat Wave By the Numbers: Dozens of Monthly and All-Time Record Highs*, WEATHER.COM (July 8, 2015), <http://www.weather.com/news/weather/news/washington-oregon-idaho-all-time-record-highs-june-2015>.

18. See, e.g., WASH. STATE DEP’T OF ECOLOGY, PUB. NO. 13-11-004, 2013 REPORT TO THE LEGISLATURE: STATEWIDE PROGRESS ON SETTING INSTREAM FLOWS 2 (2013), [hereinafter ECOLOGY, 2013 REPORT] (“[S]hrinking snow packs, increased frequency of drought years, continued population growth, and ongoing land use development—combine to increase demand and reduce water availability.”); Philip Mote et al., *Chapter 21: Northwest*, in CLIMATE CHANGE IMPACTS IN THE UNITED STATES 487, 489–92 (2014), available at <http://nca2014.globalchange.gov/report/regions/northwest> (reporting observed changes in streamflow in the Pacific Northwest and discussing water-related challenges as a consequence of climate change).

19. See *infra* Part I.A–B.

20. Washington law uses all three terms interchangeably. See WASH. REV. CODE § 90.92.020(6) (2014) (defining “instream flow” as a “minimum flow” under Washington’s Water Code or a “base

rivers and streams to protect fish, wildlife, and other environmental values.²¹ Water must also be allocated between competing uses to secure the “maximum net benefits” for the people of Washington State.²²

In Part II, this Comment explains how Ecology establishes required “instream flows” by adopting rules that identify a target flow level that should be met at various locations along a river or stream.²³ Ecology uses fish habitat as a baseline for setting these flows.²⁴ Ecology began adopting instream flow rules in the 1970s, and as of April 2015, has adopted rules for twenty-nine of the sixty-two watersheds in Washington.²⁵ As instream flow science advances, Ecology uses methods to set modern instream flow rules that are more precisely tailored to the impacts on salmon and other fish populations than early methods.²⁶ Instream flow rules do not impact water rights that predate them.²⁷ Instead, they help Ecology determine whether additional water is available for new uses, and often result in a finding that water is not available.²⁸

Part III discusses recent case law that changes the way Ecology must manage water resources.²⁹ In *Swinomish Indian Tribal Community v. Washington State Department of Ecology*,³⁰ the Washington State Supreme Court invalidated Ecology’s interpretation of the “overriding considerations of the public interest” (OCPI) language found in the Water Resources Act.³¹ This language, known as the “OCPI exception,” gives Ecology authority to allow a new use of water to “override” an established instream flow.³² Ecology invoked OCPI to justify setting aside “reservations” of water for future uses that would not be subject to the instream flow rule for the Skagit River.³³ The *Swinomish* Court

flow” under Washington’s Minimum Flows and Levels Act). This Comment will use the term “instream flow” except where another term is used by statute.

21. See *infra* Part I.B.

22. See *infra* Part I.B.

23. See *infra* Part II.A.

24. See *infra* Part II.A.

25. See *infra* Part II.A.

26. See *infra* Part II.B.

27. See *infra* Part II.A.

28. See *infra* Part II.A.

29. See *infra* Part II.A.

30. 178 Wash. 2d 571, 311 P.3d 6 (2013).

31. See *infra* Part III.A.

32. See *infra* Part III.A.

33. See *infra* Part III.A.

interpreted the OCPI exception very narrowly, effectively eliminating its use by Ecology as a tool to plan for future water needs in conjunction with existing instream flow rules.³⁴ The Court's recent decision in *Foster v. Washington State Department of Ecology*³⁵ further confirms that Ecology cannot use OCPI to authorize new water rights that will impair instream flows.

Finally, Part IV evaluates instream flow rulemaking in light of *Swinomish* and *Foster* and concludes that a new approach is needed.³⁶ To meet future challenges, instream flow rules should be more precise to reflect advances in instream flow science, and more responsive to future conditions such as climate change.³⁷ This Comment therefore suggests that Washington law should require instream flow rules to conform to a "best available science" standard tailored to provide water needed for fish.³⁸ To facilitate this change, the State should invest additional resources in its existing Trust Water Rights Program to expand water banking activities statewide.³⁹ This program provides infrastructure to facilitate market water rights transfers that can be used to supplement low stream flows and provide water for new out-of-stream uses.⁴⁰

I. EVOLUTION OF WATER RESOURCE MANAGEMENT IN WASHINGTON STATE

A. *Historical Development of Washington Water Law*

In Washington's early history, settlers acquired water rights based on two distinct doctrines: riparian doctrine and prior appropriation doctrine.⁴¹ Under the common law riparian doctrine, ownership of riparian land—land that adjoins a body of water such as a river or stream—automatically attached certain water rights.⁴² Riparian landowners had the right to enjoy the stream flowing in its natural state along their land, for the most part, undiminished by other water users.⁴³

34. See *infra* Part III.B.

35. No. 90386-7, 2015 WL 5916933 (Wash. Oct. 8, 2015).

36. See *infra* Part IV.

37. See *infra* Part IV.A.

38. See *infra* Part IV.B.1.

39. See *infra* Part IV.B.2.

40. See *infra* Part IV.B.2.

41. See *In re Deadman Creek Drainage Basin*, 103 Wash. 2d 686, 689–93, 694 P.2d 1071, 1073–75 (1985) (discussing riparian rights and appropriative rights in Washington law).

42. See, e.g., *id.* at 689, 694 P.2d at 1073.

43. See, e.g., *id.*; *Benton v. Johncox*, 17 Wash. 277, 280–82, 290, 49 P. 495, 496–97, 499 (1897);

Each riparian also had the right to withdraw “reasonable” amounts of water for use on the adjoining land for purposes like domestic use and agriculture.⁴⁴ Riparian rights vested at the time title to the land passed from the United States to the landowner, and were appurtenant to the land regardless of whether water was withdrawn and used.⁴⁵ Each riparian had an equal right to use the water, irrespective of when the water right vested.⁴⁶

Local custom also recognized water rights acquired under prior appropriation doctrine.⁴⁷ This doctrine, which was developed by miners during the California gold rush, did not allocate water based on land ownership, and instead allowed appropriators to secure water rights by taking water from public lands and putting it to a legally recognized “beneficial use.”⁴⁸ In water law, “beneficial use” refers to the use of a reasonable, non-wasteful amount of water for a specific and productive purpose.⁴⁹ Traditional beneficial uses recognized by the common law included the use of water for irrigation, domestic use, and other consumptive, out-of-stream uses.⁵⁰ Upon statehood, Washington’s first legislature adopted legislation expanding appropriative water rights to all lands, not only those in public ownership.⁵¹

As it developed by custom, prior appropriation doctrine allocated water based on the principle of “first in time, first in right.”⁵² Rather than sharing water equally, in times of shortage, earlier appropriators could use the full amount of their water right, while later appropriators got

Crook v. Hewitt, 4 Wash. 749, 749–50, 31 P. 28, 29 (1892).

44. See *Deadman Creek*, 103 Wash. 2d at 690, 694 P.2d at 1074.

45. *Benton*, 17 Wash. at 288, 49 P. at 498.

46. See, e.g., *Crook*, 4 Wash. at 749–50, 31 P. at 29.

47. See, e.g., *Deadman Creek*, 103 Wash. 2d at 691–92, 694 P.2d at 1074.

48. See *id.*; *Grant Realty Co. v. Ham, Yearsley & Ryrie*, 96 Wash. 616, 623–24, 165 P. 495, 498 (1917); *Thorpe v. Tenem Ditch Co.*, 1 Wash. 566, 569, 20 P. 588, 589 (1889).

49. WASH. STATE DEP’T OF ECOLOGY, PUB. NO. WR 98-152, WASHINGTON STATE WATER LAW: A PRIMER 2 (2006), <https://fortress.wa.gov/ecy/publications/documents/98152.pdf> [hereinafter ECOLOGY, WATER LAW PRIMER]; see also *Cornelius v. Wash. Dep’t of Ecology*, 182 Wash. 2d 574, 605, 344 P.3d 199, 214 (2015) (noting that the term “beneficial use” encompasses both the purpose for which water may be used, and the measure of the water right); BARTON H. THOMPSON, JR. ET AL., LEGAL CONTROL OF WATER RESOURCES 169 (5th ed. 2013).

50. See ECOLOGY, WATER LAW PRIMER, *supra* note 49, at 2.

51. Act of Mar. 9, 1891, ch. 142, § 1, 1891 Wash. Sess. Laws 327, 327; see also WASH. STATE OFFICE OF ATT’Y GEN., AN INTRODUCTION TO WASHINGTON WATER LAW 16 (2000), <https://fortress.wa.gov/ecy/publications/documents/0011012.pdf> [hereinafter AGO, WASH. WATER LAW].

52. See, e.g., *Grant Realty Co.*, 96 Wash. at 623–24, 165 P. at 498; ECOLOGY, WATER LAW PRIMER, *supra* note 49, at 3.

what was left.⁵³ An appropriator's "place in line" was determined by "priority date"—the date that the appropriator expressed intent to put the water to beneficial use.⁵⁴ This was done by making an actual diversion of water, or by posting a notice stating the appropriator's intent to withdraw water.⁵⁵ If an appropriator had to make improvements before diverting water, the priority date would "relate back" to the date work began, as long as the appropriator developed the right with "reasonable diligence."⁵⁶ The water right was "perfected" (in other words, "vested") once the appropriator put the water to actual use.⁵⁷ Once perfected, the right would run with the land.⁵⁸ However, the water right could be lost if the appropriator or subsequent landowner demonstrated an intent to "abandon" the right.⁵⁹ Under the doctrine of abandonment, a long period of nonuse creates a rebuttable presumption that the appropriator intended to relinquish the water right.⁶⁰

In the event of a conflict between water users, water rights would be settled in court, where the judge would apply the applicable riparian or prior appropriation principles.⁶¹ In a conflict between a riparian and an appropriator, the judge would determine which water right vested first—either by land ownership or by water use—and would resolve the dispute in favor of the earlier right.⁶² Even so, the tension between these doctrines presented a challenge that ultimately resulted in the abandonment of riparian doctrine in Washington State.⁶³

53. See, e.g., THOMPSON ET AL., *supra* note 49, at 171; ECOLOGY, WATER LAW PRIMER, *supra* note 49, at 3.

54. See, e.g., *Ellis v. Pomeroy Imp. Co.*, 1 Wash. 572, 575–78, 21 P. 27, 29 (1889); AGO, WASH. WATER LAW, *supra* note 51, at 6; THOMPSON ET AL., *supra* note 49, at 171.

55. See *In re Deadman Creek Drainage Basin*, 103 Wash. 2d 686, 691–92, 694 P.2d 1071, 1074 (1985).

56. See *Grant Realty Co.*, 96 Wash. at 623–24, 165 P. at 498.

57. See AGO, WASH. WATER LAW, *supra* note 51, at 7.

58. *Id.*

59. See *Okanogan Wilderness League v. Twisp*, 133 Wash. 2d 769, 781, 947 P.2d 732, 738 (1997); THOMPSON ET AL., *supra* note 49, at 171.

60. *Okanogan*, 133 Wash. 2d at 739, 947 P.2d at 783. This common law doctrine still applies today, although a similar statutory provision has since been incorporated into the Water Code. See, e.g., WASH. REV. CODE § 90.14.130 (2014); *Okanogan*, 133 Wash. 2d at 738, 947 P.2d at 781.

61. See, e.g., *In re Water Rights in Alpowa Creek*, 129 Wash. 9, 224 P. 29 (1924) (example of an adjudication proceeding).

62. See *In re Deadman Creek Drainage Basin*, 103 Wash. 2d 686, 689–93, 694 P.2d 1071, 1073–74 (1985) (discussing conflict between riparian and appropriative water rights); *Benton v. Johncox*, 17 Wash. 277, 280–82, 290, 49 P. 495, 496–97 (1897) (adjudicating dispute between riparian and appropriative water rights).

63. See *Deadman Creek*, 103 Wash. 2d at 691–92, 694 P.2d at 1074 (discussing decline in riparian doctrine).

Before 1917, the State had no role in managing or allocating water rights, unless a particular case was submitted to the courts for resolution.⁶⁴ This fragmented approach led to conflict and uncertainty among water users.⁶⁵ In 1917, Washington's legislature adopted its Water Code,⁶⁶ which established a central permitting system to govern water rights in surface waters such as Washington's lakes and streams.⁶⁷ The Water Code formally adopted prior appropriation as the exclusive basis for acquiring new water rights.⁶⁸ In 1945, Washington's legislature adopted the Groundwater Code,⁶⁹ which extended the permitting system to "subterranean," or "underground" waters.⁷⁰ The surface and groundwater codes (collectively the "Code") now provide the exclusive method for acquiring water rights in Washington.⁷¹ Different state officials administered the permitting system until Ecology was created in 1970,⁷² consolidating the functions of various other departments.⁷³

Today, Ecology administers Washington's permitting system. Under the Code, Ecology may issue a permit to appropriate water if it finds that: (1) water is available, (2) the permit is for a "beneficial use," (3) the use will not impair an existing water right, and (4) the use is not against the public interest.⁷⁴ A permit-holder must act with "reasonable diligence" to develop the right, and begin applying water to a beneficial use in order to "perfect" the water right.⁷⁵ Ecology will issue a water

64. See, e.g., ECOLOGY, WATER LAW PRIMER, *supra* note 49, at 3.

65. *Id.*; see also *W. Side Irrigation Co. v. Chase*, 115 Wash. 146, 149–50, 196 P. 666, 667 (1921) (discussing problems that led to adoption of the 1917 Water Code).

66. Act of Mar. 14, 1917, ch. 117, 1917 Wash. Sess. Laws 447 (codified as amended in scattered sections of WASH. REV. CODE ch. 90.03).

67. *Id.*; see also ECOLOGY, WATER LAW PRIMER, *supra* note 49, at 3.

68. See Act of Mar. 14, 1917 § 1 (codified as amended at WASH. REV. CODE § 90.03.010).

69. Act of Mar. 19, 1945, ch. 263, 1944–1945 Wash. Sess. Laws 926 (codified as amended in scattered sections of WASH. REV. CODE ch. 90.44).

70. *Id.*; see also AGO, WASH. WATER LAW, *supra* note 51, at 9–14.

71. See *In re Deadman Creek Drainage Basin*, 103 Wash. 2d 686, 687, 694 P.2d 1071, 1072 (1985). The permitting system does not affect water rights that existed prior to the Code's adoption. WASH. REV. CODE § 90.03.010 (2014). To incorporate these rights into the system, the legislature established a water right claims registry, and required claims to water rights predating the permitting system to be registered and evaluated in order to receive a water right certificate. *Id.* § 90.14.041.

72. Environmental Quality Reorganization Act of 1970, ch. 62, 1970 Wash. Sess. Laws 572.

73. *Id.*

74. WASH. REV. CODE § 90.03.290; *id.* § 90.44.070; see also TIMOTHY BUTLER & MATTHEW KING, 23 WASHINGTON PRACTICE SERIES, ENVIRONMENTAL LAW & PRACTICE § 8.25 (2d ed. 2007).

75. WASH. REV. CODE § 90.03.320; see also AGO, WASH. WATER LAW, *supra* note 51 at 6. "Reasonable diligence" is determined by considering all of the circumstances, with "intent" as the most important factor. See *In re Water Rights in Alpowa Creek*, 129 Wash. 9, 14–15, 224 P. 29,

right certificate once it receives proof that the water right has perfected.⁷⁶ The priority date for a perfected water right relates back to the date of application for the permit.⁷⁷ A perfected water right runs with the land.⁷⁸

The Code permits water right transfers to different places or uses, so long as the amount of water used remains the same, and the change does not harm other existing rights.⁷⁹ If a water right holder fails to put the water to beneficial use for five successive years without “sufficient cause,” the water right is forfeited, and reverts back to the State.⁸⁰ Certain groundwater uses, including domestic uses of up to 5000 gallons per day, are exempt from the permitting system.⁸¹

*B. Water Resource Planning and Instream Flow Protection:
Washington’s Water Resources Act*

In its traditional form, prior appropriation doctrine only recognized out-of-stream, consumptive uses of water as “beneficial uses.”⁸² This focus on water consumption and development led to overuse, resulting in environmental harms including the loss of fish and wildlife habitat.⁸³ In the 1960s and 70s, western states began adopting legislation designed to protect instream resources in order to combat these problems.⁸⁴ In 1971, Washington’s legislature adopted the Water Resources Act of

31–32 (1924) (discussing “reasonable diligence” in the context of a water rights adjudication).

76. WASH. REV. CODE § 90.03.330; *see also* AGO, WASH. WATER LAW, *supra* note 51 at 6.

77. WASH. REV. CODE § 90.03.340.

78. *Id.* § 90.03.380.

79. *Id.*

80. *Id.* §§ 90.14.160–180.

81. *Id.* § 90.44.050. Domestic well exemptions are subject to increasing critique throughout the West. *See generally* Jeremy Lieb, *A Solution to the Exempt Well Problem? The New Role of Counties in Determining Legal Water Availability in Washington State*, 3 WASH. J. ENVTL. L. & POL’Y 60 (2013) (discussing prevalence of domestic well exemptions throughout the West and criticisms); Nathan Bracken, *Exempt Well Issues in the West*, 40 ENVTL. L. 141 (2010) (survey of exempt well provisions throughout the West).

82. *See supra* Part I.A.

83. CLAIR STALNAKER ET AL., NAT’L BIOLOGICAL SERV., U.S. DEP’T OF THE INTERIOR, THE INSTREAM FLOW INCREMENTAL METHODOLOGY: A PRIMER FOR IFIM 2 (1995), <https://www.fort.usgs.gov/sites/default/files/products/publications/2422/2422.pdf> (discussing the historical context leading to the adoption of instream flow legislation).

84. *See id.* A comparison of the various state approaches to instream flow protection is outside the scope of this Comment. For more information on the approaches taken by different states, *see generally* Michael F. Browning, *Instream Flow Water Rights in the Western States and Provinces*, in 56 ROCKY MOUNTAIN MINERAL LAW INSTITUTE 9-1 (2010).

1971 (WRA),⁸⁵ declaring that water for recreation, fish and wildlife, and environmental protection are all beneficial uses.⁸⁶ With adoption of the WRA, Washington law required for the first time that minimum amounts of water, known as “instream flows,” be left in Washington’s rivers and streams to protect the environment.⁸⁷ The WRA also established a comprehensive planning process for managing the state’s water resources.⁸⁸ These changes addressed the increased pressure on Washington’s water supplies that resulted from its growing population and economy.⁸⁹

The WRA sets forth “fundamentals of water resource policy” to guide Ecology in managing the state’s water.⁹⁰ First, the WRA establishes minimum stream flows that must be maintained in Washington’s rivers and streams to protect the environment, including fish and wildlife. It directs that “[t]he quality of the natural environment shall be protected and, where possible, enhanced” by retaining “base flows [in rivers and streams] necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values.”⁹¹ Next, it provides that “[w]ithdrawals 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.”⁹² This provision is known as the “OCPI exception.”

To assist Ecology in determining how to allocate water among competing uses, the WRA declares that allocation of water “shall be based generally on the securing of the maximum net benefits for the

85. Water Resources Act of 1971, ch. 225, 1971 Wash. Sess. Laws 1020 (codified as amended in scattered sections of WASH. REV. CODE ch. 90.54).

86. WASH. REV. CODE § 90.54.020(1).

87. *Id.* § 90.54.010. Ecology also derives authority to set instream flows from provisions of the Minimum Water Flows and Levels Act (MWFLA), adopted in 1969. Act of May 23, 1969, ch. 284, §§ 3–6, 1969 Wash. Sess. Laws 2787, 2790 (codified as amended at WASH. REV. CODE §§ 90.22.010–.040). The MWFLA authorizes, but does not require, instream flows unless requested by the Department of Fish and Wildlife. *See* WASH. REV. CODE § 90.22.010. This legislation resulted in the adoption of one instream flow rule. *See* WASH. STATE DEP’T OF ECOLOGY, PUB. NO. 79-11-005, WESTERN WASHINGTON INSTREAM RESOURCES PROTECTION PROGRAM: AN OVERVIEW 3 (1979), <https://fortress.wa.gov/ecy/publications/documents/7911005.pdf> [hereinafter ECOLOGY, PROGRAM OVERVIEW].

88. WASH. REV. CODE § 90.54.010.

89. *See id.* § 90.54.010(1)(a) (setting forth the Legislature’s purposes in adopting the Water Resources Act).

90. *Id.* § 90.54.010.

91. *Id.* § 90.54.020(3)(a).

92. *Id.*

people of the state.”⁹³ “Maximum net benefits” is defined by statute as the “total benefits less costs including opportunities lost.”⁹⁴ Ecology has interpreted this language as ensuring that “Washington citizens, as a whole, get as much value as possible from the ‘waters of the state.’”⁹⁵ To implement the provision, Ecology conducts a “maximum net benefits analysis” when making certain water management decisions.⁹⁶ Ecology employs this analysis as part of its decision-making process when it considers setting aside “reservations” of water to be held for specified future uses.⁹⁷

In addition to the WRA, Ecology derives authority to set instream flows from provisions of Washington’s Minimum Water Flows and Levels Act (MWFLA).⁹⁸ The WRA and MWFLA use the terms “base flows” and “minimum flows” interchangeably to refer to the concept of “instream flows.”⁹⁹ Since the adoption of both Acts, the legislature has clarified that instream flows are “appropriations” like traditional water rights.¹⁰⁰ Like other water rights, instream flows do not impair water rights that predate them.¹⁰¹ The legislature has prioritized achieving healthy wild salmonid populations, a term that encompasses species of both salmon and trout, as the primary goal of instream flows.¹⁰²

93. *Id.* § 90.54.020(2).

94. *Id.*

95. WASH. STATE DEP’T OF ECOLOGY, POL-2025, WATER RESOURCES PROGRAM POLICY/INTERPRETIVE STATEMENT ON WHEN TO PERFORM A MAXIMUM NET BENEFITS ANALYSIS 1 (2005).

96. *Id.*

97. *Id.*

98. Act of May 23, 1969, ch. 284, §§ 3–6, 1969 Wash. Sess. Laws 2787, 2790 (codified as amended at WASH. REV. CODE §§ 90.22.010–.040). For a discussion of the overlap between the MWFLA and the WRA, see WASH. STATE DEP’T OF ECOLOGY, PUB. NO. 03-11-007, A GUIDE TO INSTREAM FLOW SETTING IN WASHINGTON STATE 1011 (2003), <https://fortress.wa.gov/ecy/publications/documents/0311007.pdf> [hereinafter ECOLOGY, GUIDE TO INSTREAM FLOWS].

99. See WASH. REV. CODE § 90.92.020(6) (defining “instream flow” as a “minimum flow” under Washington’s Water Code or a “base flow” under Washington’s MWFLA).

100. *Id.* § 90.03.345.

101. *Id.* § 90.54.920.

102. *Id.* § 90.22.060; see also ECOLOGY, GUIDE TO INSTREAM FLOWS, *supra* note 98, at 9. There are eight species of “salmonids” native to Washington: Chinook, coho, chum, pink, sockeye, steelhead, bull trout, and coastal cutthroat trout. See *Salmon/Steelhead Species Information*, WASH. DEPARTMENT FISH & WILDLIFE, <http://wdfw.wa.gov/fishing/salmon/species.html> (last visited Nov. 11, 2015).

C. *Securing Water for Unmet Needs: Washington's Trust Water Rights Program*

Because instream flow rights are junior in priority to water rights that predate them, they can prevent new water uses in a river, but they cannot put water back in streams once it has been withdrawn by more senior users.¹⁰³ In many areas throughout the state, there is not enough water available to meet all consumptive needs and to adequately protect environmental values.¹⁰⁴ To address some of these challenges, the Washington State legislature adopted legislation that authorizes Ecology to acquire existing water rights to be held in trust on behalf of the State on either a temporary or permanent basis.¹⁰⁵ These trust water rights can then be applied toward unmet needs, including instream flows, irrigation, municipal uses, and other beneficial uses.¹⁰⁶

The state's trust water rights program was first established as a pilot program in the Yakima River Basin,¹⁰⁷ and in 2009, was expanded statewide.¹⁰⁸ Under the program, the State may acquire trust water rights from existing appropriators through voluntary transfers including donation, purchase, or lease.¹⁰⁹ Trust water rights retain the priority date of the original water right and are protected from statutory forfeiture for non-use during the time they are held in trust.¹¹⁰ Appropriators who have more water rights than they need therefore have an incentive to transfer their unused water right into the trust water rights program. For example, a farmer who switches to a crop that requires less water can lease the extra water rights to the State to supplement low stream flows, rather than eventually losing the rights by abandonment or forfeiture.¹¹¹

The trust water rights program also authorizes the use of "water banking," which is an institutional tool that "facilitate[s] the legal transfer and market exchange of various types of surface, groundwater,

103. ECOLOGY, SETTING INSTREAM FLOWS, *supra* note 16, at 1–2.

104. *See* ECOLOGY, RURAL WATER SOLUTIONS, *supra* note 7, at 1–2 (discussing the challenge of providing water for instream flows and future consumptive uses).

105. *See, e.g.*, WASH. REV. CODE § 90.42.080; *Trust Water Rights Program*, WASH. STATE DEPARTMENT ECOLOGY, <http://www.ecy.wa.gov/programs/wr/market/trust.html> (last visited Nov. 11, 2015).

106. WASH. REV. CODE § 90.24.040.

107. Act of May 14, 1989, ch. 429, 1989 Wash. Sess. Laws 2351.

108. Act of Apr. 29, 2009, ch. 283, 2009 Wash. Sess. Laws 1487.

109. WASH. REV. CODE § 90.42.080.

110. *Id.*

111. *See, e.g.*, WASH. STATE DEP'T OF ECOLOGY, FOCUS ON TRUST WATER RIGHTS PROGRAM 1–2 (2012), <https://fortress.wa.gov/ecy/publications/documents/1211054.pdf>.

and storage entitlements.”¹¹² Trust water rights may be placed in “water banks,” also known as “exchanges,” where they can be used to supplement low stream flows or purchased by third parties to mitigate new uses of water.¹¹³ Water banks act as a clearinghouse or broker, and can facilitate water rights transfers through a variety of mechanisms.¹¹⁴ For example, some banks pool water rights acquired from various sellers and offer them as “credits” for purchase by new water users.¹¹⁵ Currently, active water banks operate in the Dungeness, Yakima, and Walla Walla basins in Washington State.¹¹⁶

Third parties are also authorized to acquire trust water rights and administer water banks on behalf of the State.¹¹⁷ The Washington Water Trust (WWT), a 501(c)(3) nonprofit, is one such organization that works throughout Washington State to restore streams by acquiring and dedicating trust water rights to instream flows.¹¹⁸ WWT also administers water banks that facilitate market transfers of water rights; its functions include certifying the validity of water rights, matching buyers and sellers, setting prices, and handling administrative water rights transfers.¹¹⁹ WWT currently operates water banks in the Dungeness and Walla Walla basins, and in Kittitas County in the Yakima River Basin in Washington State.¹²⁰

II. INSTREAM FLOW RULEMAKING IN PRACTICE

A. *The Basics of Instream Flows*

Instream flow rules are water rights that are established and held by the State to protect existing water rights and the environmental health of a stream.¹²¹ Like other water rights, instream flow rules have priority

112. *Water Banking*, WASH. STATE DEPARTMENT ECOLOGY, <http://www.ecy.wa.gov/programs/wr/market/waterbank.html> (last visited July 30, 2015).

113. *Id.*; WASH. REV. CODE § 90.42.100.

114. *Water Banking*, *supra* note 112.

115. *Id.*

116. *See id.*

117. WASH. REV. CODE § 90.42.080(2).

118. *What We Do, FAQ*, WASH. WATER TRUST, <http://www.washingtonwatertrust.org/faq-ds> (last visited July 30, 2015).

119. *What We Do, Water Banking*, WASH. WATER TRUST, <http://www.washingtonwatertrust.org/stream-flow> (last visited Dec. 21, 2015).

120. *See id.*

121. *Introduction to Instream Flows and Instream Flow Rules: What Is an Instream Flow?*, WASH. ST. DEPARTMENT ECOLOGY, <http://www.ecy.wa.gov/programs/wr/instream-flows/isf101.html> (last visited Sept. 24, 2015).

dates that determine their place in relation to other rights.¹²² Instream flow rules do not prevent senior water rights holders (those with earlier priority dates) from using water, and so, do not result in more water being put into a stream.¹²³ Instead, instream flow rules prevent junior users (those with later priority dates) from withdrawing water that will impair instream flows.¹²⁴ The rules also help Ecology determine whether additional water is available for appropriation.¹²⁵ In many cases, after Ecology adopts a rule, it may determine that no more water is available, and close the basin to new withdrawals.¹²⁶

An instream flow rule identifies a particular stream flow level, measured in cubic feet per second, to be maintained at a specific location in a stream.¹²⁷ Because the amount of water found in a stream at any given time varies naturally, rules identify a target range rather than a single number.¹²⁸ Because natural flow variations are important to stream health, target flow levels may differ by time of year.¹²⁹ To arrive at a particular stream flow, Ecology focuses on the amount of water needed to sustain healthy fish populations.¹³⁰

Washington State is divided into sixty-two watersheds, or “Water Resource Inventory Areas,” and instream flow rules are adopted on a watershed level.¹³¹ Rules can be set by Ecology alone, or in conjunction with local planning units.¹³² Ecology engages in notice and comment

122. *Id.*

123. *Id.*

124. *Id.*

125. See ECOLOGY, GUIDE TO INSTREAM FLOWS, *supra* note 98, at 1.

126. See *Introduction to Instream Flows and Instream Flow Rules: Why Are Stream Flows Important?*, WASH. ST. DEPARTMENT ECOLOGY, <http://www.ecy.wa.gov/programs/wr/instream-flows/isf101.html> (last visited Sept. 24, 2015).

127. See ECOLOGY, SETTING INSTREAM FLOWS, *supra* note 16, at 1. For an example of an instream flow rule, see WASH. ADMIN. CODE § 173-501-030 (2014) (instream flow rule for the Nooksack Water Resource Inventory Area).

128. See ECOLOGY, SETTING INSTREAM FLOWS, *supra* note 16, at 1; ECOLOGY, GUIDE TO INSTREAM FLOWS, *supra* note 98, at 21–22.

129. *Introduction to Instream Flows and Instream Flow Rules: What is an Instream Flow?*, *supra* note 121.

130. See, e.g., ECOLOGY, SETTING INSTREAM FLOWS, *supra* note 16, at 1.

131. *Introduction to Instream Flows and Instream Flow Rules: Are There Instream Flows Set in My Watershed?*, WASH. ST. DEPARTMENT ECOLOGY, <http://www.ecy.wa.gov/programs/wr/instream-flows/isf101.html> (last visited Sept. 24, 2015).

132. See WASH. REV. CODE § 90.82.080 (2014). However, Governor Inslee’s Operating Budget Proposal for 2015–2017 eliminates funding for the Watershed Planning Program. See *Watershed Management: 2015–2017 Ecology Budget Request*, WASH. ST. DEPARTMENT ECOLOGY, <http://www.ecy.wa.gov/watershed/index.html> (last visited Sept. 24, 2015).

rulemaking to set instream flow rules.¹³³ Once set, an instream flow rule becomes part of the Washington Administrative Code.¹³⁴ Currently, instream flow rules have been established in twenty-six watersheds in Washington.¹³⁵

B. How Much Water for Fish?: Development of Instream Flow-Setting Methods

Since Washington's earliest instream flow rules were adopted in the 1970s, rules have been set with the general goal of providing adequate water for fish, most notably, salmon and steelhead.¹³⁶ The methods used to arrive at these flows, however, have become increasingly sophisticated as instream flow science improves.¹³⁷ In the past, Ecology used the "base flow" method to set early instream flow rules, which provided an efficient but imprecise method of setting instream flows.¹³⁸ Today, Ecology most often uses "toe width" or "instream flow incremental method" (IFIM) to set instream flows, resulting in flows more precisely tailored to fish habitat.¹³⁹

1. Early Methods

After the legislature adopted the WRA in 1971, Ecology began setting the state's first instream flow rules.¹⁴⁰ Ecology proposed an instream flow-setting method designed to efficiently establish a base level of protection for streams to avoid or mitigate the negative effects of over-appropriation.¹⁴¹ Ecology expressed concern over its lack of knowledge

133. See, e.g., WASH. REV. CODE §§ 90.22.020, 90.54.040; ECOLOGY, SETTING INSTREAM FLOWS, *supra* note 16, at 2. See generally ECOLOGY, GUIDE TO INSTREAM FLOWS, *supra* note 98, at 5 (outlining the general steps involved with developing an instream flow rule).

134. See ECOLOGY, SETTING INSTREAM FLOWS, *supra* note 16, at 2.

135. See *Instream Flows in Your Watershed/WRIA*, WASH. ST. DEPARTMENT ECOLOGY, <http://www.ecy.wa.gov/programs/wr/instream-flows/isf-rule.html> (last visited Sept. 24, 2015).

136. See WASH. REV. CODE § 90.22.060 (prioritizing salmonids as the primary goal of setting instream flows); ECOLOGY, SETTING INSTREAM FLOWS, *supra* note 16, at 2-45; *supra* notes 13-15, 102 and accompanying text.

137. See generally ECOLOGY, SETTING INSTREAM FLOWS, *supra* note 16; STALNAKER ET AL., *supra* note 83, at 1 (discussing advances in instream flow science).

138. See ECOLOGY, SETTING INSTREAM FLOWS, *supra* note 16; *infra* Part III.B.1.

139. See ECOLOGY, SETTING INSTREAM FLOWS, *supra* note 16, at 4.

140. See WASH. STATE DEP'T OF ECOLOGY, PUB. NO. 79-11-005, FINAL ENVIRONMENTAL IMPACT STATEMENT, WESTERN WASHINGTON INSTREAM RESOURCES PROTECTION PROGRAM 2 (1979), <https://fortress.wa.gov/ecy/publications/documents/7911005.pdf> [hereinafter ECOLOGY, FINAL EIS].

141. See ECOLOGY, GUIDE TO INSTREAM FLOWS, *supra* note 98, at 25 ("An approach used in the

regarding the impact of particular flow levels on fish, commenting that:

Since determination of the smallest amount of water necessary for fish is not an exact science, a strong argument can be made for setting the instream flow high enough to include a substantial margin for error. If the flows are set too low and water is appropriated to that level, the water cannot be easily retrieved.¹⁴²

As a result, the methods used to set the state's earliest instream flow levels were relatively imprecise by today's standards.¹⁴³

Ecology evaluated several alternative methods of setting instream flows while establishing its Instream Resource Protection Program in the 1970s. One method Ecology considered, but ultimately rejected, was the method developed by the United States Geological Service (USGS).¹⁴⁴ The USGS method results in a relatively high instream flow level because it attempts to maximize fish habitat without considering the flows naturally occurring in a particular stream.¹⁴⁵ As a result, this method might recommend a flow level that is not possible given the natural conditions of a stream.¹⁴⁶ For this reason, Ecology generally did not use it.¹⁴⁷

Ecology also considered the "minimum flow" method.¹⁴⁸ This method is patterned after a judicial adjudication, where existing water rights are quantified and determined in relation to each other.¹⁴⁹ As a result, the method provides data on how much water is currently being used in a stream and how much is available for instream flows.¹⁵⁰ Calculating an instream flow rule this way considers the natural conditions of a particular stream as well as the existing appropriative demands on its water to get an accurate picture of the amount of water available.¹⁵¹ However, because of the extensive time needed to conduct this analysis,

past is to include a margin of safety by increasing the recommended stream flows in the rule by a slight amount.").

142. ECOLOGY, FINAL EIS, *supra* note 140, at 5.

143. See ECOLOGY, SETTING INSTREAM FLOWS, *supra* note 16, at 2 ("The instream flow rules developed since 2000 are much more complex and comprehensive than their counterparts in the 1970's and early 1980's.").

144. ECOLOGY, FINAL EIS, *supra* note 140, at 7–8.

145. See, e.g., *id.*

146. *Id.*

147. *Id.*

148. *Id.* at 8.

149. *Id.*; see also *supra* notes 61–62 and accompanying text (discussing judicial adjudication procedures).

150. ECOLOGY, FINAL EIS, *supra* note 140, at 8.

151. *Id.*

Ecology only used it to set one instream flow rule.¹⁵²

Ecology chose the “base flow” method as a baseline for establishing most early instream flow rules.¹⁵³ Rules set using this method are based generally on the amount of water found naturally in a particular stream; instream flows are set at a certain percentage of the stream’s natural volume.¹⁵⁴ Ecology used this method as a basis for early rules because it provided an efficient way to arrive at an instream flow level; although it does not consider the specific environmental impact of various flows on instream resources like salmon.¹⁵⁵ After Ecology proposed a stream flow level arrived at using the base flow method, the Department of Fisheries and Game was given the opportunity to propose a higher instream flow, and differences between the proposals were resolved by discussion between the two agencies.¹⁵⁶

2. *Modern Methods*

Modern methods of setting instream flow rules focus more narrowly on scientific knowledge regarding salmon and trout habitat preferences.¹⁵⁷ These fish are a useful basis for setting instream flows because they are an indicator species: If they are healthy, it is likely the surrounding ecosystem is as well.¹⁵⁸ Although instream flow rules have always been intended to provide adequate water for fish, knowledge regarding the relationship between stream flows and fish populations has improved significantly since the first instream flow rules were set.¹⁵⁹

Since 2000, Ecology most often uses the IFIM or the “toe-width” method to set instream flows.¹⁶⁰ IFIM models the way that various stream flows affect fish habitat, by considering factors that include food supply, water quality, temperature, and sediment.¹⁶¹ Ecology conducts a

152. *Id.* This method was used to set the instream flow rules for the Cedar River basin.

153. *Id.*

154. *See id.* app. IV at D-9 (describing, for example, how the flow level present in a particular stream ninety-five percent of the time was selected as the guide for base flows during high-flow periods).

155. ECOLOGY, FINAL EIS, *supra* note 140, at 5.

156. *Id.* at 8.

157. *See* ECOLOGY, SETTING INSTREAM FLOWS, *supra* note 16, at 2; WASH. DEP’T OF FISH & WILDLIFE & WASH. DEP’T OF ECOLOGY, INSTREAM FLOW STUDY GUIDELINES app. (2013), <https://fortress.wa.gov/ecy/publications/documents/0411007.pdf> (listing habitat preferences curves for salmon and trout species to be used in instream flow studies).

158. ECOLOGY, SETTING INSTREAM FLOWS, *supra* note 16, at 3.

159. *Compare id.* at 2–4, with ECOLOGY, FINAL EIS, *supra* note 140, at 5.

160. *See* ECOLOGY, SETTING INSTREAM FLOWS, *supra* note 16, at 4.

161. WASH. STATE DEP’T OF ECOLOGY, PUB. NO. Q-WR-95-104, AN OVERVIEW OF THE

study of a particular stream and inputs this data into a computer program that estimates how fish habitat will change in response to various stream flows.¹⁶² The end result is a model that illustrates the relationship between habitat and stream flow for various fish species and life stages.¹⁶³ IFIM is time-intensive and expensive because it requires multiple site-visits spread out over several months, but results in a “state of the art” estimate of the stream flow needs of fish.¹⁶⁴

The “toe-width” method provides a simple and inexpensive method of setting instream flows, but results in less detailed information.¹⁶⁵ This method describes “peak habitat” for fish rather than a range as provided by IFIM.¹⁶⁶ “Peak habitat” is determined by measuring the width of a stream channel and using that measurement to estimate the stream flow that will provide the most favorable conditions for fish.¹⁶⁷ Because this method only describes peak habitat, Ecology cannot use it to predict the impact that alternate stream flow levels will have on fish populations. Still, both IFIM and toe-width methods provide comparable results regarding stream flows that will provide optimal fish habitat.¹⁶⁸

III. RECENT CASE LAW HIGHLIGHTS PROBLEMS WITH THE DEVELOPMENT OF INSTREAM FLOW RULES

A. *The Washington State Supreme Court Has Invalidated Ecology’s Water Management Methods*

In recent years, case law has addressed unresolved questions concerning instream flow rights in Washington. In particular, the Washington State Supreme Court’s decisions in *Postema v. Pollution Control Hearings Board*,¹⁶⁹ *Swinomish Indian Tribal Community v. Washington State Department of Ecology*, and most recently *Foster v.*

INSTREAM FLOW INCREMENTAL METHODOLOGY (IFIM) 1 (2010), <https://fortress.wa.gov/ecy/publications/documents/qwr95104.pdf>.

162. *Id.* at 2–4.

163. *Id.* at 3; *see also* WASH. STATE DEP’T OF ECOLOGY, THE SCIENCE BEHIND INSTREAM FLOWS—QUICK OVERVIEW OF INSTREAM FLOW METHODS USED IN WASHINGTON STATE, <http://www.ecy.wa.gov/programs/wr/instream-flows/Images/pdfs/sbif-isfmethods.pdf> [hereinafter ECOLOGY, SCIENCE BEHIND INSTREAM FLOWS].

164. *See* ECOLOGY, SCIENCE BEHIND INSTREAM FLOWS, *supra* note 163.

165. *See* ECOLOGY, SETTING INSTREAM FLOWS, *supra* note 16, at 4.

166. *See* ECOLOGY, SCIENCE BEHIND INSTREAM FLOWS, *supra* note 163.

167. *See id.*

168. *See id.*

169. 142 Wash. 2d 68, 11 P.3d 726 (2000).

Washington State Department of Ecology illustrate the diverging viewpoints that developed regarding the nature of instream flow rights, and provide guidance on the place of instream flow rights within Washington's water management scheme. *Swinomish* and *Foster* build on the foundation set by *Postema* by interpreting the statutory exception to mandatory instream flows—the OCPI exception—very narrowly. As a result, Ecology likely cannot rely on this exception to set aside water for future uses once an instream flow rule has been adopted in a basin, and may need to alter its water management strategies as a result.

1. *Postema v. Pollution Control Hearings Board*

In 2000, *Postema* provided an early indication of the Washington State Supreme Court's conceptualization of instream flows. In *Postema*, the Court upheld Ecology's denial of groundwater permits.¹⁷⁰ Ecology denied the permits because it determined the proposed wells would be located in areas where the groundwaters were hydraulically connected to a river or stream subject to an instream flow rule.¹⁷¹ The term "hydraulic continuity" refers to the relationship between surface water and groundwater, where the withdrawal of one impacts the other and vice versa.¹⁷² In other words, Ecology determined that the withdrawal of groundwater would have a negative impact on instream flows, and that therefore, no groundwater could be withdrawn. While the *Postema* Court upheld Ecology's actions in this case, *Postema* draws attention to diverging views that had developed regarding the nature of instream flows as water rights.¹⁷³ These differences would later lead the Court to invalidate Ecology's water management strategies in *Swinomish* and *Foster*.

Postema involved the consolidated appeal of a number of landowners to whom Ecology denied groundwater permits.¹⁷⁴ In each case, Ecology denied the permits because it determined that the proposed wells would withdraw groundwater in hydraulic continuity with a river or stream that was either subject to an unmet minimum flow rule, or closed to further appropriation.¹⁷⁵ Because the groundwaters were hydraulically

170. *Postema*, 142 Wash. 2d at 73–74, 11 P.3d at 731.

171. *Id.* at 73, 11 P.3d at 731.

172. *See, e.g., id.* at 75–76, 11 P.3d at 732–33 (discussing the relationship between surface water and ground water).

173. *See id.* at 78, 11 P.3d at 733–34 (discussing the parties' different conceptions of the nature of instream flow rights).

174. *Id.* at 73, 11 P.3d at 731.

175. *Id.* at 74, 11 P.3d at 732.

connected to the surface waters, any new withdrawals would impact unmet instream flows.¹⁷⁶ The dispute in *Postema* focused on the amount of hydraulic continuity (or, the closeness of the relationship) that was required before a permit could be properly denied.¹⁷⁷

This disagreement stemmed from the parties' varied conceptions of the nature of instream flows as water rights.¹⁷⁸ The landowners argued that groundwater withdrawals must have a "direct and measureable impact" on surface waters, as determined by standard stream-measuring equipment, before a permit could be denied.¹⁷⁹ They grounded this argument in the idea that instream flow rules are limited water rights that are defined by all the regulations pertaining to water management in a particular basin.¹⁸⁰ Ecology argued that a lesser standard of "significant hydraulic continuity" required it to deny a permit.¹⁸¹ Although the rules adopted by Ecology for each basin used varied language to describe this standard, Ecology interpreted them uniformly.¹⁸²

The *Postema* Court rejected both the landowners' and Ecology's arguments, holding that any impairment of an existing water right is prohibited, even if that impairment is de minimis.¹⁸³ In so doing, the Court made a statement regarding the nature of instream flow rights, declaring that "[an instream] flow is an appropriation subject to the same protection from subsequent appropriators as other water rights" and that Washington law "mandates denial of an application where existing rights would be impaired."¹⁸⁴ The Court therefore rejected any argument that instream flows are limited water rights, and confirmed that instream flows are subject to the same protections as traditional water rights. In dissent, Justice Sanders criticized the harshness of the Court's

176. *See id.* at 74–77, 11 P.2d at 732–33 (discussing Ecology's denial of the permits and Ecology's understanding of hydraulic continuity).

177. *See id.* at 77–78, 11 P.3d at 733–34.

178. *See id.*

179. *Id.* at 81–82, 11 P.3d at 735.

180. *Id.* at 82, 11 P.3d at 735–36.

181. *Id.* at 87, 11 P.3d at 738.

182. *Id.*

183. *See id.* at 92–93, 11 P.3d at 741 ("The statutes do not authorize a de minimis impairment of an existing right . . . This does not mean, however, that there is no mean to show any impact on the surface water resource, nor does it mean that measurement is irrelevant to the inquiry."); *see also* Swinomish Indian Tribal Cmty. v. Wash. State Dep't Ecology, 178 Wash. 2d 571, 584, 311 P.3d 6, 12 (2013) ("[In *Postema*], we held that denial of a permit to withdraw groundwater on the basis that withdrawal would impair [instream flows] requires actual impact and hydraulic continuity alone does not establish such impairment.")

184. *Postema*, 142 Wash. 2d at 82, 11 P.3d at 736.

impairment standard, which would “allow[] [Ecology] to deny a groundwater permit if [it] proves only a single molecule of surface water [would be] lost to the stream.”¹⁸⁵ Nevertheless, *Postema* established the principle that any impairment, even one that is not measurable using standard stream-measuring equipment, is prohibited.¹⁸⁶ In this way, *Postema* emphasized the importance of maintaining the integrity of minimum flows. The amount of withdrawal, however, that would constitute “impairment” remained unclear.

2. Swinomish Indian Tribal Community v. Washington State Department of Ecology

Thirteen years later, instream flow rights were at issue again in *Swinomish Indian Tribal Community v. Washington State Department of Ecology*, and this time, the Court invalidated Ecology’s interpretation of Washington law regarding instream flows.¹⁸⁷ In *Swinomish*, the Swinomish Indian Tribal Community challenged an amended rule governing water use in the Skagit River basin.¹⁸⁸ Prior to this litigation, Ecology first adopted an instream flow rule for the Skagit River in 2001.¹⁸⁹ Skagit County challenged the rule’s failure to allocate water for future uses, arguing that the rule would prevent new development because any new withdrawals would be subject to shut-off whenever instream flows in the Skagit River fell below the required minimums.¹⁹⁰ The instream flow rule was litigated for several years.¹⁹¹ As part of a settlement, Ecology adopted the amended rule at issue in *Swinomish*.¹⁹² In response to the county’s concerns, the amended rule reserved water for certain future uses.¹⁹³ These reservations provided water for non-interruptible use, meaning that withdrawals could continue, even when instream flows were unmet.¹⁹⁴ The Swinomish Indian Tribal Community challenged these reservations in *Swinomish*, arguing that Ecology lacked authority to allow the new withdrawals to override instream flows.¹⁹⁵

185. *Id.* at 128, 11 P.3d at 759 (Sanders, J., dissenting).

186. *See, e.g., id.* at 92–93, 11 P.3d at 741 (majority opinion).

187. 178 Wash. 2d 571, 576, 311 P.3d 6, 8 (2013).

188. *Id.*

189. *Id.* at 577, 311 P.3d at 9.

190. *Id.*

191. *Id.* at 577–78, 311 P.3d at 9.

192. *Id.* at 578, 311 P.3d at 9.

193. *Id.*

194. *Id.*

195. *Id.* at 579–80, 311 P.3d at 10.

In response, Ecology relied on the statutory OCPI exception, which authorizes withdrawals of water that conflict with instream flows only “where it is clear that overriding considerations of the public interest will be served.”¹⁹⁶ To determine whether this standard was met, Ecology applied a balancing test where it considered the extent to which important public interests would be helped or harmed by the proposed reservations, and whether the potential benefits of the reservations outweighed the harms.¹⁹⁷ In this case, Ecology determined that the economic benefits gained from the reservations in the Skagit River basin would outweigh any potential negative impact on instream flows.¹⁹⁸ Specifically, Ecology estimated that the reservations would result in increased economic productivity of \$32.9 million to \$55.9 million over twenty years with a monetary loss to fisheries of \$5.3 million.¹⁹⁹ In addition, Ecology noted that without the reservations, water for future withdrawals including domestic, municipal, and agricultural use would be, “as a practical matter,” unavailable.²⁰⁰

The *Swinomish* Court flatly rejected Ecology’s interpretation of the law, holding that its use of the OCPI exception was inconsistent with the Court’s decision in *Postema*, the statute’s plain language, and the prior appropriation principles codified in Washington law.²⁰¹ The Court emphasized that although *Postema* dealt with the issue of groundwater in hydraulic continuity with surface waters, it contained several important holdings with respect to minimum flows.²⁰² First, a minimum flow “constitutes an appropriation with a priority date as of the effective date of the rule establishing the minimum flow,” and therefore, cannot be impaired by subsequent withdrawals of water.²⁰³ In addition, *Postema* held that the language of RCW 90.54.020(3)(a) creates a “narrow exception” in cases where “it is clear that overriding considerations of the public interest will be served.”²⁰⁴ Therefore, a minimum flow is “not a limited right, but rather . . . ‘an appropriation subject to the same

196. WASH. REV. CODE § 90.54.020(3) (2014); see also *Swinomish*, 178 Wash. 2d at 581, 311 P.3d at 10–11.

197. *Swinomish*, 178 Wash. 2d at 583, 311 P.3d at 11–12.

198. *Id.* at 583–84, 311 P.3d at 12.

199. *Id.* at 578 nn.3–4, 311 P.3d at 10 nn.3–4.

200. *Id.* at 583, 311 P.3d at 12.

201. *Id.* at 585–88, 311 P.3d at 12–14.

202. *Id.* at 584, 311 P.3d at 12.

203. *Id.*

204. *Id.*

protection from subsequent appropriators as other water rights.”²⁰⁵

Next, the Court concluded that Ecology’s interpretation was inconsistent with the exception’s plain language—“overriding considerations of the public interest.”²⁰⁶ The Court noted that the legislature did not include the term “beneficial use” in this phrase, and therefore objected to Ecology’s conflating “overriding considerations” with “beneficial uses” by weighing the benefits from all beneficial uses against harms to instream flows to determine whether the OCPI standard was met.²⁰⁷ The Court noted that Ecology’s treatment of beneficial uses was particularly inappropriate because some beneficial uses serve private, not public, interests.²⁰⁸ For example, the need for water to support population growth is not an “overriding consideration” within the meaning of the statute, because limited water and population growth are both “certainties” that would otherwise always override instream flows, defeating the purpose of instream flow legislation.²⁰⁹ Ecology’s interpretation of OCPI also violated the principle that statutory exceptions should be narrowly construed; instead, Ecology “appear[ed] to use [OCPI] as a way to reallocate water supply and priority of rights.”²¹⁰

Next, the Court concluded that Ecology’s interpretation of OCPI conflicted with the prior appropriation principles codified in Washington law.²¹¹ When Washington’s legislature adopted prior appropriation doctrine by enacting the 1917 Surface Water Code, it also adopted a permitting process by which all new appropriations must be made.²¹² State law provides that Ecology cannot issue a permit to appropriate water unless it determines that: (1) water is available, (2) the appropriation will be put to a beneficial use, (3) the permit will not impair any existing water rights, and (4) the permit is not against the public interest.²¹³ Because a reservation of water is an appropriation, it

205. *Id.* at 584–85, 311 P.3d at 12 (quoting *Postema v. Pollution Control Hearings Bd.*, 142 Wash. 2d 68, 82, 11 P.3d 726, 736 (2000)).

206. *Id.* at 586, 311 P.3d at 13.

207. *Id.* at 586–87, 311 P.3d at 13.

208. *Id.* at 587, 311 P.3d at 13 (“For example, here some of the water is reserved for exempt wells for domestic use on a noninterruptible basis—a private use, generally speaking, not a public use.”).

209. *Id.* at 588, 311 P.3d at 14.

210. *Id.*

211. *Id.*

212. *Id.*

213. WASH. REV. CODE § 90.03.245 (2014); *see also Swinomish*, 178 Wash. 2d at 588, 311 P.3d at 14.

cannot be made unless this four-part test is satisfied.²¹⁴ The Skagit reservations failed this test on two separate grounds; first, water was unavailable, and second, the withdrawals would impair existing water rights—instream flows.²¹⁵ The Court characterized Ecology’s use of the OCPI exception as an “end-run around the normal appropriation process” that would “relegate [instream flows] to a lesser class of water right than others” in contravention of legislative intent.²¹⁶

Finally, the Court held that Ecology lacked statutory authority to use the exception as a source of “considerable authority to reevaluate and reallocate water” from instream flows to consumptive uses, based on its weighing of which uses are most desirable.²¹⁷ In particular, the Court criticized Ecology’s reliance on economic criteria in weighing whether the reservations would justify impairing instream flows.²¹⁸ As an example, the Court noted that the “maximum net benefits” principle set forth in the WRA contemplates consumptive uses, but also nonconsumptive uses that do not have an easily quantified economic value.²¹⁹ For all of these reasons, the Court concluded that Ecology exceeded its statutory authority and invalidated the amended instream flow rule for the Skagit River basin.²²⁰

Justice Wiggins dissented in part because in his view, providing water for exempt wells and rural water supply did meet the OCPI standard, while he agreed with the majority that reservations for other uses would not.²²¹ He noted that in the Skagit Basin, rural domestic water needs could be met with a reservation of less than 0.03% of the Skagit River’s average flow during the dry season and would have a very high economic cost if unmet.²²² The dissent also expressed concern that under the majority’s narrow interpretation of OCPI, instream flow rules can never be modified once set;²²³ the majority opinion did note, however, that Ecology would be free to adjust instream flows by the same method

214. See *Swinomish*, 178 Wash. 2d at 588–89, 311 P.3d at 14.

215. *Id.* at 589, 311 P.3d at 14.

216. See *id.* at 590, 596, 311 P.3d at 15, 18.

217. *Id.* at 597–99, 311 P.3d at 19.

218. *Id.* at 600, 311 P.3d at 20.

219. *Id.*; see also WASH. REV. CODE § 90.03.005 (2014). (“It is the policy of the state to promote the use of public waters in a fashion which provides for obtaining maximum net benefits arising from both diversionary uses of the state’s public water and retention of waters within streams and lakes in sufficient quantity to protect instream and natural values and rights.”).

220. *Swinomish*, 178 Wash. 2d at 602, 311 P.3d at 21.

221. *Id.* at 607–09, 311 P.3d at 23–24 (Wiggins, J., dissenting).

222. *Id.* at 607–08, 311 P.3d at 23–24.

223. *Id.* at 603, 311 P.3d at 21.

through which they are set—notice-and-comment rulemaking.²²⁴

The *Swinomish* decision might be seen as an affirmation of basic prior appropriation principles establishing that “first in time” is “first in right,” as well as confirmation that instream flows are appropriations that are equal to traditional water rights.²²⁵ The decision raised other questions, including how the OCPI exception might properly be invoked in the future. Whatever the answer, *Swinomish* signaled that Ecology must make significant changes in its management of water resources.

3. Foster v. Washington State Department of Ecology

While *Swinomish* called Ecology’s existing water management strategies into question, the decision did not provide clear guidance regarding when OCPI might justify impairing an instream flow rule. In October 2015, the Court handed down a decision in *Foster v. Washington State Department of Ecology* that further clarified its interpretation of OCPI and again invalidated an Ecology action, this time a municipal water permit issued to the city of Yelm.²²⁶

In *Foster*, Ecology invoked OCPI as authority to issue the municipal water permit, which was intended to provide water to accommodate the city’s projected future growth. Although the new water rights would impair instream flows during low-flow seasons, Ecology conditioned permit approval on an extensive mitigation package that it determined would result in a net ecological benefit to fish and wildlife habitat despite the impairment to instream flows.²²⁷ The mitigation plan included both in-kind mitigation, where water is put back in streams to offset new uses by retiring existing water rights or reclaiming water, and out-of-kind mitigation, where water is not put back in streams, but other measures are taken that will improve stream conditions overall, such as

224. *Id.* at 597 n.13, 311 P.3d at 18 n.13 (majority opinion). Some commentators have questioned the extent of Ecology’s authority to decrease instream flows, however. See Thomas M. Pors, *How Messed Up Is Washington’s Water Allocation System?*, ENVTL. & LAND USE L. (Wash. State Bar Ass’n), April 2014, at 8, 9, available at http://www.wsba.org/~media/Files/Legal%20Community/Sections/ELUL/Newsletters/2014_04%20ELUL%20News.ashx (discussing extent to which the legislature could grant Ecology authority to modify instream flows and noting that some groups have argued instream flows are vested rights that “cannot be diminished once they are created without upsetting the priority system inherent in the Water Code”).

225. See *Swinomish*, 178 Wash. 2d at 588–89, 311 P.3d at 14; Pors, *supra* note 224, at 2, 3 (suggesting the Court’s analysis of prior appropriation principles may have considerable impact because the doctrine was “thoroughly analyzed and forcefully stated”).

226. No. 90386-7, 2015 WL 5916933 (Wash. Oct. 8, 2015).

227. *Id.* at *1.

stream restoration projects and farmland acquisition.²²⁸

The *Foster* litigation predated the Court's *Swinomish* decision, and was pending in Thurston County Superior Court when *Swinomish* was decided.²²⁹ Initially, the Pollution Control Hearings Board (PCHB) affirmed Ecology's issuance of the Yelm permit after finding that the mitigation plan would benefit fish and wildlife habitat and outweigh the negative effects of impairing instream flows.²³⁰ Although PCHB rejected Ecology's OCPI balancing test as not sufficiently stringent (the same test later rejected by the Court in *Swinomish*), PCHB nevertheless found that the permit met the OCPI standard, after considering twelve factors that PCHB concluded weighed in favor of approval.²³¹ In light of *Swinomish*, the trial court affirmed PCHB and upheld the permit.²³² On direct review to the Washington State Supreme Court, the Court reversed, invalidating Ecology's action based once again on Ecology's erroneous interpretation of OCPI, and this time further clarified the meaning of the exception.²³³

The Court reiterated many of its rationales in *Swinomish*, including its holding that the OCPI exception is "very narrow . . . and requires extraordinary circumstances" before it can be invoked.²³⁴ The *Foster* Court took the analysis one step further, stating that under the plain language of the exception, it can only be used to authorize temporary, not permanent, impairment of instream flows.²³⁵ The Court drew a distinction between the term "appropriation" which is used throughout Washington's water code to refer to permanent legal water rights, and the term "withdrawal" as used in the OCPI exception, which refers to "the physical act of removing water."²³⁶

The Court concluded that its interpretation of "withdrawal" was supported by the statutory scheme as a whole.²³⁷ The Court specifically pointed to RCW 43.83B.410, which authorizes Ecology to make emergency "withdrawal" of water during drought "on a temporary

228. *Id.*

229. *Id.* at *2.

230. *Id.*

231. *Id.*

232. *Id.*

233. *Id.* at *2, 4.

234. *Id.* at *3 (quoting *Swinomish Indian Tribal Cmty. v. Wash. State Dep't of Ecology*, 178 Wash. 2d 571, 576, 311 P.3d 6, 8 (2013)).

235. *Id.*

236. *Id.*

237. *Id.* at *4.

basis.”²³⁸ As further support, the Court noted that the emergency drought provision specifically prohibits Ecology from “reduc[ing] flows or levels below essential minimums.”²³⁹ The Court concluded that the legislature would have used the term “appropriation” instead of “withdrawal” if it intended the OCPI exception to authorize new legal water rights to override instream flows, and therefore invalidated Ecology’s issuance of the permit.²⁴⁰

Echoing its analysis in *Swinomish*, the Court stated that municipal water needs do not present “extraordinary circumstances”; rather, limited water availability is common and to be expected throughout the state.²⁴¹ The mitigation plan was “largely irrelevant” to the Court’s analysis, as it was undisputed that despite the mitigation plan and corresponding ecological benefit, the new water rights would result in less water for instream flows.²⁴² Also like *Swinomish*, the Court emphasized basic water law principles, reiterating that “[t]he water code, including the [OCPI] exception, is concerned with the *legal* injury caused by impairment of senior water rights—water law does not turn on notions of ‘ecological’ injury.”²⁴³

A strongly worded dissent criticized the Court’s holding, commenting that:

[T]he majority adopts a novel and unprecedented definition of the key word “withdraw” as only temporary, which is contrary to the consistent meaning of the word in the water code In over a century of water law, we have never perceived such a distinction. Nor has the legislature. Nor did the court mention this theory in our recent *Swinomish* opinion, which never mentions the words “temporary” or “permanent.”²⁴⁴

The dissent noted the differences between *Swinomish* and *Foster*, including the fact that the permit at issue in *Foster* was the result of a twenty-year effort by the cities of Lacey, Olympia, and Yelm to develop a strategy for the acquisition and mitigation of new water rights to accommodate projected future growth.²⁴⁵ The dissent concluded that

238. *Id.* (quoting WASH. REV. CODE § 43.83B.410(1)(a) (2014)).

239. *Id.* (quoting WASH. REV. CODE § 43.83B.410(1)(a)(iii)).

240. *Id.*

241. *Id.*

242. *Id.*

243. *Id.* (emphasis in original).

244. *Id.* at *5–6 (Wiggins, J. dissenting) (citing *Swinomish Indian Tribal Cmty. v. Wash. State Dep’t of Ecology*, 178 Wash. 2d 571, 311 P.3d 6 (2013)).

245. *Id.* at *10.

PCHB correctly applied the law as set forth in *Swinomish* and that its decision to uphold Yelm's permit was adequately supported by an extensive record.²⁴⁶

B. *The Impact of These Cases*

Postema, *Swinomish* and *Foster* mark a significant shift in Washington water law because the Court's narrow interpretation of the OCPI exception has serious implications for Ecology's management of water resources. While both *Postema* and *Swinomish* clearly established that instream flow rules are water rights that are subject to the same prior appropriation principles as traditional water rights, *Swinomish* provided little guidance regarding when OCPI might be properly invoked. In restating and expanding on the holding of *Swinomish*, *Foster* further confirms that Ecology cannot invoke OCPI to authorize new water rights that will impair instream flows, even where those impacts are fully mitigated. As a result, these cases have raised questions regarding water availability for future needs in basins subject to instream flow rules.

1. *The OCPI Exception Has Little Utility*

Following *Swinomish* and *Foster*, it is clear that Ecology cannot use OCPI to authorize new water rights that will impair instream flows. Not surprisingly, the Court's interpretation of the OCPI exception has received varied reactions. Following *Swinomish*, stakeholders suggested various solutions to restore use of OCPI. For example, two bills were introduced in 2015 that would modify the exception to state that water for domestic use is an "overriding consideration of the public interest."²⁴⁷ One of these bills would also require Ecology to reserve water for future domestic uses when setting instream flows.²⁴⁸ In a workgroup convened by Ecology to explore rural domestic water solutions in light of the *Swinomish* decision, stakeholders discussed pursuing amendments to the OCPI exception to allow for continued use; however, Ecology reported that this proposal received less support than

246. *Id.* at *12, 15.

247. *See, e.g.*, S. 5129, 64th Leg., Reg. Sess. (Wash. 2015); S. 5407, 64th Leg., Reg. Sess. (Wash. 2015). Both bills were pending when the third special session adjourned. *See SB 5129 – 2015–16*, WASH. ST. LEGISLATURE, <http://app.leg.wa.gov/billinfo/summary.aspx?bill=5129&year=2015> (last visited Sept. 23, 2015); *SB 5407 – 2015–16*, WASH. ST. LEGISLATURE, <http://app.leg.wa.gov/billinfo/summary.aspx?bill=5407&year=2015> (last visited Sept. 23, 2015).

248. S. 5129, 64th Leg., Reg. Sess. (Wash. 2015).

other strategies.²⁴⁹ While it is too soon to tell what stakeholder reactions to *Foster* might be, the decision seems likely to elicit similar calls for legislative reform. On the other hand, the Court's forceful language in *Swinomish* and *Foster* might signal the need to abandon OCPI and pursue new approaches to address water resource challenges.²⁵⁰

2. *Ecology Must Change Its Methods of Managing Water Resources*

The *Foster* and *Swinomish* decisions have serious implications for water availability in the communities involved in the litigation, as well as for Ecology. It is unclear how the city of Yelm will address the loss of its water right permit, although the city will have to find some alternate way to secure water rights to serve its future population.²⁵¹ Over the past several years, however, the impact of *Swinomish* has played out in Skagit County.

By invalidating the amended instream flow rule for the Skagit River, *Swinomish* restored the earlier rule and eliminated the water reservations at issue in the case.²⁵² As a result, Skagit County landowners who began using water after the first instream flow rule was adopted in 2001 were left without secure water rights.²⁵³ An estimated 450 homes and businesses were initially affected by the *Swinomish* decision.²⁵⁴ Instead

249. See ECOLOGY, RURAL WATER SOLUTIONS, *supra* note 7, at iii–iv, 14–15; *Identifying Rural Water Supply Strategies Workgroup*, WASH. ST. DEPARTMENT ECOLOGY, <http://www.ecy.wa.gov/programs/wr/wrac/rwss-leg.html> (last visited Sept. 23, 2015) (homepage for the Rural Water Supply Strategies Workgroup).

250. See ECOLOGY, RURAL WATER SOLUTIONS, *supra* note 7, at iv, 14–15 (discussing pros and cons associated with a statutory amendment to the OCPI exception and noting that this proposal has less support than other proposed solutions).

251. The city of Yelm and Ecology have asked the Court to reconsider its decision in *Foster*. See Motion for Reconsideration, *Foster v. Wash. State Dep't of Ecology*, No. 90386-7 (Wash. filed Oct. 28, 2015), available at <http://www.ecy.wa.gov/programs/wr/swro/images/pdf/Ecology-MotionReconsideration.pdf> (Ecology's motion); Motion for Reconsideration, *Foster v. Wash. State Dep't of Ecology*, No. 90386-7 (Wash. filed Oct. 28, 2015), available at <http://www.ecy.wa.gov/programs/wr/swro/images/pdf/Yelm-MotionReconsideration.pdf> (City of Yelm's motion).

252. See, e.g., WASH. STATE DEP'T OF ECOLOGY, PUB. NO. 14-11-002, PROTECTING WATER SUPPLIES FOR PEOPLE, FARMS AND FISH: GOALS AND ACCOMPLISHMENTS 2014–15, at 4 (2014), <https://fortress.wa.gov/ecy/publications/publications/1411002.pdf> [hereinafter ECOLOGY, GOALS & ACCOMPLISHMENTS].

253. *Id.* at 1, 4; see also *Water Availability for Skagit Basin Landowners – Questions and Answers: I Started Using Water After April 14, 2001, but Before the October 3, 2013, Supreme Court Decision. What Is the Status of My Water Supply?*, WASH. ST. DEPARTMENT ECOLOGY, <http://www.ecy.wa.gov/programs/wr/instream-flows/skagitbasin-faq.html> (last visited Sept. 23, 2015).

254. ECOLOGY, GOALS & ACCOMPLISHMENTS, *supra* note 252, at 1, 4.

of shutting off these users' water, Ecology has worked with stakeholders including the Swinomish Tribe to develop mitigation strategies that will accommodate these water uses while also protecting instream flows.²⁵⁵ Ecology is exploring mitigation options, including a project that would use managed groundwater recharge to supplement low stream flows.²⁵⁶ Once developed, this project would allow landowners to purchase "mitigation credits" in exchange for a water right.²⁵⁷ In turn, these funds would support the groundwater recharge project.²⁵⁸ Until mitigation programs are operating, however, rural landowners who were not using water prior to *Swinomish* cannot acquire new water supplies unless they can connect to a public water system, purchase an existing water right, or transport water onto their land.²⁵⁹ Additionally, mitigation projects may need to be evaluated in light of *Foster*.

Ecology has acknowledged that the *Swinomish* decision "increased the difficulty in creating rules that balance the needs of competing uses and users,"²⁶⁰ and *Foster* further adds to this challenge. Without using the OCPI exception, Ecology cannot reserve water for future uses unless it finds that water is available.²⁶¹ Because instream flows are frequently unmet during at least part of the year, Ecology cannot make this finding in most of Washington's watersheds.²⁶² For example, lack of water has resulted in a development moratorium in many rural areas of Skagit County.²⁶³ This issue has not gone unnoticed by Washington's legislature. In 2015, legislation was introduced that would require Ecology to evaluate mitigation options for permit-exempt wells and report back to the legislature.²⁶⁴ Although the proposed bill was not adopted, Ecology has indicated that it will voluntarily prepare a

255. *Id.* at 1, 4–5; see also ECOLOGY, RURAL WATER SOLUTIONS, *supra* note 7, at 1.

256. See *Skagit River Basin Stream Flow Enhancement/Groundwater Mitigation Program*, WASH. ST. DEPARTMENT ECOLOGY, <http://www.ecy.wa.gov/programs/wr/nwro/skagit-sfe-gmp.html> (last visited Sept. 23, 2015).

257. *Id.*

258. *Id.*

259. *Water Availability for Skagit Basin Landowners – Questions and Answers: What Options Exist for Skagit Landowners Affected by the Rule?*, WASH. ST. DEPARTMENT ECOLOGY, <http://www.ecy.wa.gov/programs/wr/instream-flows/skagitbasin-faq.html> (last visited Sept. 23, 2015).

260. ECOLOGY, RURAL WATER SOLUTIONS, *supra* note 7, at 1.

261. *Id.*

262. *Id.*

263. *Id.* at 5.

264. S. 5965, 64th Leg., Reg. Sess. (Wash. 2015).

report.²⁶⁵ In addition, Ecology's rural water supply strategies workgroup continues to evaluate new approaches for managing water in light of these challenges.²⁶⁶

IV. REVISITING INSTREAM FLOW RULEMAKING AFTER *SWINOMISH* AND *FOSTER*

The *Swinomish* and *Foster* decisions have increased Ecology's challenge in managing water resources by eliminating the OCPI exception as a means of providing water for future needs. Because instream flows cannot be impaired once set using OCPI, the cases provide a significant opportunity to reexamine instream flow rulemaking to ensure that Washington's water management is consistent with the framework established by the WRA. When examined in light of these decisions, instream flow rulemaking falls short of the goals of the WRA, and is insufficient to address the water resource challenges of the future.

While this complex problem cannot be easily resolved, this Comment proposes suggestions to help address some of these challenges. First, state law should require instream flow rules to conform to a "best available science" standard tailored to provide adequate water for fish. In addition, the state should invest additional resources in its Trust Water Rights Program to establish water banking infrastructure throughout the state; these mechanisms are needed to facilitate market transfers of water rights that can provide water for low stream flows and for new out-of-stream uses.

A. *Current Instream Flow Rulemaking Falls Short of the Goals of the WRA*

Because Ecology cannot invoke OCPI to reserve water for future uses, *Swinomish* and *Foster* limit Ecology's ability to allocate water for consumptive uses where instream flows have been established. Accordingly, the cases draw increased attention to the levels at which instream flow rules are set. Against this backdrop, instream flow rulemaking falls short of the goals of the WRA for two primary reasons. First, rules that are not precisely tailored to protect the environment fail

265. Wash. State Dep't of Ecology, Rural Water Supply Strategies Workgroup, Meeting Notes: Resolving Rural Water Conflicts 1 (July 30, 2015), <http://www.ecy.wa.gov/programs/wr/wrac/images/pdf/07302015-rws-notes.pdf>; see also *Identifying Rural Water Supply Strategies Workgroup*, *supra* note 249 (collecting meeting minutes and materials for the rural water supply strategies workgroup).

266. See, e.g., *Identifying Rural Water Supply Strategies Workgroup*, *supra* note 249.

to achieve “maximum net benefits.” Second, rules that cannot be adapted to meet changing conditions are inadequate to meet the water resource challenges of the future, including climate change.

1. Imprecise Instream Flow Rules Fail to Achieve “Maximum Net Benefits”

The WRA sets forth two important principles for managing water resources. First, it establishes mandatory “base flows” that must be left in Washington’s rivers and streams to protect the environment.²⁶⁷ Second, it directs Ecology to allocate water among competing uses according to the principle of “maximum net benefits.”²⁶⁸ Aside from these principles, however, the WRA does not provide clear guidelines regarding how much water should be retained in streams, and how much may be allocated for other beneficial uses.²⁶⁹

For example, in establishing mandatory “base flows,” the WRA directs Ecology to “protect” the natural environment by retaining “base flows” in Washington’s rivers and streams.²⁷⁰ It further directs that base flows be retained at levels “necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values.”²⁷¹ By this language, the WRA mandates a baseline of protection for instream resources. The WRA also grants Ecology authority to establish flows higher than this baseline: “The quality of the natural environment shall be protected and, *where possible, enhanced.*”²⁷²

These directives do not clearly specify the levels at which instream flow rules should be set, and instead afford discretion to Ecology.²⁷³ This discretion is cabined slightly by RCW 90.54.020 which directs that the “allocation of waters among potential uses and users shall be based generally on the securing of the maximum net benefits for the people of the state. Maximum net benefits shall constitute total benefits less costs including opportunities lost.”²⁷⁴

Washington’s instream flow rulemaking approach falls short of these objectives because under current law, instream flow rules are not

267. WASH. REV. CODE § 90.54.010 (2014).

268. *Id.*; *see also id.* § 90.54.020(3).

269. *See, e.g.*, ECOLOGY, FINAL EIS, *supra* note 140, at 8.

270. WASH. REV. CODE § 90.54.020(3); *see also supra* Part I.B.

271. WASH. REV. CODE § 90.54.020(3)(a).

272. *Id.* § 90.54.020(3) (emphasis added).

273. *See, e.g.*, ECOLOGY, FINAL EIS, *supra* note 140, at 8.

274. WASH. REV. CODE § 90.54.020(2).

required to conform to any scientifically-grounded standard. While Ecology used scientific methods appropriate for the time in setting early instream flow rules, science has advanced so that modern rules provide more accurate information regarding the impact of different stream flows on fish.²⁷⁵ Once Ecology establishes an instream flow rule, however, it has no duty to revisit the rule in the future to evaluate whether the rule continues to adequately protect the environment and appropriately balance in-stream and out-of-stream needs; indeed, it may be difficult to do so due to the threat of litigation and limited resources.²⁷⁶ To achieve “maximum net benefits,” instream flow rules should be scientifically-grounded, to provide the best possible information regarding water that is needed for instream flows, and water that can be put to other beneficial uses.²⁷⁷ Managing Washington’s waters is a challenge that will only increase in the future.²⁷⁸ A codified scientific standard for instream flow-setting would help to ensure that Ecology has the information it needs to make difficult water management decisions that fulfill the mandates of the WRA.

2. *Inflexible Instream Flow Rules Cannot Meet Future Challenges*

Washington’s existing approach to instream flows is insufficient to address future water resource challenges such as climate change, because instream flow rules cannot currently be modified except through notice-and-comment rulemaking.²⁷⁹ At the time of publication of this

275. See *supra* Part II.B (discussing how early methods differ from modern methods of setting instream flows).

276. Parties can petition Ecology to adopt or amend a rule, but Ecology is not required to take any particular action. See, e.g., WASH. STATE DEP’T OF ECOLOGY, PUB. NO. 14-11-013, 2014 REPORT TO THE LEGISLATURE: STATEWIDE PROGRESS ON SETTING INSTREAM FLOWS ii, 5–6 (2015), <https://fortress.wa.gov/ecy/publications/documents/1411013.pdf> [hereinafter ECOLOGY, 2014 REPORT] (reporting to the state legislature that Ecology denied all three petitions to amend existing rules that it received in 2014 and citing the threat of litigation and limited resources as rationales).

277. Scientific standards are codified in other Washington statutes related to resource planning. See, e.g., WASH. REV. CODE § 36.70A.172 (2014) (requiring “best available science” to be used in “designating and protecting critical areas” in planning under Growth Management Act); WASH. REV. CODE § 76.09.370 (2014) (requiring “best available science” to be used in adopting and evaluating forest practices rules).

278. See, e.g., ECOLOGY, RURAL WATER SOLUTIONS, *supra* note 7, at 1–2 (discussing challenge of providing water for future consumptive needs); Mote et al., *supra* note 18, at 487, 489–92 (discussing future water resource challenges as a consequence of climate change).

279. See WASH. REV. CODE § 90.22.020 (requiring notice and a public hearing before adopting or modifying instream flow rules); Swinomish Indian Tribal Cmty. v. Wash. State Dep’t of Ecology, 178 Wash. 2d 571, 597 n.13, 311 P.3d 6, 18 n.13 (2013) (discussing Ecology’s ability to modify instream flows). Population growth and shifting consumptive demands for water also present future

Comment, Washington State has weathered a summer of drought, impacting people, farms, and fish.²⁸⁰ By July 2015, 98.61% of the state was experiencing “severe drought” conditions due to warm temperatures and low snowpack.²⁸¹ Experts predict that due to climate change, these conditions may become more common.²⁸² In fact, since 1950, average snowpack in the Cascade Mountains, the source of base flow for many of Washington’s rivers, has decreased by twenty percent.²⁸³ Aside from increased risk of drought conditions, decreasing snowpack and earlier snowmelt caused by warming temperatures are expected to impact natural stream flow conditions in the future by changing the timing of flows and increasing water temperature during low-flow seasons.²⁸⁴ In addition to low summer stream flows, increased winter precipitation and stormwater runoff is expected to impact water quality and fish habitat.²⁸⁵

Because Washington law does not currently provide a mechanism for Ecology to adjust instream flow rules except through notice-and-comment rulemaking, it may be difficult for Ecology to adequately adapt existing instream flow rules to changing conditions, such as the earlier spring runoff and shifting peak and low flows that are expected to result from climate change.²⁸⁶ At present, Ecology cites a lack of resources, the inability to provide water for future consumption, and the threat of legal challenge as rationales for stalled progress on setting or modifying

challenges. *See, e.g.*, ECOLOGY, RURAL WATER SOLUTIONS, *supra* note 7, at 1–2 (describing efforts to plan for future water needs). However, because these changes may be easier to predict over the long-term than weather patterns, this Comment focuses in particular on the challenge of climate change.

280. Wash. State Dep’t of Ecology, *Washington’s Future is Parched*, ECOCONNECT (July 27, 2015), <http://ecologywa.blogspot.com/2015/07/washingtons-future-is-parched.html>.

281. *Id.*

282. *Id.*

283. *Id.*

284. *See, e.g., id.* (predicting lower flows and increased stream temperatures as a result of decreased snowpack).

285. WASH. STATE DEP’T OF ECOLOGY, PUB. NO. 12-01-004, PREPARING FOR A CHANGING CLIMATE: WASHINGTON STATE’S INTEGRATED CLIMATE RESPONSE STRATEGY 107–09 (2012), <https://fortress.wa.gov/ecy/publications/documents/1201004.pdf> [hereinafter ECOLOGY, CLIMATE RESPONSE STRATEGY] (discussing predicted impacts of climate change on water quality and winter flooding).

286. *See, e.g.*, Jonathan H. Adler, *Water Marketing As an Adaptive Response to the Threat of Climate Change*, 31 *HAMLIN L. REV.* 729, 730–32 (2008) (describing future challenges for water resource management and arguing that more efficient institutions are needed to address these challenges). *See generally* Robin Kundis Craig, *Designing Administrative Law for Adaptive Management*, 67 *VAND. L. REV.* 1 (2014) (discussing the inadequacies of notice-and-comment rulemaking in managing variable natural resources).

instream flows.²⁸⁷ These institutional constraints make it more difficult for Ecology to adapt instream flow rules to reflect advances in instream flow science or changing conditions.²⁸⁸

Already, the state has acknowledged that more adaptive strategies will be needed to better address the impact of climate change on water resources.²⁸⁹ Instream flow rules that are now considered “state of the art” may not adequately address stream flow conditions in the future.²⁹⁰ Ecology faces significant challenges in carrying out its legislative mandate to establish instream flows throughout the state with limited resources.²⁹¹ Following *Swinomish* and *Foster*, Ecology cannot rely on OCPI to secure future water supplies, even where the negative effects of impairing instream flows are fully mitigated. Ecology must be given more flexible tools in order to address the realities of limited water supply and changing conditions. While a comprehensive solution to these challenges is beyond the scope of this Comment, the next section will turn to several concrete steps that would have a positive impact.

B. *Moving Forward: Suggestions for the Future*

Washington’s current water management framework does not adequately address water resource challenges posed by limited water availability and changing conditions. To better address future challenges,

287. See ECOLOGY, 2014 REPORT, *supra* note 276, at ii–iii, 5–6. Ecology has also shifted resources away from instream rulemaking toward mitigation strategies in response to the *Swinomish* decision. See *id.* at 2. Ecology’s stalled progress may be due in part to constraints imposed by current rulemaking procedures. Scholars have criticized that traditional administrative rulemaking:

constrains agency flexibility by demanding hyperdetailed predecisional impact assessments, intense public participation during the decisionmaking process, and postdecision hard look judicial review. The combined effect of this procedural gauntlet, codified in large part through the [Administrative Procedure Act], has been to channel self-preserving agencies into cramming all that could possibly be thought or dreamed about action they carry out, fund, or authorize into single-shot, all-encompassing decision extravaganzas. Especially in rulemaking, this impetus toward up-front comprehensiveness strongly encourages agencies to streamroll their decisions through public-comment scrutiny and judicial review litigation and then never look back.

Craig, *supra* note 286, at 4–5.

288. See, e.g., ECOLOGY, 2014 REPORT, *supra* note 276, at 2 (describing how its water management is made more challenging by its inability to make “OCPI” findings).

289. ECOLOGY, CLIMATE RESPONSE STRATEGY, *supra* note 285, at 22, 110–12 (describing the need for integrated approaches to water management based on the realities of climate change).

290. See, e.g., ECOLOGY, 2013 REPORT, *supra* note 18, at 2 (noting that climate change presents future challenges that have already been observed in managing water resources); Mote et al., *supra* note 18, at 487, 489–92 (reporting observed changes in streamflow in the Pacific Northwest and discussing water-related challenges as a consequence of climate change).

291. See, e.g., ECOLOGY, 2014 REPORT, *supra* note 276, at 7 (citing lack of resources as a rationale for stalled progress on setting instream flows).

a “best available science” standard should be incorporated into Washington law to provide additional precision and consistency in instream flow rulemaking throughout the state. In addition, the State should invest additional resources in its existing Trust Water Rights Program to expand the infrastructure for water banking throughout the state. While challenges remain, expanding water banks to more basins statewide is necessary to facilitate market water rights transfers that can provide water to supplement low stream flows and to mitigate new consumptive uses. While these suggestions cannot address all of Washington’s water resource challenges, the changes would be a positive step toward providing Ecology with the tools needed to better prepare for these challenges.

1. *Adopting a “Best Available Science” Standard for Instream Flow Rules*

In light of recent case law, instream flow rules should be set with increased precision given the knowledge that water may be unavailable for future uses once a rule has been established. Instream flow rules currently in force in Washington State were set using different methods, some which provide detailed information regarding the relationship between stream flows and fish populations, and others that are no longer used because more advanced methods are available.²⁹² Some instream flow rules therefore provide more accurate information than others. In addition to providing water for healthy fish populations and environmental protection, instream flow rules help Ecology to make difficult water management decisions.²⁹³ A uniform standard is needed to ensure that Ecology has the best information possible to carry out its statutory directives throughout the state.

Washington law should adopt a “best available science” standard for setting instream flows that is tailored toward achieving healthy salmonid

292. See ECOLOGY, SETTING INSTREAM FLOWS, *supra* note 16, at 2 (noting that “instream flow rules developed since 2000 are much more complex and comprehensive than their counterparts in the 1970’s and early 1980’s”). As of April 2015, sixteen pre-1990 rules and eleven post-2000 rules were in force in Washington. See *Instream Flow Rule Status: April 2015*, WASH. ST. DEPARTMENT ECOLOGY, <http://www.ecy.wa.gov/programs/wr/instream-flows/Images/pdfs/wsisf.pdf> (last visited Sept. 25, 2015).

293. See ECOLOGY, 2014 REPORT, *supra* note 276, at 7 (“Although often referred to as ‘instream flow rules,’ it is more accurate to call them ‘water management rules.’ In addition to setting instream flow levels, . . . today’s rules include: Determinations of seasonal and year-round closures. Management of groundwater withdrawals to protect surface water resources, including permit-exempt groundwater withdrawals. Water management tools to ensure reliable future water supplies.”).

populations. As indicator species, these fish provide a useful benchmark for setting instream flows because their populations closely reflect the overall health of an ecosystem.²⁹⁴ In addition, this approach is consistent with existing law that confirms sustainable wild salmonid populations are the primary goal of instream flows.²⁹⁵ Scientific standards are already used in other provisions of Washington law relating to natural resources.²⁹⁶

A best available science standard would further the goals of the WRA by producing rules that correlate instream flows to environmental benefits. Current instream flow science can accurately predict the impact of particular stream flows on fish populations and is already used by Ecology to set modern rules.²⁹⁷ Codifying such a standard would be a useful step because it would give Ecology more direction for setting instream flows, and would redirect some stakeholder tension in the rulemaking process to avenues where it may be more useful, such as addressing unmet water needs, or planning for future growth.²⁹⁸

In addition to a codified standard, Washington law should require Ecology to periodically review instream flow rules to ensure the rules continue to conform to the “best available science” standard.²⁹⁹ This would also allow, and even require, that instream flow rules adapt to changing conditions, such as earlier spring runoff and shifting natural flow conditions. While this change would impose an additional burden on Ecology by requiring it to review existing flows, Ecology will inevitably need to revisit rules as water management goals continue to shift with changing conditions. As water is vital for so many needs, this investment is necessary to ensure that Washington’s water resources are managed in a way that is both scientifically accurate and responsive to

294. ECOLOGY, SETTING INSTREAM FLOWS, *supra* note 16, at 3.

295. WASH. REV. CODE § 90.22.060 (2014).

296. *See, e.g.*, WASH. REV. CODE § 36.70A.172 (2014) (requiring “best available science” to be used in “designating and protecting critical areas” in planning under Growth Management Act); WASH. REV. CODE § 76.09.370 (2014) (requiring “best available science” to be used in adopting and evaluating forest practices rules). *See generally* Alan D. Copsey, *Including Best Available Science in the Designation and Protection of Critical Areas Under the Growth Management Act*, 23 SEATTLE U. L. REV. 97 (1999) (evaluating the “best available science” standard incorporated in Washington’s Growth Management Act).

297. *See supra* Part II.B.2.

298. *See, e.g.*, ECOLOGY, RURAL WATER SOLUTIONS, *supra* note 7, at iv (describing the contentious nature of water conflicts and the difficulties in getting different stakeholders to agree).

299. Scholars have suggested periodic review of water rights as a method for adapting to changing conditions. *See* Michael Toll, *Reimagining Western Water Law: Time-Limited Water Right Permits Based on a Comprehensive Beneficial Use Doctrine*, 82 U. COLO. L. REV. 595, 626–31 (2011) (arguing that time-limited water rights would better address future challenges).

changing conditions.

Ideally, the legislature would act to provide needed clarification to the Water Resources Act. However, Ecology could implement these suggestions independently without a legislative mandate by adopting an interpretive rule or policy statement.³⁰⁰ Ultimately, for Ecology to be successful in addressing future challenges, the state must invest additional resources in water resource management. Making this investment now would be a positive step toward ensuring that all of the waters of the state are “protected and fully utilized.”³⁰¹

2. *Investing in Washington’s Trust Water Rights Program*

To allow Ecology to make meaningful adjustments to instream flow rules in response to changing conditions, more water must be available for unmet instream flows. Washington’s existing Trust Water Rights Program is an important tool that can be used to meet this need, if the infrastructure for water banking activities is expanded to more basins throughout the state. The program’s water banking component provides the infrastructure to facilitate market water right transfers that can be used to shift water from existing uses to emerging needs, including unmet instream flows and new consumptive demands.³⁰² However, at present, water banks are only operating in three basins in the state.³⁰³

These banks can have a significant impact in the communities where they operate, both by restoring low stream flows, and by mitigating new consumptive uses. For example, in the Dungeness River basin on Washington’s Olympic Peninsula, the Dungeness Water Exchange established under the Trust Water Rights Program includes both “mitigation” and “restoration” components, allowing participants to

300. For example, Ecology has used policy statements to interpret provisions of the WRA. *See* WASH. STATE DEP’T OF ECOLOGY, POL-2025, WATER RESOURCES PROGRAM POLICY/INTERPRETIVE STATEMENT ON WHEN TO PERFORM A MAXIMUM NET BENEFITS ANALYSIS 1 (2005).

301. WASH. REV. CODE § 90.54.010(2) (2014) (“It is the purpose of [the Water Resources Act] to set forth fundamentals of water resource policy . . . to insure that waters of the state are protected and fully utilized . . .”).

302. Ecology states that “[t]he ability to use the Trust Water Rights Program to create and protect trust water rights for instream flow purposes provides the key mechanism to incrementally increase stream flows for fish, wildlife, and other in-stream values.” WASH. STATE DEP’T OF ECOLOGY, PUB. NO. 12-11-055, 2012 REPORT TO THE LEGISLATURE: WATER BANKING IN WASHINGTON STATE 13, <https://fortress.wa.gov/ecy/publications/documents/1211055.pdf> [hereinafter *ECOLOGY, WATER BANKING REPORT*]; *see also supra* Part I.C.

303. Water banks currently operate in the Dungeness, Walla Walla, and Yakima basins in Washington State. *See Water Banking, supra* note 112.

mitigate new water uses by purchasing a certificate.³⁰⁴ The Exchange then uses these funds to purchase additional water rights that are left instream to balance the new uses.³⁰⁵ The restoration program is a separate component that acquires water rights dedicated to supplement instream flows.³⁰⁶ The Dungeness Water Exchange also serves an important function by helping to mitigate the effects of drought. For example, its 2015 Dry Year Leasing Program temporarily leased irrigation water rights from farmers that were instead dedicated to instream flows.³⁰⁷ The program invited farmers to submit bids to the program that named the price they would be willing to accept in order to forgo part of their existing water right for the summer. The leased water was used to supplement low stream flows.³⁰⁸

Water banking is a powerful tool in basins where it has been implemented; however, there are challenges in establishing these programs throughout the state. Some barriers identified by Ecology include the difficulty of valuing water rights, the difficulty of separating water rights from land (causing a corresponding reduction in land value), the economic impacts associated with water rights transfers (e.g., by transferring water out of agriculture in rural communities), and the need for water banking support mechanisms.³⁰⁹ Although water-right holders can arrange private transfers of water rights without the use of a water bank, a water banking system makes these transfers much easier, and water banks can also support critical stream restoration projects. With limited water resources, these transfers will be necessary to provide water for current and future unmet needs. While difficulties will remain, Washington State should expand water banking programs to basins throughout the state to ensure that the infrastructure exists to support water right transactions statewide.

CONCLUSION

Although Washington water law has come far in thoughtfully managing water resources, work remains to be done to allow the state to

304. *See Dungeness Water Exchange*, WASH. WATER TRUST, <http://www.washingtonwatertrust.org/water-exchange> (last visited July 30, 2015).

305. *Id.*

306. *Id.*

307. *See 2015 Dungeness Dry Year Leasing Program – FAQs*, WASH. WATER TRUST, <http://www.washingtonwatertrust.org/2015-dungeness-dry-year-leasing> (last visited July 30, 2015).

308. *See id.*

309. ECOLOGY, WATER BANKING REPORT, *supra* note 302, at iii, 10–12.

address future challenges. By invalidating Ecology's use of the OCPI exception as a tool to plan for future water needs in conjunction with instream flow rules, *Swinomish* and *Foster* highlight problems that have developed with imprecise and inflexible instream flow rules. The existing framework is insufficient to allow Ecology to appropriately balance competing needs and adapt rules to changing conditions. Instead, adopting a "best available science standard" based on water needs for fish, and imposing a continuing obligation to ensure that this standard is met, would provide needed consistency and precision in instream flow rulemaking throughout the state. Additionally, investing resources in Washington's existing Trust Water Rights Program and establishing water banking infrastructure statewide would help ensure that Washington State is able to address future water supply challenges, while also restoring stream flows. Making these issues a priority now is the best way to ensure that Washington's water resources can be "utilized and enjoyed today and protected for tomorrow."³¹⁰

310. WASH. REV. CODE § 90.54.010(1)(b) (2014).