

Chapter 22

EVALUATING INSTREAM FLOW PROGRAMS: INNOVATIVE APPROACHES AND PERSISTENT CHALLENGES IN THE WESTERN UNITED STATES

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§ 22.04 Evaluating the Effectiveness of Instream Flow Programs

§ 22.01 Introduction* **

The movement to recognize water rights for non-consumptive instream uses began in the mid-1970s,¹ and since that time every western state has established, in one form or another, mechanisms for recognizing and protecting non-consumptive instream uses of water. The ability to file for or establish instream flow “rights” has been in effect in all western states for several decades. This chapter will provide a brief overview of several approaches taken to recognize instream flow rights and integrate those rights within the overall water rights allocation system adopted by states in the western United States.

While the western states largely all follow the basics of the doctrine of prior appropriation, each state system has unique attributes, particularly with regard to instream flow water rights. The chapter will compare the various approaches offering observations about innovation in the area of instream flow protection and the persistent challenges faced by efforts to protect water instream. In making these comparisons, the chapter focuses on four questions that impact the implementation and ultimate success of instream flow programs: (1) who can apply for or seek an instream flow right? (2) who can hold an instream flow right? (3) what priority date does an instream flow right have? and (4) who can enforce an instream flow

*Cite as Adell L. Amos & Christopher R. Swensen, “Evaluating Instream Flow Programs: Innovative Approaches and Persistent Challenges in the Western United States,” 61 *Rocky Mt. Min. L. Inst.* 22-1 (2015).

**This chapter benefited from excellent research assistance by Wes Knoll, Will Carlon, Jamie McLeod, Victoria Wilder, and Nate Gurol. This chapter reflects insights from my colleagues who work in this area including Tom Meacham and Robert T. Anderson. I want to thank Jill Elizabeth for her support in preparing this chapter. I am deeply grateful to have been asked to speak at the Institute and for the encouragement and support I received from the Foundation, including Tom Meacham.

¹See David M. Gillilan & Thomas C. Brown, *Instream Flow Protection: Seeking a Balance in Western Water Use* ch. 2 (2d ed. 1997) (describing the early history of water usage and water rights in the United States); Charles Wilkinson, “The First Half Century of Western Water Reform: Have We Kept Faith with the Rivers of the West?” 36 *Envtl. L.* 1115 (2006).

right? Finally, the chapter will conclude with a set of observations about the future of instream flow rights in the western United States including the impact of severe and frequent drought conditions. To demonstrate many of the innovations and challenges in the development of instream flow rights, the chapter will use recent developments in Alaska as a concrete example of some of the positive and negative dynamics that surround the establishment and enforcement of these rights.

§ 22.02 Background on Instream Flow Programs in the Western United States

Oregon was the first western state to recognize instream flow under state law, with its landmark Instream Water Rights Act of 1987.² In some states, this recognition has been limited to a modification of the definition of beneficial use under the state appropriative code to make clear that a physical diversion of water is *not* required to establish a water right.³ Other states have adopted more programmatic statutory provisions for addressing instream flow rights including the creation of new mechanisms allowing state resource management agencies to assert instream water rights.⁴ A few states have gone as far as creating a statutory mechanism that allows an individual, not just the state itself, to hold and enforce an instream water right.⁵

Notwithstanding the details and nuances of individual state instream flow programs, many in the field conclude, and celebrate, that tremendous change has occurred since the 1970s in terms of western states addressing and protecting important non-consumptive uses of water.⁶ Each state can point to success stories including measurable amounts of water each year that have been dedicated to instream flow. Throughout the West there are incredible stories of innovation and creativity in finding win-win solutions that have benefitted instream flow interests. Despite these successes, however, there are persistent challenges in many places. As we have moved beyond the mere recognition of instream flow rights, we have

²Or. Rev. Stat. §§ 537.332–.360; see Adell Louise Amos, “The Use of State Instream Flow Laws for Federal Lands: Respecting State Control While Meeting Federal Purposes,” 36 *Envtl. L.* 1237, 1256–58 (2006); see also Or. Rev. Stat. § 536.310.

³See, e.g., Idaho Code Ann. § 42-1502(a); see also Cynthia F. Covell, “A Survey of State Instream Flow Programs in the Western United States,” 1 *U. Denv. Water L. Rev.* 177, 178 (1998) (“a typical appropriative water right requires a diversion”).

⁴Mont. Code Ann. § 85-2-316(1); Or. Rev. Stat. § 537.336; Wash. Rev. Code § 90.22.010.

⁵Alaska Stat. § 46.15.145(a); Ariz. Rev. Stat. Ann. § 45-151(A).

⁶See, e.g., Jesse A. Boyd, “Hip Deep: A Survey of State Instream Flow Law from the Rocky Mountains to the Pacific Ocean,” 43 *Nat. Resources J.* 1151 (2003).

moved toward tougher and more challenging questions of controlling and enforcing those rights. Often the real success of instream flow programs lies in the day-to-day details of how these rights stack up against more traditional diversionary rights and how instream rights are integrated into the larger water rights administration process. These questions are made even more challenging in the face of persistent drought cycles in many areas of the West.

[1] Changing the Definition of Beneficial Use

Under the doctrine of prior appropriation, “beneficial use” defines the parameters of any use of water. Throughout western water law, a common phrase prevails: beneficial use is “the basis, the measure and the limit” of any water right. This phrase is codified in many state water codes.⁷ Thus, recognizing non-consumptive, instream uses of water within the definition of beneficial use and more importantly, as constituting an expressly listed beneficial use, marked a significant turning point for instream flow rights.

A few examples of beneficial use definitions help to demonstrate the foundational nature of this principle in western water law. In Oregon, a state statute provides that “[b]eneficial use shall be the basis, the measure and the limit of all rights to the use of water in this state.”⁸ “Beneficial use” is not defined further other than by examples of uses, which by their listing are declared beneficial.⁹ These uses include “water for domestic, municipal, irrigation, power development, industrial, mining, recreation, wildlife, and fish life uses and for pollution abatement.”¹⁰ The State of Washington defines beneficial use as “[u]ses of water for domestic, stock watering, industrial, commercial, agricultural, irrigation, hydroelectric power production, mining, fish and wildlife maintenance and enhancement, recreational, and thermal power production purposes, and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state.”¹¹ In California, beneficial use “include[s], but [is] not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.”¹² In Alaska, beneficial use includes

⁷See, e.g., N.M. Const. art. XVI, § 3; Nev. Rev. Stat. § 533.035; Or. Rev. Stat. § 540.610(1).

⁸Or. Rev. Stat. § 540.610(1).

⁹*Id.* § 536.300(1).

¹⁰*Id.*

¹¹Wash. Rev. Code § 90.54.020(1).

¹²Cal. Water Code § 13050(f).

a use of water for the benefit of the appropriator, other persons or the public, that is reasonable and consistent with the public interest, including, but not limited to, domestic, agricultural, irrigation, industrial, manufacturing, fish and shellfish processing, navigation and transportation, mining, power, public, sanitary, fish and wildlife, recreational uses, and the maintenance of water quality.¹³

In addition, under Alaska law, as will be discussed in more detail below, any person can secure an instream flow right for “(1) protection of fish and wildlife habitat, migration, and propagation; (2) recreation and park purposes; (3) navigation and transportation purposes; and (4) sanitary and water quality purposes.”¹⁴

As these definitions of beneficial use demonstrate, under state codes today, uses that do not require a diversion appear regularly within the definitions of beneficial use. As a result, non-consumptive water use for purposes like fishery or recreational needs are well within established definitions of beneficial use.

[2] Incorporating Instream Flow Rights into the Prior Appropriation System

One of the fundamental challenges when establishing instream flow water rights involves understanding the relative priority of any right that is created. Newly established instream flows often carry a relatively junior priority date. As a result, in the drier years, when protection of non-consumptive use is often most significant, the junior priority date effectively results in a water right on paper only. To address this dynamic many states have created mechanisms to transfer or convert more senior diversionary rights to instream flow, while retaining the more senior and valuable priority date.¹⁵

In addition to the priority date of the water right, often there are special statutory provisions that allow the state to forego the exercise of a senior instream flow right in a given year.¹⁶ When the state, rather than an individual, holds all instream flow rights, this gives the state the discretionary authority to waive enforcement of that right, essentially subordinating the instream right to more junior diversionary uses of water. Under provisions like the one in Oregon, the water resources department makes that decision in a given water year. By contrast, in states where an individual or

¹³Alaska Stat. § 46.15.260(3).

¹⁴*Id.* § 46.15.145(a).

¹⁵*See, e.g.,* Ariz. Rev. Stat. Ann. § 45-172(A); Colo. Rev. Stat. § 37-92-102; Or. Rev. Stat. § 537.348(1).

¹⁶*See, e.g.,* Idaho Code Ann. § 42-203B; Or. Rev. Stat. § 537.352; *see also* Swinomish Indian Tribal Cmty. v. Dep’t of Ecology, 311 P.3d 6 (Wash. 2013).

an organization can hold an instream flow right, the holder of the right would be in the position to make a call or forego a call for the instream water right.

For everyone involved, the proponents and the opponents of instream water rights, the mechanism for incorporating instream flow rights into the existing priority system, whether by operation of the priority date or through subordination provisions found in state statutes, represents one of the central challenges. To be meaningful in protecting flows or lake levels, non-consumptive water rights need to be on par with more traditional consumptive rights. With several decades of experience creating and managing instream flow rights, we now have the opportunity to step back and assess where we stand and chart the next steps. To embark on this kind of evaluation, it may be helpful to use a case study or common set of facts to compare various approaches and challenges associated with each. Alaska's instream flow program provides a dynamic and current case study for evaluating instream flow programs in the context of a typical prior appropriation jurisdiction.

[3] Case Study—Alaska's Instream Flow Law and the Chuitna River

Alaska is a prior appropriation state, and one of the few western states that allow private parties to hold instream flows.¹⁷ This aspect can significantly alter the typical dynamic found in many western states, where only government entities may hold appropriations of instream flow.¹⁸

Alaska's water law allows any party to apply for and be granted a reservation of water for a number of instream uses.¹⁹ The statutory language is very inclusive, authorizing applications not only by state or federal agencies, but also by private individuals or entities.²⁰ Statutorily listed instream uses include fish and wildlife habitat, recreation, transportation,

¹⁷See Michael F. Browning, "Instream Flow Water Rights in the Western States and Provinces," 56 *Rocky Mt. Min. L. Inst.* 9-1 (2010); Alaska Water Use Act, Alaska Stat. §§ 46.15.010–.270 (Alaska adopted the majority of its current water code in 1966). *But see* Frank J. Trelease, "Alaska's New Water Use Act," 2 *Land & Water L. Rev.* 1, 43 (1967) (noting that more robust provisions providing for reservations of water for instream flow were excluded from the final version of Alaska's Water Use Act).

¹⁸See Browning, *supra* note 17, § 9.04[16].

¹⁹Alaska Stat. § 46.15.145(a).

²⁰See *id.* (stating "a person" may apply); see also *id.* § 46.15.260(7) (defining "person" as "includ[ing] an individual, partnership, association, public or private corporation, state agency, political subdivision of the state, and the United States").

and sanitation.²¹ Alaska's Department of Natural Resources (DNR) is in charge of reviewing these applications and issuing certificated rights.²² The applications are reviewed and granted if it is shown that they will not harm existing rights holders, there is a need for the reservation, there is sufficient unappropriated water for the reservation, and the reservation is within the public's interest.²³ While Alaska's code is among the most expansive in terms of who can assert and hold an instream flow right, the law also provides for periodic review (every 10 years) to ensure those rights continue to meet the public interest standard.²⁴ The rights are also subject to review, at the discretion of the DNR commissioner, if certain circumstances occur.²⁵ No other appropriative rights are subject to this kind of review.

In many states, the decision to establish instream flow rights comes at a time when there is very little water available for appropriation. Alaska is in a very different position with large quantities of unappropriated water. As a result, for many advocates of instream flow protection, Alaska has the opportunity to avoid a situation where non-consumptive uses are an afterthought. Despite this hydrologic reality, the instream flow program in Alaska has been, and continues to be, controversial. Much of this concern stems from DNR's stated inability to keep up with the number of water reservations that are filed.²⁶ The Alaska Department of Fish & Game (ADF&G) has filed a large number of the reservation of water applications for fish and wildlife,²⁷ but only about a quarter have been granted.²⁸ During a 10-year

²¹*Id.* § 46.15.145(a).

²²*Id.* §§ 46.15.010, .040-.140.

²³*Id.* § 46.15.145(c).

²⁴*Id.* § 46.15.145(f) (Instream reservations are to be reviewed every 10 years to ensure they continue to meet the specified purposes of the reservation and that the findings under (c) still apply. If not, they can be revoked or modified, if doing so would be in the best interest of the state.).

²⁵Alaska Admin. Code tit. 11, § 93.147(a) (including such circumstances as a "significant change" to the resource or a protest by a subsequent applicant).

²⁶See Joe Klein, Alaska Dep't of Fish & Game (ADF&G), "Instream Flow Protection in Alaska, 1999-2009," at 5-6 (Special Pub. No. 11-01 Feb. 2011); see also *Chuitna Citizens Coal. v. Alaska Dep't of Natural Res.*, No. 3AN-11-12094CI, slip op. at 9 (Alaska Super. Ct. Oct. 16, 2013) (order regarding pending motions and cross-motions for summary judgment).

²⁷Joe Klein, ADF&G, "Instream Flow Protection in Alaska, 2012," at 5 (Special Pub. No. 13-12 May 2013) (stating that the ADF&G filed applications on 191 river reaches, and 4 lake levels out of 512 total applications as of 2012).

²⁸*Id.* (stating that 54 river reaches and 1 lake level were granted).

period, from 1992 to 2002, the DNR did not grant a single certificate to a reservation of water application filed by ADF&G.²⁹ A memorandum of understanding between the two agencies eventually helped facilitate processing and decrease the backlog of applications.³⁰ While this has increased the number of agency applications being processed,³¹ it has failed to resolve the challenges faced by non-agency applicants.

According to the DNR, the agency's current funding stream does not provide sufficient resources to effectively process instream flow applications.³² There have been recent attempts to modify Alaska's instream flow law to address this problem. Originally introduced in 2013, House Bill 77³³ was promoted as a means to help alleviate the DNR's application backlog and increase agency efficiency.³⁴ However, it would have achieved those objectives by repealing the ability of private parties, tribes, and local governments to apply for and hold an instream water reservation, and giving the DNR broad authority to permit land use changes. The bill ultimately died in committee during the 2014 legislative session.³⁵

The ongoing Chuitna River conflict involves a non-agency applicant and centers on competing claims: applications for reservations of instream flow to support fish and wildlife, and temporary water use permits requested for a proposed mining project.³⁶ At issue are applications made for water

²⁹Klein, *supra* note 26, at 24 fig.5.

³⁰Klein, *supra* note 27, at 5 (stating that ADF&G now "partially funds a position at DNR" to help process the applications).

³¹*Id.*

³²*Chuitna*, No. 3AN-11-12094CI, slip op. at 9, 39–40.

³³H.R. 77, 28th Leg., 1st Sess. (Alaska 2013).

³⁴See Letter from Sean Parnell, Governor, Alaska, to Mike Chenault, Speaker of the House, Alaska State Legislature (Jan. 17, 2013); PowerPoint Presentation, Dan Sullivan, Brent Goodrum & Wyn Menefee, "Statewide Permitting Reform—HB 77: Land Disposals/Exchanges; Water Rights," at 10 (Jan. 30, 2013) (HB 77 "would reform and streamline procedures for obtaining, issuing, and appealing permits, leases, best interest findings, and other DNR authorizations. It would also allow DNR to establish a general permit for an activity on state land unlikely to cause irreparable harm to the State").

³⁵The bill was amended for the 2014 session. Changes included allowing private parties to apply for an instream reservation, but requiring that once granted, it would be transferred to a public agency. See DNR, "Summary of Changes—HB 77: Land Disposals/Exchanges; Water Rights" (Mar. 10, 2014); see also Robert T. Anderson, "Alaska Legislature Considers Innovative Instream Flow Law," 2 *Rivers* 255 (1991) (describing an effort in 1991 to provide for instream reservations).

³⁶See *Chuitna Citizens Coal. v. Sullivan*, No. 3AN-11-12095CI (Alaska Super. Ct. Feb. 26, 2013) (opinion and order on administrative appeal).

in Middle Creek, a tributary of the Chuitna River.³⁷ The Chuitna River is located approximately 45 miles from Anchorage, on the western side of Cook Inlet.³⁸ A local environmental group, Chuitna Citizens Coalition (CCC), filed three instream water reservation applications in 2009.³⁹ Subsequently, a mining company, PacRim Coal LP (PacRim), filed for and was granted temporary water use permits in 2010 and 2011 for the same stretch of stream.⁴⁰ After trial court litigation over a number of issues involving PacRim's permits, the application was opened for public comment and is currently under consideration.⁴¹ At issue is whether the earlier instream water right filed by CCC takes priority over the subsequent consumptive use permit sought by the mining company. The dynamics surrounding this project illustrate one of the most profound issues with instream flow rights: are they, in fact, on par with traditional consumptive use rights or are they a lesser right than can be easily trumped by later in time consumptive use needs? If it is the latter, it is hard to conclude that instream flow programs have done much more than protect water that was not really under threat of being appropriated. As the discussion of various state programs below illustrates, each state approaches instream flow a bit differently, but they all struggle with how to integrate and enforce those rights in the larger water rights permitting structure.

§ 22.03 Categories of State Programs

This chapter offers three categories of western state instream flow programs as a way of comparing and contrasting the various approaches to protecting instream flow values.⁴² The first category—the “Water

³⁷See “Main Stem Stream 2003 Instream Flow Reservation Application,” at 1 (Main Stem Application), https://inletkeeper.org/resources/contents/chuitna-instream-flow-reservation-application-main-stem/at_download/file; “Middle Reach Stream 2003 Instream Flow Reservation Application,” https://inletkeeper.org/resources/contents/application-for-instream-flow-reservation-for-the-middle-reach-of-the-chuitna-river/at_download/file; “Lower Reach Stream 2003 Instream Flow Reservation Application,” https://inletkeeper.org/resources/contents/chuitna-instream-flow-reservation-application-lower-reach/at_download/file.

³⁸DNR, “Chuitna Coal Project,” <http://dnr.alaska.gov/mlw/mining/largemine/chuitna/>.

³⁹*Chuitna*, No. 3AN-11-12095CI, slip op. at 3; see also Main Stem Application, *supra* note 37, at 1 (“primary purpose of the proposed reservation is for protection of fish and wildlife habitat, migration, and propagation”).

⁴⁰See *Chuitna*, No. 3AN-11-12095CI, slip op. at 5.

⁴¹Kimberly Sager, DNR, “Extension of Comment Period: Notice of Applications for Reservation of Water; Middle Creek/Stream 2003 Main Reach, Middle Reach, & Lower Reach” (Feb. 26, 2015) (public comments were opened on Feb. 23, 2015, and were extended until April 9, 2015).

⁴²See also Dudley W. Reiser, Thomas A. Wesche & Christopher Estes, “Status of Instream Flow Legislation and Practices in North America,” in 14 *Fisheries* 22 (1989).

Rights/Instream Flow Program Approach”—represents states that have recognized instream rights within their larger water rights system and coupled that basic recognition with specific statutory and programmatic efforts to advance the instream protection. This first category captures the majority of western states that have not only modified their definitions of beneficial use and diversion requirements, but have also taken affirmative steps to advance instream flow programs within the state.

The second category—“Using the Definition of Beneficial Use Approach”—describes a minority of states that have amended their definition of beneficial use and removed the requirement for a diversion, but have been more reluctant to establish instream flow programs or use statutory language to promote the establishment of instream flows. This is not to say that important instream water rights work is not occurring in these states; rather, that work is occurring through more creative mechanisms and often lacks any affirmative action in a programmatic way by the state water resource agencies.

The final category of states—the “Statewide Planning Approach”—describes states that have taken a comprehensive approach to evaluating non-consumptive water use and instream flow on a statewide basis.

[1] Water Rights Approach Using Statutorily Enacted Instream Flow Programs

[a] Oregon

Oregon adopted the Instream Water Rights Act of 1987⁴³ to allow for stream flow rights for public purposes related to fish and wildlife needs, recreation, water quality, and pollution abatement.⁴⁴ Oregon was the first state to adopt this type of comprehensive statutory scheme. In fact, Oregon had been addressing instream flow on a programmatic statewide basis even prior to 1987 with minimum perennial stream flows established for many streams.⁴⁵ The 1987 Act, however, directed the Oregon Water Resources Department (OWRD) to work on a “voluntary basis with water right users, landowners, watershed councils, soil and water conservation districts, irrigation districts, and other organizations to restore streamflows” for the aforementioned trust purposes and to convert existing minimum

⁴³Or. Rev. Stat. §§ 537.332–.360.

⁴⁴See *id.* § 537.332 (an instream water right is “a water right held in trust by the Water Resources Department for the benefit of the people of the State of Oregon to maintain water in-stream for public use”).

⁴⁵See Janet Neuman, Anne Squier & Gail Achterman, “Sometimes a Great Notion: Oregon’s Instream Flow Experiments,” 36 *Envtl. L.* 1125, 1130–31 (2006).

perennial stream flow to instream water rights.⁴⁶ Several state agencies are statutorily authorized to apply for instream flow rights.⁴⁷ Applications undergo a review process similar to other water rights applicants, including establishing a priority date based on when the request was submitted. If the state agency application is approved, the instream water right is held by the OWRD in trust for the people of Oregon,⁴⁸ although as a practical matter, priority dates after 1987 secure very junior rights and provide little protection except in basins where unappropriated water is still available.

Since 1987, more than 500 of the state's minimum perennial stream flows have been converted to instream water rights, and the OWRD has issued more than 900 state agency-applied instream water rights.⁴⁹ In addition to direct appropriation by state agencies for instream flow and the conversion of minimum perennial stream flows, Oregon has three other methods of protecting water instream: instream leases and time-limited transfers, permanent instream transfers, and allocation of conserved water through the Conserved Water Program.

Oregon's instream leasing program allows water right holders to transfer, subject to approval by the OWRD, any amount of their diversionary water right to instream flow for a period of up to five years.⁵⁰ The permanent instream transfer program also allows a water right to be moved instream, but in contrast to the limited-duration lease program, water rights under this program are permanently converted to an instream flow right that is held in trust by the OWRD.⁵¹

Oregon's Conserved Water Program is an innovative system that focuses on improving irrigation efficiencies and then applying a portion of the conserved water to instream flows.⁵² While the program may be underutilized

⁴⁶OWRD, "Flow Restoration in Oregon" (Aug. 2009) http://www.oregon.gov/owrd/pages/mgmt_instream.aspx.

⁴⁷Or. Rev. Stat. § 537.336 (listing the Oregon Departments of Fish and Wildlife, Parks and Recreation, and Environmental Quality as agencies authorized to request instream water rights).

⁴⁸*Id.* § 537.341.

⁴⁹*See* OWRD, *supra* note 46. There are, however, minimum perennial stream flows that have not been converted, including many on the Willamette River.

⁵⁰OWRD, "Instream Leasing Program," http://www.oregon.gov/owrd/pages/mgmt_leases.aspx.

⁵¹OWRD, "Oregon's Flow Restoration Toolbox," http://www.oregon.gov/owrd/pages/mgmt_instream_tools.aspx.

⁵²OWRD, "Allocation of Conserved Water," http://www.oregon.gov/owrd/pages/mgmt_conserved_water.aspx.

for various reasons, it has enjoyed increased success and serves as a model for other states.⁵³ The program provides funding for individuals to update and improve irrigation systems.⁵⁴ The updated systems allow users to divert less water, yet still meet their needs.⁵⁵ The water that is saved—the difference between the original water right and amount now needed—is divided between the state and the user. The state receives a 25–75% share of the now excess water, depending on the proportion of public funds used for the project.⁵⁶ The user is free to sell the share or apply it to a new use. Thus, the system allows appropriators not only to modernize their operations, but also to receive a financial benefit and avoid a forfeiture or abandonment claim based on nonuse.⁵⁷

According to OWRD's website, more than 50% of Oregon's regulated streams included protections to instream water rights, and over 70% of permanent instream water has a senior priority date. Oregon's restoration program results in about 900 cubic feet per second (cfs) of stream flow.⁵⁸ The relationships formed with nonprofit organizations have been a key to Oregon's success. The flow restoration program involves over "1,100 individual instream leases, instream transfers, and allocations of conserved water."⁵⁹ The program depends on active partnerships with nonprofit organizations such as the Klamath Basin Rangeland Trust, Deschutes River Conservancy, and the Freshwater Trust.⁶⁰ It provides incentives to water right holders using a market-based approach.

[b] Alaska

Alaska's instream water rights picture, while not as robust as Oregon's, falls into this category because, structurally, the statutory provisions create the opportunity for a programmatic approach to instream water rights. As previously noted in § 22.02[3], Alaska is one of the few western states

⁵³*Id.*

⁵⁴Janet Neuman, *Oregon Water Law: A Comprehensive Treatise on the Law of Water and Water Rights in Oregon* 203–08 (2011).

⁵⁵*Id.*

⁵⁶*Id.*

⁵⁷OWRD, "Flow Restoration Actions," http://www.oregon.gov/owrd/pages/mgmt_flow_restoration.aspx.

⁵⁸OWRD, "Flow Restoration in Oregon" (Aug. 2009) http://www.oregon.gov/owrd/pages/mgmt_instream.aspx.

⁵⁹*Id.*

⁶⁰The Freshwater Trust was formerly known as the Oregon Water Trust. *Id.*; see Janet C. Neuman, "The Good, The Bad, and The Ugly: The First Ten Years of the Oregon Water Trust," 83 *Neb. L. Rev.* 432 (2004).

that allow private parties to hold instream flows and is uniquely situated to proactively address the need for instream flow.⁶¹ Starting in 1980, Alaska has allowed both government entities and private individuals⁶² to apply for reservations of water for a number of instream uses.⁶³ As a result of these provisions, state and federal agencies, as well as private citizens groups like the CCC, have sought instream flow rights for various streams, often with a programmatic approach.

[c] Washington

In Washington, similar to Oregon and Alaska, water rights can be established with instream flow or lake level as a beneficial use.⁶⁴ Washington law also allows for the transfer or lease of senior water rights to the state as instream flow rights.⁶⁵ Once transferred to the state or established under state law, instream flow rights are protected as trust water rights.⁶⁶

In addition to this relatively common instream water rights structure, Washington law also provides that the Department of Ecology (Ecology) has the authority to set minimum flows and levels in consultation with other state agencies.⁶⁷ The base flows are established via rule and are subject to future withdrawals for consumptive use if there are “overriding considerations of the public interest.”⁶⁸

In a recent decision, the Washington Supreme Court held that Ecology acted beyond its statutory authority in allowing new uses of water where there was an established instream flow.⁶⁹ In 2001, the Skagit River Basin Instream Resources Protection Program rule⁷⁰ went into effect protecting instream flows in the basin. In 2006, Ecology amended the rule to establish 27 “reservations” of surface and groundwater for future out-of-stream uses that provided uninterrupted water sources for new agricultural, residential,

⁶¹ See Browning, *supra* note 17.

⁶² Alaska Stat. § 46.15.145(a).

⁶³ *Id.* § 46.15.145(a)(1)–(4).

⁶⁴ Wash. Rev. Code § 90.42.080.

⁶⁵ *Id.*

⁶⁶ *Id.* § 90.42.080(7).

⁶⁷ *Id.* § 90.22.010.

⁶⁸ *Id.* § 90.54.020(3)(a).

⁶⁹ Swinomish Indian Tribal Cmty. v. Dep’t of Ecology, 311 P.3d 6, 9 (Wash. 2013).

⁷⁰ Wash. Admin. Code §§ 173-503-010 to -100.

and commercial uses.⁷¹ In 2008, the Swinomish Tribe challenged the reservations.⁷² The court found that “overriding considerations of the public interest” was a very narrow exception and “requires extraordinary circumstances before the minimum flow water right can be impaired.”⁷³

Washington also offers two targeted programs that operate to help supplement instream flows, the Irrigation Efficiencies Program and the Water Acquisition Program.⁷⁴ The Water Acquisition Program is similar to other basic lease systems, except that its primary focus is to support salmon populations by providing targeted instream flow in 16 high priority basins at locations with the greatest need.⁷⁵ This highly focused approach allows the state to maximize the environmental benefit while minimizing overall costs. The program has been highly successful in some areas. The Washington Water Trust—a nonprofit organization—has played a major role in the operation of the program.⁷⁶ A potential roadblock to this general type of voluntary water program is public perception. Appropriators who have a negative view of government in general may be less inclined to participate, as evidenced by vastly different adoption rates by region.⁷⁷ Nonprofits like the Washington Water Trust are able to help bridge the gap and mitigate for any negative feeling or concerns. In particular, users were often concerned that by inquiring about the program, they would invite to investigation and potentially lose their water right.⁷⁸ The Irrigation Efficiencies program has a similar focus to the Acquisition program and operates in the same critical watersheds. This program provides technical and financial support to farmers, facilitating more efficient use of water. Through cost-sharing the program helps provide “an improved irrigation system at reduced cost and in turn places a portion of the saved water in the state’s trust water program for the life of the system.”⁷⁹

⁷¹*Swinomish Indian Tribal Cmty.*, 311 P.3d at 9.

⁷²*Id.* at 10.

⁷³*Id.* at 8.

⁷⁴Nicholas P. Lovrich et al., “Of Water and Trust: A Review of the Washington Water Acquisition Program” (Mar. 2004); Wash. State Conservation Comm’n, “2008 Report: Irrigation Efficiencies Grants Program” (2008).

⁷⁵Lovrich, *supra* note 74; *see* Wash. Rev. Code §§ 90.42.005–.900.

⁷⁶*See* Lovrich, *supra* note 74.

⁷⁷*Id.* at 9.

⁷⁸*Id.* at 7.

⁷⁹*Id.* (noting also that the duration of the trust will vary, depending on the estimated lifespan of the new irrigation system).

[2] Using the Definition of Beneficial Use Approach

The first category of states, including Oregon, Alaska, and Washington as examples, is characterized by robust statutory mechanisms for establishing instream flow rights *and* concrete initiatives or potential initiatives for addressing instream flow on a programmatic scale. The second category of states, including Arizona, Nevada, California, Idaho, and New Mexico as examples, is characterized by a less programmatic statutory approach to instream flow. Rather, these states address instream flow as a function of the existing provisions of their water code, primarily through the definition of beneficial use. These states do not have comprehensive acts of the state legislature that set forth a programmatic approach to instream flow.

[a] Arizona

Arizona relies on the definition of beneficial use to address the establishment of water rights for non-consumptive uses. Arizona water law establishes a right of appropriation for “domestic, municipal, irrigation, stock watering, water power, recreation, wildlife, including fish, non-recoverable water storage . . . or mining uses.”⁸⁰ The Arizona Department of Water Resources (ADWR) has statutory discretion over the “appropriation and distribution” of surface waters and has developed guidance for filing instream flow water rights.⁸¹ In 2005, the Arizona Court of Appeals construed ADWR’s discretion broadly, upholding the agency’s decision to issue permits appropriating water for instream flows.⁸² The court upheld ADWR’s permit of an instream flow right to the U.S. Forest Service (USFS) appropriating Cherry Creek in the Tonto National Forest for fish, wildlife, and recreation purposes.⁸³ Like Alaska, Arizona allows private individuals and non-governmental entities to file claims for instream flow rights.⁸⁴ Arizona law also allows for the transfer of existing rights to instream flow purposes, specifically recreation or wildlife purposes. These transferred

⁸⁰Ariz. Rev. Stat. Ann. § 45-151(A).

⁸¹*Id.* § 45-103(B); *see* ADWR, “Application Review Process: Application for Permit to Appropriate Public Water of the State of Arizona for Instream Flow Purposes” (Aug. 2012).

⁸²*Phelps Dodge Corp. v. ADWR*, 118 P.3d 1110, 1117 (Ariz. Ct. App. 2005).

⁸³*Id.* In addition to the instream flows for Cherry Creek, the U.S. Department of Justice, Environment & Natural Resources Division, lists as a success for federal reserved water rights “the settlement of all water rights for all the national parks and monuments in the Little Colorado River Basin in Arizona.” While these federal settlements include provisions for protecting instream flow, those rights are typically based on federal, not state, law. U.S. Dep’t of Justice, “Federal Reserved Water Rights and State Law Claims” (May 12, 2015).

⁸⁴Ariz. Rev. Stat. Ann. §§ 45-152, -152.01.

instream flow rights, however, can only be held by the state or its political subdivision.⁸⁵

[b] Nevada

Nevada has no state program dedicated to protecting or managing instream flows. Nevada's water code⁸⁶ provides, however, that "all water may be appropriated for beneficial use."⁸⁷ Moreover, the Supreme Court of Nevada has held that a diversion is not required to establish beneficial use.⁸⁸ In combination, this creates a structure for establishing instream flow rights.

In addition, the Nevada State Water Plan sets forth several mechanisms for addressing instream flow.⁸⁹ The Nevada State Water Plan provides that "[i]nstream beneficial uses in Nevada include habitat for aquatic invertebrates, fishes, birds and other wildlife, maintenance of water quality, and recreation."⁹⁰ The Nevada State Water Plan also identifies a need for instream flow assessment and protection in some areas where sensitive species are located.⁹¹

Beyond the Nevada State Water Plan, instream flow has also been addressed through specific projects. For example, in 2007, the legislature authorized the temporary conversion of irrigation rights to wildlife purposes and to improve the quality or flow of water.⁹² In addition to specific statutes, state agencies have established policies, augmented or conditioned permits, and adopted water quality standards to address instream flow. For example, the Nevada Division of Wildlife has established policies regarding

⁸⁵*Id.* § 45-172(A); see also Allan Locke et al., Instream Flow Council, *Integrated Approaches to Riverine Resource Stewardship: Case Studies, Science, Law, People, and Policy* 291 (2008).

⁸⁶See Nev. Rev. Stat. ch. 553.

⁸⁷*Id.* § 553.030(1).

⁸⁸State v. Morros, 766 P.2d 263, 266 (Nev. 1988) (finding that beneficial use was the only true requirement when determining the right to appropriate water).

⁸⁹See Nev. Div. of Water Planning, "Nevada State Water Plan" (Mar. 1999) (Nevada State Water Plan), http://water.nv.gov/programs/planning/stateplan/documents/NV_State_Water_Plan-complete.pdf.

⁹⁰*Id.* at 3B-1.

⁹¹*Id.* at 3B-2.

⁹²Nev. Rev. Stat. § 533.0243.

fish management,⁹³ fisheries management,⁹⁴ and the designation of Wildlife Management Areas.⁹⁵ Each of those policies takes into account water usage, which can include minimum flow requirements.⁹⁶

Finally, agreements are perhaps the most frequently used mechanism to protect instream flows in Nevada up to this point. These agreements often amount to outright purchases of wetlands or water rights in order to sustain instream flows.⁹⁷ For example, the Truckee-Carson-Pyramid Lake Water Rights Settlement Act⁹⁸ created an avenue for the U.S. Fish & Wildlife Service, in cooperation with the U.S. Department of the Interior and the Nevada Division of State Lands, to purchase from willing sellers sufficient water to sustain 25,000 acres of prime wetlands in Lahontan Valley.⁹⁹ Congress appropriated approximately \$16 million to facilitate these purchases.¹⁰⁰ The Truckee River Water Quality Agreement resulted in cooperating agencies modeling water quality improvement as a function of stream flow and using that information to estimate water supply needs for flow augmentation during periods of lower water quality. This led Washoe County and the cities of Reno and Sparks to begin to purchase water rights and apply for their transfer. The Nevada Division of Wildlife has assessed minimum instream flows to determine the potential impact to fish habitat from water development projects proposed for the Truckee River and Lamoille Creek, and has made agreements to maintain certain reservoir pool elevations and wetlands on state wildlife management areas.¹⁰¹

⁹³Nev. Bd. of Wildlife Comm'rs (NBWC), Policy No. 31, "Lahontan Cutthroat Trout Management Guidelines" (Policy 31).

⁹⁴NBWC, Policy No. 33, "Fisheries Management Program" (Policy 33).

⁹⁵NBWC, Policy No. 66, "Management and Use of Wildlife Management Areas" (Policy 66).

⁹⁶See Policy 31, *supra* note 93; Policy 33, *supra* note 94; Policy 66, *supra* note 95.

⁹⁷Nevada State Water Plan, *supra* note 89, at 3B-5 to 3B-9.

⁹⁸Truckee-Carson-Pyramid Lake Water Rights Settlement Act, Pub. L. No. 101-618, tit. II, 104 Stat. 3289 (1990).

⁹⁹W. Hemisphere Shorebird Reserve Network, "Lahontan Valley Wetlands: Ecology & Conservation," www.whsrn.org/site-profile/lahontan-valley-wetlands.

¹⁰⁰*Id.*

¹⁰¹See John Elliott, Nev. Dep't of Wildlife, "Lahontan Cutthroat Trout Species Management Plan for the Upper Humboldt River Drainage Basin" (Dec. 2004).

[c] California

While here are several isolated, but robust, mechanisms available to secure instream flows in California waterways,¹⁰² currently there is no statewide comprehensive instream flow program.¹⁰³ California Water Code § 1707 allows existing water right holders to transfer the otherwise diverted water to instream flows up to the extent of the existing right.¹⁰⁴ The ability to convert existing rights is significant because under section 1707, the requirement of having an actual diversion no longer applies.¹⁰⁵ Section 1707 has been used 23 times to transfer appropriative water rights to instream flows.¹⁰⁶ Farmers can now use section 1707 to allocate excess flows for a portion of the year without fear of losing the right due to intentional nonuse. Thus, the section incentivizes more efficient uses of water, which ultimately benefits both the right holder and the environment. Section 1707 allows the petitioner to specify whether the instream flow being dedicated can be counted toward instream flow goals.¹⁰⁷ In addition to section 1707, section 5937 of the Fish and Game Code provides protections for fisheries that afford benefits for instream flow as well.¹⁰⁸

The California Department of Fish and Wildlife (CDFW) has also been mandated by the California Public Resources Code § 10001 to “identify and list those streams and watercourses throughout the state for which minimum flow levels need to be established in order to assure the continued viability of stream-related fish and wildlife resources.”¹⁰⁹ Note that this is not a requirement to actually set instream flows, but instead simply a mandate that the CDFW “identify and list” streams that need to have instream

¹⁰²See, e.g., 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, 1220–21 (2006) (describing the evolution of California’s adoption of the public trust doctrine).

¹⁰³Harrison C. Dunning, “California Instream Flow Protection Law: Then and Now,” 36 *McGeorge L. Rev.* 363, 392 (2005).

¹⁰⁴Cal. Water Code § 1707 (“Any person entitled to the use of water, whether based upon an appropriative, riparian, or other right, may petition the board . . . for a change for purposes of preserving or enhancing wetlands habitat, fish and wildlife resources, or recreation in, or on, the water.”).

¹⁰⁵*Id.* § 1707(b).

¹⁰⁶State Water Res. Control Bd., “Instream Flow Dedication,” http://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/instream_flow_dedication/index.shtml.

¹⁰⁷Cal. Water Code § 1707(c)(1).

¹⁰⁸Cal. Fish & Game Code § 5937.

¹⁰⁹Cal. Pub. Res. Code § 10001.

flows. The CDFW has identified 22 streams and provided the State Water Resources Control Board (SWRCB) with recommended instream flows for each.¹¹⁰ The streams were listed because they are important to anadromous fish populations and the recommended minimum flows would help threatened and endangered salmonid populations recover.¹¹¹ However, the SWRCB need only consider these recommendations during its decision-making processes regarding water allocations.

[d] Idaho

In Idaho, only the Idaho Water Resource Board (IWRB) is authorized to appropriate the minimum flow of water required to protect designated uses.¹¹² In order for IWRB to obtain an instream flow right, three conditions must be satisfied. First, unappropriated water must be available. This essentially eliminates the possibility of any senior instream flow claims. Second, the water right is limited to the minimum amount necessary to meet the goals.¹¹³ Third, data must show that the flow can be maintained.¹¹⁴

While the public may request that an instream flow be established, the IWRB reviews these requests and files applications with the Idaho Department of Water Resources (IDWR) if it determines a minimum stream flow may be desirable.¹¹⁵ To determine the desirability, the IWRB can seek public input and gather information in the area of the requested minimum stream flow.¹¹⁶ Based on this input, the IWRB will decide whether to withdraw, modify, or submit the application to the IDWR.¹¹⁷ These applications to the IWRB describe the stream, the amount of water sought, the purpose and location of the minimum flow, and any other information required.¹¹⁸

¹¹⁰CDFW, “Instream Flow Program: 2013 Annual Report,” at 9 (2013).

¹¹¹*Id.*

¹¹²Idaho Code Ann. § 42-1503. The current Idaho state water plan states that “[m]inimum stream flows protect and support many nonconsumptive beneficial uses of water such as fish and wildlife habitat, aquatic life, recreation and aesthetic values, transportation, navigation, hydropower generation, and water quality . . . [which] contribute to Idaho’s economy and the well being of its citizens.” IWRB, “Idaho State Water Plan,” at 27 (Nov. 2012) (Idaho State Water Plan); see Idaho Code Ann. §§ 42-1501, -201(7).

¹¹³See IWRB, “Minimum Streamflows,” http://www.idwr.idaho.gov/waterboard/WaterPlanning/Minimum%20Stream%20Flow/minimum_stream_flow.htm.

¹¹⁴*Id.*

¹¹⁵See IWRB, “Idaho Minimum Stream Flow Program” (Jan. 2013).

¹¹⁶*Id.* at 2.

¹¹⁷*Id.*

¹¹⁸*Id.*

If the application is submitted, the priority date assigned to the minimum stream flow is the date the application is filed with the IDWR.¹¹⁹

Finally, applications approved by the IDWR “must be submitted to the Idaho Legislature.”¹²⁰ Formal approval of the minimum stream flow occurs “when the legislature affirms it by Concurrent Resolution.”¹²¹ However, if the legislature fails to act on the minimum stream flow before the end of the regular session of that year, it is considered approved.¹²² As of 2013, the IWRB holds 287 minimum stream flow water rights, including rights for lake levels.¹²³

A large majority of the established minimum stream flows in Idaho are based on the 2004 Snake River Water Rights Agreement,¹²⁴ which settled the Nez Perce Tribe’s claims and provided a programmatic approach to addressing the needs of species listed under the Endangered Species Act of 1973 (ESA).¹²⁵ The 205 water rights from the Nez Perce agreement are meant to provide protection for ESA-listed species in the Salmon and Clearwater River basins,¹²⁶ but have a priority date of April 1, 2005, and for at least the main stem of the Snake, available water is insufficient to meet the minimum stream flow at the time they were set.¹²⁷ In order to meet the minimum stream flows, and to utilize funding from the Columbia Basin Water Transactions Program, the IWRB created the Idaho Water Transaction Program, which utilizes Idaho’s existing Water Bank and local rental pools to purchase water, create agreements not to divert, conduct source switches, and implement other water saving techniques that put more water in stream for listed aquatic species.¹²⁸

¹¹⁹*Id.*

¹²⁰*Id.*

¹²¹*Id.*

¹²²*Id.*

¹²³IWRB, “Minimum Stream Flow and Minimum Lake Level Summary 2013” (Jan. 16, 2013).

¹²⁴See IWRD, “The 2004 Snake River Water Rights Agreement (Nez Perce Agreement),” <http://www.idwr.idaho.gov/waterboard/WaterPlanning/nezperce/default.htm>.

¹²⁵16 U.S.C. §§ 1531–1544.

¹²⁶See Idaho State Water Plan, *supra* note 112, at 25–27, 70–74.

¹²⁷Generally the IWRB would require a petitioner to show that there is sufficient available water to meet the minimum stream flow; however, those minimum stream flows in the Nez Perce agreement, and other minimum stream flows created through special legislative enactments like those for the Lemhi River, are not subject to the requirement.

¹²⁸See IWRB, “Idaho Water Transactions Program—Progress Report: Overview and Accomplishments 2003–2012” (2012).

In addition to the rights established under state law and those created by agreements with the federal government, the Idaho legislature has also authorized instream flow in particular circumstances. For example, the legislature “authorized the [IWRB] to appropriate minimum stream flow water rights in the Lemhi and Wood River basins where the rights are maintained through operation of a Water Supply Bank.”¹²⁹ Programs like this “are used to maintain or enhance instream flow in a [way] that respects [current] water use practices” while addressing local needs and concerns.¹³⁰

Lastly, from a more programmatic perspective, Policy 6B of the 2012 Water Plan says that the IWRB will promote and “expand opportunities for voluntary, market-based transactions to improve instream flow [to protect] ESA-listed [aquatic] species.”¹³¹ In addition to the requirements of the Snake River Water Rights Agreement, the IWRB administers and participates in many “programs to improve instream flows in the Salmon and Clearwater River basins” using a variety of water acquisition tools including “short and long-term leases, permanent purchases, partial season leases, diversion reduction agreements, and water use efficiency measures, all of which are market-based and voluntary.”¹³² Further, the IWRB “works collaboratively with organizations committed to voluntary, market-based conservation strategies, such as conservation easements, to maximize instream flow programs,” which benefit fish species and local economies.¹³³

[e] New Mexico

The Constitution of New Mexico establishes the doctrine of prior appropriation and declares all unappropriated waters public property “subject to appropriation for beneficial use, in accordance with [state law].”¹³⁴ New Mexico water law does not clearly define beneficial use, but regulations issued by the New Mexico Office of the State Engineer (NMOSE) define beneficial use as “including, but not limited to, agricultural, municipal, commercial, industrial, domestic, livestock, fish and wildlife, and

¹²⁹Idaho State Water Plan, *supra* note 112, at 28. *But see* “2014 Water District 1 Rental Pool Procedures” (Mar. 3, 2014) (removing some of the challenges of renting to the IWRB).

¹³⁰Idaho State Water Plan, *supra* note 112, at 28.

¹³¹*Id.* at 72.

¹³²*Id.* at 73.

¹³³*Id.*

¹³⁴N.M. Const. art. XVI, § 2.

recreational uses.”¹³⁵ Beyond this definition, the New Mexico water code does not explicitly provide for instream flow rights. A NMOSE report on water use by categories defines instream use as “use that occurs within a stream channel. . . . [that] is not dependent on withdrawal or diversion from groundwater or surface water sources . . . [and] is usually classified as a flow use.”¹³⁶ In 1998, then-Attorney General Tom Udall concluded that existing consumptive use water rights could be transferred to instream flow based on common law principles.¹³⁷

[3] Statewide Planning Approach

The last category of states, including Montana and Colorado, is grouped together because they represent an approach to instream flow that emphasizes statewide efforts. These states are similar to the first category with the notable difference that they have undertaken, often for very different reasons, broad statewide efforts to establish and address instream flow.

[a] Montana

In 1969, quite early in terms of instream flow recognition in the western United States, the Montana legislature adopted a statute¹³⁸ that allowed the Montana Fish and Game Commission¹³⁹ to file for water rights to maintain minimum stream flows necessary for the preservation of fish and wildlife habitat.¹⁴⁰ These rights are often referred to as Murphy water rights and marked the beginning of instream flow protection in Montana.¹⁴¹ In 1973, the Montana legislature passed the Water Use Act.¹⁴² A number of other ways to assert instream flow rights evolved thereafter including (1) state-based water reservations allowing public entities to seek water for future

¹³⁵N.M. Code R. § 19.26.2.7(D).

¹³⁶John W. Longworth et al., NMOSE, Technical Report 54, “New Mexico Water Use by Categories 2010,” at 46 (Oct. 2013).

¹³⁷N.M. Att’y Gen. Op. No. 98-01 (Mar. 27, 1998).

¹³⁸Mont. Code Ann. § 89-901 (repealed 1972).

¹³⁹The name of the Fish and Game Commission was changed to Montana Fish, Wildlife & Parks (FWP) in 1991.

¹⁴⁰Matthew McKinney, “Instream Flow Policy in Montana: A History and Blueprint for the Future,” in *Instream Flow Protection in the West* 15-1 (Lawrence J. MacDonnell, Teresa A. Rice & Steven J. Shupe eds., rev. ed. 1993).

¹⁴¹Mont. Dep’t of Natural Res. & Conservation (MDNRC), “Montana State Water Plan,” at 44 (2015) (Montana Plan); see also FWP, “Murphy Water Rights,” <http://fwp.mt.gov/fishAndWildlife/habitat/fish/waterManagement/murphyWaterRights.html> (listing Murphy right streams).

¹⁴²Mont. Code Ann. §§ 85-2-101 to -907.

use or to protect in stream flows or water levels,¹⁴³ (2) leasing/exchanging water rights (a private contract between willing parties) for the purpose of protecting instream flows,¹⁴⁴ (3) using stored water to supplement instream flows, (4) regulating permits based on overuse in the basin/subbasin,¹⁴⁵ and (5) judicial determinations by the Water Court or district court.¹⁴⁶

Water reservations are the most common water rights for instream flow in Montana and are statutorily authorized.¹⁴⁷ These reservations work to allow public entities an avenue to seek water for future use or to protect instream flows and water levels.¹⁴⁸ Any unappropriated water can be reserved to maintain a minimum flow; however, no more than 50% of average annual flow can be reserved.¹⁴⁹ This section has been used, and reservations granted, for more than 700 river and stream reaches.¹⁵⁰

Through separate state-initiated water-planning processes in the Yellowstone River and Upper and Lower Missouri basins, public entities received water rights for future diversionary development and for instream-flow protection.¹⁵¹ Under the statute, Montana Fish, Wildlife & Parks (FWP), the Montana Department of Environmental Quality (MDEQ), and the U.S. Bureau of Land Management have received reservations for stream flow and water-level protection.¹⁵² The FWP and MDEQ water reservations primarily reside in the Yellowstone and Missouri river basins.¹⁵³ Diversionary reservations were also granted to cities, towns, conservation districts, and the U.S. Bureau of Reclamation.¹⁵⁴ MDEQ reservations on the Yellowstone “are for the 80th percentile of monthly flows [minus the]

¹⁴³*Id.* § 85-2-316.

¹⁴⁴However, any agreement that transfers water or changes its use, place of use, or purpose of use is subject to administrative and public review in a MDNRC proceeding.

¹⁴⁵Mont. Code Ann. § 85-2-319.

¹⁴⁶Montana Plan, *supra* note 141, at 18.

¹⁴⁷*See* Mont. Code Ann. § 85-2-316.

¹⁴⁸Montana Plan, *supra* note 141, at 40–41; *see also* FWP, “Instream Flows” (Instream Flows), <http://fwp.mt.gov/fishAndWildlife/habitat/fish/waterManagement/instreamFlows.html>.

¹⁴⁹*See* Mont. Code Ann. § 85-2-316(1)–(6); *see also* Montana Plan, *supra* note 141, at 41.

¹⁵⁰*See* Instream Flows, *supra* note 148.

¹⁵¹*See id.*; Montana Plan, *supra* note 141, at 41; Mont. Code Ann. § 85-2-316(2)(a).

¹⁵²*See* Montana Plan, *supra* note 141, at 40–41; Mont. Code Ann. § 85-2-316.

¹⁵³Montana Plan, *supra* note 141, at 40–41.

¹⁵⁴*Id.* at 41.

depletions from other reservations, [which are] evaluated at Livingston, Billings, Miles City, and Sidney.”¹⁵⁵ MDEQ instream flow reservations run concurrently with FWP reservations.¹⁵⁶

Other sources of instream flow protection are temporary water use changes and leases. “In 1989, FWP received limited authority to temporarily lease or convert a water right to instream flow.”¹⁵⁷ These leases are voluntary agreements between parties and last for a term of up to 10 years at a time, but can be renewed an indefinite number of times.¹⁵⁸ In special cases, a 30-year lease is allowed if the lease stems from the development of a water conservation or storage project.¹⁵⁹ However, only FWP and the USFS are specifically authorized to permanently change the use of an owned right to instream flow purposes.¹⁶⁰ Therefore any proposed lease or conversion is subject to administrative and public review in a Montana Department of Natural Resources and Conservation (MDNRC) proceeding.¹⁶¹ Organizations such as Trout Unlimited and the Montana Water Trust have engaged in some of these leasing programs.¹⁶²

The temporary conversion of existing water rights to instream flow rights is governed by Mont. Code Ann. § 85-2-436. According to a FWP water leasing progress report, three proposed leases did not come to fruition, but two of them were still ongoing at the time of the report (Nevada Spring Creek and Mill Creek/Willow Creek).¹⁶³ Typically, FWP’s water-leasing activities largely focus on tributaries to larger rivers that provide important spawning habitat and most “current leases target the restoration of flow in these dewatered reaches so that redds are not dewatered, fry can emerge and migrate to the main-stem river, and connectivity between the

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

¹⁵⁷ *Id.* at 40.

¹⁵⁸ *Id.* at 40, 59; *see also* McKinney, *supra* note 140.

¹⁵⁹ Montana Plan, *supra* note 141, at 40.

¹⁶⁰ *Id.* at 59; *see also* Mont. Code Ann. § 85-2-320.

¹⁶¹ Mont. Code Ann. §§ 85-2-320, -436; Montana Plan, *supra* note 141, at 59–60.

¹⁶² *See* Trout Unlimited, “Private Water Leasing: A Montana Approach” (2005); *see also* Clark Fork Coal., “Drought & Streamflows,” <http://clarkfork.org/why-were-here/watershed-history-challenges-need/drought-streamflows/>.

¹⁶³ FWP, “Biennial Progress Report—FWP Water Leasing Study—2012 & 2013,” at 2 (Dec. 2013) (Progress Report) (this is the most current Water Leasing report; the next is due in December 2015).

main stem and tributary can be maintained.”¹⁶⁴ The focus of these leases is improving irrigation efficiency and keeping irrigation levels unchanged, while at the same time reducing diversions to encourage stream flow restoration.¹⁶⁵

Montana also allows the transportation of stored water to augment stream flows, which is most notably found in state-federal storage projects.¹⁶⁶ For example, FWP holds two long-standing contracts for stored water.¹⁶⁷ Both are in the Bitterroot River basin and come from Painted Rocks Reservoir, a MDNRC water project, and Lake Como, a storage reservoir operated by the Bitter Root Irrigation District.¹⁶⁸

The MDNRC also has the option to close a basin if it determines that no new permits are appropriate in highly appropriated basins or subbasins.¹⁶⁹ This prevents potential appropriators from applying for new water rights. If conditions warrant, the MDNRC can modify or condition permits previously issued.¹⁷⁰ The designation of a basin as “closed” to certain new appropriations of water, however, does not create any new water rights or specifically protect an instream flow level. The designation simply places a cap on additional depletions of water from the system, thus protecting existing water rights and therefore indirectly maintaining existing stream flow conditions. For instance, the Upper Clark Fork Basin closure was specifically crafted to protect status quo conditions and, thereby, to protect fisheries and existing water-right holders.¹⁷¹

Many of the mechanisms discussed above are common in other states. What makes Montana different is the existence of a statewide adjudication process for all pre-1973 claims to water, including non-consumptive use claims.¹⁷² The 1973 Water Use Act¹⁷³ created the ability to recognize and confirm existing, pre-1973 water rights through adjudication in water

¹⁶⁴*Id.* at 3.

¹⁶⁵*Id.*

¹⁶⁶Montana Plan, *supra* note 141, at 5, 40. Ashley Lake, Lake Como, and Painted Rocks Reservoir projects are some examples.

¹⁶⁷Instream Flows, *supra* note 148.

¹⁶⁸*Id.*

¹⁶⁹Mont. Code Ann. § 85-2-319.

¹⁷⁰Instream Flows, *supra* note 148.

¹⁷¹Montana Plan, *supra* note 141, at 57 tbl.7.

¹⁷²Mont. Code Ann. § 85-2-228.

¹⁷³*Id.* §§ 85-2-101 to -907.

courts.¹⁷⁴ The Montana Water Court's target date for issuance of final decrees for all basins in the state is 2028.¹⁷⁵ Public recreation claims can be brought by FWP on behalf of "the public for the purpose of establishing any prior and existing public recreational use in existing right determinations."¹⁷⁶ In 1979, the legislature directed FWP to file "Statements of Existing Water Right Claims" for public recreational uses,¹⁷⁷ and it has filed public recreation claims in the Beaverhead, Bitterroot, and Blackfoot/Clearwater drainages.¹⁷⁸ Through the general stream adjudication proceedings, these claims are to be reviewed and decided by the Montana Water Court.¹⁷⁹

The Montana Supreme Court, in a series of cases commonly referred to as the *Bean Lake* decisions, further explored the requirements for these claims.¹⁸⁰ In 2002, the court recognized that there could be other pre-1973, judicially recognizable, non-diversionary instream water rights, overturning a prior decision.¹⁸¹ Most recently, the court reversed the Water Court's ruling that only FWP could represent public recreation and conservation claims and held that a conservation organization (Trout Unlimited) had sufficient ownership interest in water to demonstrate "good cause" to be heard in front of the Water Court.¹⁸²

In addition to adjudicating the state law claims, the comprehensive adjudication process in Montana includes the resolution of all federal

¹⁷⁴*Id.* § 85-2-228; Montana Plan, *supra* note 141, at 3, 18.

¹⁷⁵Montana Plan, *supra* note 141, at 19.

¹⁷⁶Mont. Code Ann. § 85-2-223.

¹⁷⁷Progress Report, *supra* note 163, at 4; *see* Mont. Code Ann. § 85-2-223.

¹⁷⁸Montana Plan, *supra* note 141, at 40.

¹⁷⁹*Id.* at 18.

¹⁸⁰*See In re Adjudication of Dearborn Drainage Area (Bean Lake I)*, 766 P.2d 228 (Mont. 1988) (holding that the stockgrowers association had standing and FWP lacked a valid appropriation water right claim to the lake), *overruled by In re Adjudication of the Existing Rights to the Use of All the Water (Bean Lake II)*, 2002 MT 216, 55 P.3d 396.

¹⁸¹*See Bean Lake II*, 2002 MT 216, ¶ 38 (finding that fish, wildlife, and recreation are beneficial uses for purposes of water appropriation claims, and that water appropriation claims for non-diversionary uses for fish, wildlife and recreation, including instream and inlake uses, were valid and existed in state prior to 1973).

¹⁸²*See* Mont. Trout Unlimited v. Beaverhead Water Co., 2011 MT 151, ¶ 34, 255 P.3d 179 (finding that organizations, and not just FWP, could represent public recreational and conservation interests in water adjudications, and in this case the organization had "sufficient ownership interest in water . . . to demonstrate 'good cause' to require the Water Court to hold a hearing on its objections").

and tribal reserved water rights.¹⁸³ The State has committed to addressing these federal rights through a statewide effort to negotiate compacts with federal interests. These compacts must be ratified by the Montana legislature and approved by federal authorities and the tribes (in the case of tribal compacts) prior to review by the Water Court.¹⁸⁴ For example, in April 2015, a tribal compact with the Confederated Salish and Kootenai Tribes was approved by the Montana legislature and signed by the Governor.¹⁸⁵ Congressional approval is required to implement provisions of the settlement where federal authorization or appropriations are needed.¹⁸⁶ To date, the Montana legislature has negotiated and approved 18 compacts.¹⁸⁷ The decision by the State of Montana to address federal rights through this compact process represents another way in which Montana approached instream flow in a broader, less piecemeal fashion than other western states.

[b] Colorado

In 2014 Colorado marked the 40th anniversary of its instream flow program, one of the oldest programs in the nation. Like many other states, only a state agency, the Colorado Water Conservation Board (CWCB), can hold instream flow rights. The CWCB can hold these rights to

- (1) protect healthy native and sport fish populations, aquatic insects, and rare and distinctive riparian vegetation communities;
- (2) achieve federal agencies' resource protection goals through a state-held water right;
- (3) [be] a key element of a stakeholder group plan developed as an alternative to suitability for Wild and Scenic designation of three reaches of the Colorado River; and
- (4) provide numerous other benefits to the citizens of Colorado.¹⁸⁸

However, since 2001 Colorado has recognized the ability of third parties (generally city or county governments) to hold recreational in-channel diversions, primarily for boating and whitewater rafting.¹⁸⁹ Colorado's instream flow program benefits from its relative maturity compared to other western states' programs. Since the legislation for the program was enacted in 1973,¹⁹⁰ the CWCB has secured over 1,500 new appropriations

¹⁸³Montana Plan, *supra* note 141, at 19.

¹⁸⁴*Id.*

¹⁸⁵S. 262, 64th Leg., Reg. Sess. (Mont. 2015).

¹⁸⁶Montana Plan, *supra* note 141, at 19.

¹⁸⁷See MDNRC, "History," <http://dnrc.mt.gov/divisions/reserved-water-rights-compact-commission/history>.

¹⁸⁸CWCB, "Colorado's Water Plan," at 215 (2d draft July 2, 2015).

¹⁸⁹See Joshua Mack, "The Evolution of Colorado's Recreational In-Channel Diversions," 10 *U. Denv. Water L. Rev.* 73 (2006).

¹⁹⁰S. 097, 49th Gen. Assemb., 1st Reg. Sess. (Colo. 1973).

and completed over 25 transfers of senior water rights, creating instream flow protection for over nearly 9,200 miles of streams and rivers and protecting nearly 500 natural lake levels.¹⁹¹ Colorado's experience created a number of tools to protect instream flows, including short and long-term leases, which have been incentivized through legislation.¹⁹²

At around the same time impediments to leasing water for instream flows were being removed, the Colorado Water Trust (CWT) was created to fill a void left by CWCB's lack of funding to acquire existing senior rights.¹⁹³ CWT's success at brokering water instream flow transactions and the popularity of recreational instream diversion applications¹⁹⁴ highlights the value non-governmental organizations may provide. However, CWCB's notice and comment process and flexibility might be a superior alternative to other organizations entering Colorado's highly litigious appropriations process to secure instream rights, or the federal government's participation in the state's appropriations.¹⁹⁵

Like Montana, Colorado has a more comprehensive statewide approach to instream water rights. Unlike Montana, however, Colorado has not initiated a compact negotiation process with the federal government or the tribes. Rather, the comprehensive nature of Colorado's program stems from its more than four decades of history with instream flow and, perhaps more significantly, the existence of a rolling adjudication process for all water rights in the state.¹⁹⁶

¹⁹¹See Emily Dowd, "Celebrating 40 Years of Success and Challenges for Colorado's Instream Flow Program" (Apr. 15, 2014).

¹⁹²Examples include the allowance of leases for instream flows, removing the threat of abandonment through long-term leases, and eventually creating funding for CWCB to lease or purchase water rights for instream flows. See Joshua Zaffos, "CWCB's Instream Flow Program Matures," <https://www.yourwatercolorado.org/headwaters-archive-template/100-headwaters-magazine/headwaters-fall-2009-the-cwcb/343-cwcb-instream-flow-program-matures>.

¹⁹³*Id.* (CWCB would receive funding to the tune of \$1.5 million a year starting in 2008 to acquire existing water rights or leases, at least \$500,000 of which was to go towards declining or endangered fish habitat).

¹⁹⁴CWCB, "Pending and Decreed RICDs," <http://cwcb.state.co.us/environment/recreational-in-channel-diversions/Pages/PendingandDecreedRICDs.aspx>; see also Reed Benson, "'Adequate Progress,' or Rivers Left Behind? Developments in Colorado and Wyoming Instream Flow Laws Since 2000," 36 *Envtl. L.* 1283 (2006).

¹⁹⁵Conference Report, Gina Tincher, "University of Denver Water Law Review Seventh Annual Symposium: Prepare. Protect. Prioritize. Exploring Colorado's New Water Plan," 17 *U. Denv. Water. L. Rev.* 381, 400 (2014).

¹⁹⁶See Greg Hobbs, *The Public's Water Resource: Articles on Water Law, History, and Culture* (2d ed. 2010).

§ 22.04 Evaluating the Effectiveness of Instream Flow Programs

As the examples above indicate, the western states vary considerably in their approaches to instream flow. However, some consistent themes emerge. For the lower 48 states, the situation is extremely challenging if instream rights are only available through new appropriations because many of the most critical reaches were overappropriated by the time the instream flow laws were adopted. Moreover, even where more senior consumptive rights can be converted to instream flow, if state law provides that instream flow rights can be subordinated to more junior rights, then the likelihood of realizing the benefit of the instream flow right, especially in a dry year, is small. Alaska represents an exception to this dynamic, but as the Chuitna River demonstrates, direct appropriations are controversial even where there is unappropriated water in the system.

In almost every state the funds available to pursue instream flow are limited and some water users still view the programs with skepticism and fear. In terms of establishing rights, many state agencies are still reluctant to assert new instream flow rights or lack the resources to do so. In states where individuals can assert rights, like Alaska, or facilitate water transactions, like Oregon's Freshwater Trust, there is more movement on transferring existing rights and establishing new instream flow rights.

Once rights are established, there are important questions about who can hold those rights. There are two primary models: states where only the state government can hold the instream flow right, and states like Alaska where individuals or non-governmental organizations can hold instream flow rights. And regardless of who holds the right, there are key questions regarding its enforcement and who makes the decision in a given year whether to assert or forego assertion of an instream water right, or whether that right is subordinate to future consumptive uses. The decision regarding enforcement and any statutory parameters that define conditions for subordination often undermine what is seen as progress in terms of recognizing and establishing instream rights. In all of the above circumstances, there are administrative and political realities that shape the effectiveness of instream flow programs. As a result, working in this area remains very challenging but also quite rewarding.

