

***PUBLIC FUNDING PROGRAMS FOR ENVIRONMENTAL WATER ACQUISITIONS:
ORIGINS, PURPOSES, AND REVENUE SOURCES***

Reed D. Benson*

Existing water uses in the western United States often leave too little water for healthy ecosystems in rivers, lakes, and wetlands. One policy tool for addressing this problem is buying and leasing water rights for conversion to environmental use. This article reviews public funding programs for such acquisitions, examining why and how government entities have provided money for obtaining environmental water supplies. The article does not address implementation of these programs, focusing instead on their origins, purposes, legal and institutional structures, and revenue sources. It briefly explains the rationale for both environmental water acquisitions and public funding for them, then states a couple of important caveats about the role of these measures in securing water for the environment. The main body of the article describes several different public funding programs, focusing primarily on ones that do not rely on annual legislative appropriations to finance acquisitions. The conclusion offers brief analysis and comments regarding the origins, purposes, and revenues of publically funded environmental water acquisition programs.

I. Introduction

Buying and leasing water for environmental purposes has grown in popularity over the past twenty-some years, from a handful of transactions in the 1980s¹ to a fairly well-established and widespread practice today. This article addresses environmental water acquisition programs, not only because they are increasingly important, but because the topic seems highly appropriate for a symposium honoring Jim Huffman and Jan Neuman. Professor Huffman, of course, has long advocated for non-regulatory approaches to environmental problems, and has written that

* Professor of Law, University of New Mexico School of Law. The author thanks the people who assisted him in researching and developing this article, including the UNM law library faculty (particularly Ernesto Longa), Steve Malloch, Bonnie Colby, and especially Andrew Purkey. He also thanks the UNM School of Law and Dean Kevin Washburn for supporting work on this article during the summer of 2011. Finally, he thanks Professor Michael Blumm for inviting him to be part of this outstanding symposium honoring Professors Neuman and Huffman on their retirement.

¹ See Bonnie G. Colby, *Enhancing Instream Flow Benefits in an Era of Water Marketing*, 26 WATER RESOURCES RES. 1113, 1117 (1990) (identifying a handful of water acquisitions done in the late 1980s, then asking why there had been so few market transactions for water to benefit instream flows).

water marketing “promises less heat and more light in providing concrete solutions to water allocation problems, including the desire to protect the environment.”² Professor Neuman helped develop the practice of environmental water acquisitions through her long service with the Oregon Water Trust, and her articles on the lessons gained from that organization’s early years³ have surely influenced and assisted new programs across the West.

This article deals with the dollars supplied for environmental water acquisitions—more specifically, on public funding programs for this purpose. It identifies a number of programs where some form of public money has been devoted to buying or leasing water for the environment, thus lending a measure of government support for restoring streamflows, wetlands, or other important waters. Some programs involve water acquisitions directly by a government agency, and some provide money to other kinds of entities involved in water transactions.

The focus is on the origins, purposes, and revenue sources of these public funding programs. What are the circumstances that prompted creation of the program, and how was it accomplished? What was the program set up to achieve in terms of environmental benefits, and how was the program structured to serve those ends? Finally, and perhaps most importantly, what was the source of money provided to (or through) the program? By answering these questions for a range of public funding programs, this article presents a picture of the reasons why government entities have chosen or agreed to devote public dollars to environmental water acquisitions, and of the various types of revenue streams they have employed for this purpose.

I offer a couple of additional points to clarify what this article does *not* do. First, while it identifies more than a dozen public funding programs, it goes into depth on none of them. I

² James L. Huffman, *Water Marketing in Western Prior Appropriation States: A Model for the East*, 21 GA. ST. L. REV. 429, 447 (2004).

³ Janet C. Neuman & Cheyenne Chapman, *Wading into the Water Market: The First Five Years of the Oregon Water Trust*, 14 J. ENVTL. L. & LITIG. 135 (1999); 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).

chose to leave out the details partly so that I could survey a wide range of programs in a medium-sized article, and partly because I had no intention of holding up any one of them as a model. Second, this article *does not deal with program implementation*; that is, it does not address how much money a program has actually spent on acquisitions, how much water it has obtained, or whether it has delivered the kinds of environmental benefits for which it was created. It would certainly be interesting and useful to have the kind of in-depth review of program implementation that Jan Neuman has provided for the Oregon Water Trust ... but that article, or book, will have to wait for another day.⁴

The chief purpose of this article is to collect and summarize information on existing programs in a way that is potentially useful to water stakeholders and decision-makers who may be contemplating a new program. Because the first question regarding such a proposal is likely to be where the money would come from, the article organizes the programs by funding source, separating those using legislatively appropriated funds from those relying on another kind of revenue. The latter programs get somewhat longer descriptions, mostly because their origins and revenue sources require a bit more explanation. Programs using federal appropriations get only two paragraphs each, partly because they are numerous and relatively homogeneous, but also because Congress seems increasingly unlikely to spend money on such luxuries as water.⁵

⁴ A variety of documents have indeed reviewed the implementation of certain environmental water acquisition programs. For example, a somewhat dated but very good study, and perhaps the most comprehensive, is STEVEN MALLOCH, TROUT UNLIMITED, INC., *LIQUID ASSETS: PROTECTING AND RESTORING THE WEST'S RIVERS AND WETLANDS THROUGH ENVIRONMENTAL WATER TRANSACTIONS* (2005), <http://www.tu.org/sites/www.tu.org/files/documents/Malloch.LiquidAssets.2005.pdf>. A more recent journal article addresses implementation of some programs in the Columbia River Basin, and offers an interesting comparison with the water acquisition efforts in Australia's Murray-Darling Basin. D. Garrick et al., *Water markets and freshwater ecosystem services: Policy reform and implementation in the Columbia and Murray-Darling Basins*, 69 *ECOLOGICAL ECON.* 366 (2009). A 2005 GAO report, *infra* note 68, examined early implementation of the Bureau of Reclamation's water bank in the Klamath Basin.

⁵ The August 2011 deal to cut federal spending seems likely to reduce the money available for such purposes. "Conservationists and those familiar with the Interior Department and EPA budgets say they believe some of the first programs to suffer from spending cuts will be land acquisition, capital improvements and grants for state water and conservation projects." Jean Chemnick and Phil Taylor, *Appropriations: Debt pact could mean lean times for*

Part II of this article briefly explains the rationale for both environmental water acquisitions and public funding for them, and concludes with a couple of important caveats about the role of acquisitions in securing water for the environment. Part III addresses public funding programs using appropriated money, touching briefly on several federal programs, then describing one established in Colorado. Part IV identifies six programs across the West, each of which relies on a different, non-appropriated revenue stream. Part V offers some brief analysis and conclusions regarding the origins, purposes, and revenues of environmental water acquisition programs.

II. Summarizing the rationale for environmental water acquisitions and public funding

Purchasing water for environmental benefits is not cheap: most of the public funding programs discussed in this article involve the spending of several million dollars. The rationale for these kinds of expenditures is not intuitively obvious, especially given that western water laws consistently state that water belongs to the public. One reasonably might ask why, particularly in a time of tight federal and state budgets, the public should have to fork over large sums of money to acquire something it already owns. This section attempts to answer that question briefly, starting with the logic for environmental water acquisitions, then providing the rationale for public funding of such acquisitions.

A. Why environmental water acquisitions?

Although western state constitutions and statutes declare that water is a public resource,⁶ they also provide that water may be appropriated for beneficial use.⁷ An appropriator obtains a

EPA, Interior, E&E DAILY, Aug. 2, 2011, http://www.eenews.net/EEDaily/budget_2012/2011/08/02/2 . Even before that deal, however, it was getting more difficult to gain Congressional approval of measures, however worthy, involving new spending. See Ryan A. Smith, *Indian Water Settlements: Outlook for the 112th Congress and Beyond*, THE WATER REPORT, Aug. 15, 2011, at 10, 12-13 (describing Congressional policies intended to limit new spending and the challenges such policies present for tribal water settlement legislation).

⁶ See, e.g., N.M. CONST. art. XVI, § 2; UTAH CODE ANN. § 73-1-1.

⁷ See, e.g., COLO. CONST. art. XVI, § 5; OR. REV. STAT. § 537.120.

water right which provides only a limited right to use this public resource, but is nonetheless a form of property.⁸ Although state law based on the prior appropriation doctrine thus provides for both public ownership and private rights in water, in practice the latter have been far more important,⁹ as indicated by the many western rivers dried up by the cumulative demands of existing water uses.¹⁰

In addition to their status as property, two aspects of western water rights are noteworthy from the standpoint of water acquisitions. First, under the famous “first in time is first in right” principle of prior appropriation, the oldest water rights are most reliable in a period of shortage;¹¹ at times when total demands on a stream exceed the available supply, “senior” rights get their water while those more junior—such as relatively recent rights protecting instream flows—get little or nothing. Second, existing water rights may be changed or “transferred” to a new place or purpose of use, subject to certain restrictions and conditions.¹² These two characteristics, taken together, promote acquisition and transfer of senior rights in places where water is scarce relative to existing and new demands, because such rights offer legal assurance of a secure water supply. State water codes have long provided that water rights may be changed to new uses, and several of them now specifically allow water transfers for environmental purposes.¹³

⁸ For an interesting examination of water rights as property rights, see Gregory J. Hobbs, Jr., *Priority: The Most Misunderstood Stick in the Bundle*, 32 ENVTL. L. 37 (2002). Hobbs suggested that acquisition and conversion of existing water rights was the “preferred and surest way” to assure adequate water for the environment. *Id.* at 50-51.

⁹ See Reed D. Benson, *Public on Paper: The Failure of Law to Protect Public Water Uses in the Western United States*, 1 INT’L J. RURAL LAW & POL’Y __ (forthcoming 2011).

¹⁰ DAVID M. GILLILAN AND THOMAS C. BROWN, INSTREAM FLOW PROTECTION: SEEKING A BALANCE IN WESTERN WATER USE 40 (1997) (identifying several significant western rivers as being “dry or virtually dry during substantial portions of the year”).

¹¹ See Hobbs, *supra* note 8, at 42-45.

¹² See *Farmers Highline Reservoir & Canal Co. v. City of Golden*, 272 P.2d 629 (Colo. 1954); N.M. STAT. § 72-5-23.

¹³ See, e.g., Lawrence J. MacDonnell, *Environmental Flows in the Rocky Mountain West: A Progress Report*, 9 WYO. L. REV. 335, 340 (noting that statutes in three of the eight Intermountain West states now specifically allow existing water rights to be changed to environmental flow use); see also, e.g., CAL. WATER CODE § 1707; OR. REV. STAT. § 537.348.

Environmental water acquisitions might be far less necessary, however, if appropriative water rights had any of three features they do *not* have. First, water rights lack an expiration date; a right lasts forever so long as it is exercised at least every few years.¹⁴ Second, water rights do not provide for interruption of use in the event of critically low flows, high temperatures, or high pollution loads—conditions that could cause serious ecological harm and that might be exacerbated by water withdrawals. Third, water rights typically have no mechanism for periodic review or amendment of their terms, including the authorized quantity of water. The day may come when western state water laws include some or all of these provisions¹⁵ ... but unless and until that day arrives, established water uses are more or less immune from serious legal scrutiny, at least under state law.

The federal Endangered Species Act¹⁶ (ESA), of course, has prompted changes in water use in some areas where established practices have impaired the habitat of threatened or endangered species. Because the general prohibition on “take” of listed animals has gone nearly unenforced against water users,¹⁷ however, the ESA has largely affected those who obtain water from a federal project. Under § 7, federal agencies must undergo “consultation” on the effects of their proposed actions on listed species, concluding with a “biological opinion” from the Fish and Wildlife Service (or National Marine Fisheries Service) on these effects, all to ensure that no

¹⁴ AMERICAN SOCIETY OF CIVIL ENGINEERS, APPROPRIATIVE RIGHTS MODEL WATER CODE 15 (Joseph W. Dellapenna ed. 2007) (commentary explaining the perpetual nature of water rights under prior appropriation).

¹⁵ The Appropriative Rights Model Water Code addresses these shortcomings in existing water law based on prior appropriation. For example, § 7A-3-01(1) states, “The State Agency may restrict any term or condition of any permit issued under this Code for the duration of a water emergency declared by the State Agency.” *Id.* at 326. And § 1A-1-07 provides, “The State Agency shall review all water rights periodically to confirm their compliance with the requirements of this Code.” *Id.* at 15. In addition, §4A-1-04 calls for creation of a “State Environmental Fund for the exclusive purpose of upgrading the environmental, ecological, or aesthetic values of the waters of the State, including, when the State Agency deems it appropriate, to reacquire water rights under section 3A-2-02.” *Id.* at 133.

¹⁶ 16 U.S.C. §§ 1531-1544.

¹⁷ See See Reed D. Benson, *Dams, Duties and Discretion: Bureau of Reclamation Water Operations and the Endangered Species Act*, 33 COLUMBIA J. ENVTL. L. 1, 52 (2008) (no reported decision finding “take” resulting from water use).

federal action jeopardizes the survival and recovery of a listed species.¹⁸ Where these ESA requirements have caused a reduction in deliveries from federal water projects, however, users have sued for compensation, with some degree of success.¹⁹

Whatever their legal rights, existing users are often seen as having strong claims to water based on the perceived fairness of allowing them to continue taking the water they rely upon. The power of these equity arguments is shown by Justice Brennan's concurrence in *Nevada v. United States*,²⁰ where he clearly sympathized with an Indian tribe yet agreed that irrigators' rights should be protected: "In the final analysis, our decision today is that thousands of small farmers in northwestern Nevada can rely on specific promises made to their forebears two and three generations ago, and solemnized in a judicial decree, despite strong claims on the part of the Pyramid Lake Paiutes."²¹ Elected officials, of course, may be even more wary of any involuntary reallocation that would deprive established users of water they see as theirs.²²

The current political climate suggests that the states will not soon adopt new legislative or regulatory approaches to improving flows at the (real or perceived) expense of existing water users. The politics seems less favorable for such actions today than it did in the 1990s, when the western states made little progress in modernizing or "greening" their water laws despite recognizing that reforms were needed.²³ As for Congress, its efforts to promote such goals as

¹⁸ 16 U.S.C. § 1536 (a)(2); 50 C.F.R. Part 402.

¹⁹ See *Casitas Mun. Water Dist. v. United States*, 543 F.3d 1276 (Fed. Cir. 2008); *Stockton East Water Dist. v. United States*, 583 F.3d 1344 (Fed. Cir. 2009). Many of these cases are still being litigated. See *Klamath Irrigation Dist. v. United States*, 635 F.3d 505 (Fed. Cir. 2011).

²⁰ 463 U.S. 110, 145 (Brennan, J., concurring).

²¹ He continued, "The availability of water determines the character of life and culture in this region. Here, as elsewhere in the West, it is insufficient to satisfy all claims." *Id.*

²² Consider the allegations of White House interference in Klamath Basin water management decisions in the wake of the 2001 water crisis; Karl Rove and Dick Cheney were reported to have improperly taken the irrigators' side in the ongoing controversy. See HOLLY DOREMUS AND A. DAN TARLOCK, *WATER WAR IN THE KLAMATH BASIN* 159-61 (2008) (describing these reports, suggesting they may have been exaggerated, and acknowledging the importance of political influence in resource management decisions).

²³ The late David Getches reviewed western water law revisions during the 1990s and concluded that the states had made little real headway in reforming their laws to promote public goals such as water conservation and instream

water conservation have focused on subsidies rather than mandates.²⁴ Thus, except where required under ESA § 7, environmental flow improvements may be legally and politically difficult to achieve in the short term ... except, perhaps, for acquisitions of water from willing sellers.

B. Why public funding?

The general case for environmental water acquisitions comes down to law and politics, but the rationale for public funding of such acquisitions is mostly about economics. This section identifies some of the economic factors that call for public sector involvement in providing money for this purpose.

The case for public funding starts with perhaps the most basic economic concept: supply and demand. In most of the West, natural water supplies are scarce relative to total demands, especially when environmental needs are considered. Thus, senior water rights that provide a reliable supply of that scarce resource ought to be valuable, especially in places where demands are increasing due to growing cities or other entities seeking new sources of water. And valuable they are, sometimes costing several thousand dollars per acre-foot for permanent acquisitions.²⁵ Some owners may be willing to donate water with that kind of value, especially on a temporary basis, but surely most of those who are willing to part with it would prefer to be paid.²⁶

flow protection. David H. Getches, *The Metamorphosis of Western Water Policy: Have Federal Laws and Local Decisions Eclipsed the States' Role?*, 20 STAN. ENVTL. L.J. 3 (2001).

²⁴ See generally Reed D. Benson, *New Adventures of the Old Bureau: Modern-Day Reclamation Statutes and Congress' Unfinished Environmental Business*, 48 HARV. J. ON LEGIS. 137, 152-53, 163-65 (discussing Congress' recent funding of water conservation projects, and authorization of water conservation grants under the 2009 SECURE Water Act).

²⁵ See *Annual Transaction Review*, WATER STRATEGIST, Feb. 2010, at 8, 17 (describing prices for permanent water acquisitions of roughly \$18,000 per acre-foot in the Truckee River Basin of Nevada, \$10,000 or more per acre-foot on the northern Colorado Front Range, and \$6,000 per acre-foot in the Edwards Aquifer region of Texas).

²⁶ 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, 445-47 (2004) (describing reasons why irrigators may consider leasing or selling water rights for instream flows).

Conversely, sizable senior water rights in high-demand areas will almost certainly be far too expensive for non-governmental, non-commercial entities to buy.²⁷

Healthy rivers provide a range of benefits—such as recreation, fish and wildlife habitat, and scenic beauty—which accrue to many people. But because free-flowing water is, in economic terms, a “public good,”²⁸ it is hard to convert those benefits into the kind of money that could acquire enough water to ensure adequate river levels. Professor Bonnie Colby nicely summarizes the problem:

[I]nstream flows have public good characteristics which make it difficult to translate collective values for instream flows into dollars to bid for water rights in the market place. Those who benefit from free-flowing waters are a large, but largely unorganized, constituency. The term “public good” refers to resources characterized by nonexcludability, meaning it is difficult or impossible to exclude those who do not pay from enjoying the benefits of the resource. Many individuals who do place a positive value on a public good may be “free riders,” enjoying the resource but making no payments, since payments are not required. Funds raised to purchase water for instream flow maintenance will not represent total willingness to pay by all potential beneficiaries due to the free ridership phenomenon, the difficulty of collecting contributions from all who will benefit, and the lack of an incentive to voluntarily contribute, since those who do not contribute cannot easily be prevented from enjoying the resource.²⁹

Thus, the public nature of instream flow benefits basically precludes collection of all the money that could be brought to the water market by those who enjoy them. In the absence of a robust funding mechanism, not enough water will be acquired for adequate instream flows.³⁰ Solving this problem will require “coordinated, and often consensus-based or collaborative,

²⁷ The Oregon Water Trust (now part of the Freshwater Trust) has done a lot of deals, but part of the reason for its success is its focus on smallish tributaries, where converting even a modest-sized water right to instream use can make a big impact. *Id.* at 439, 441. And its permanent acquisitions have through 2004 involved an average cost of \$140 per acre-foot, far less than in some other parts of the West. *Id.* at 446.

²⁸ Edna Loehman and John Loomis, *In-Stream Flow as a Public Good: Possibilities for Economic Organization and Voluntary Local Provision*, 30 REV. AGRIC. ECON. 445(2008).

²⁹ Colby, *supra* note 1, at 1118.

³⁰ Loehman and Loomis, *supra* note 28, at 447.

efforts by public and private entities to assert and fund these environmental needs in the marketplace in order to achieve socially desired levels of water” for the environment.³¹

C. Some crucial caveats on the role of water acquisitions

Having just made a case for environmental water acquisitions using public funding, I now emphasize that I do not mean to oversell it. I do *not* suggest that water acquisitions are the only way, or necessarily the best way, to pursue restoration of environmental flows. I certainly do not intend to discredit legislative, regulatory, or judicial approaches to protect flows without compensation, or to indicate that such measures are either infeasible or inherently unfair to existing water users. To the contrary: I believe that publically funded water acquisitions should be only one of several viable policy options for ensuring environmental flows in the West. Practically speaking, however, I recognize the legal, political, and economic factors that may make willing-seller acquisitions the path of least resistance for near-term progress on flow restoration.

Near-term progress aside, however, long-term success in this endeavor will require funding levels in proportion to the cost of providing enough water to be ecologically meaningful. Money may not be much of a limiting factor in the early stages, during the period when the program is still gaining acceptance among water users and demonstrating that water transactions can work.³² After the pilot phase, however, far more money will likely be required if these programs are to move from localized successes toward a larger-scale solution to instream flow

³¹ Garrick, *supra* note 4, at 367.

³² I acknowledge that the Oregon Water Trust, for example, had more acquisitions money than it could spend in its early years, even as it was doing small deals and laying the groundwork for a successful statewide program. See Neuman, *supra* note 26, at 439-42. And it took fifteen years, not the originally agreed five, to spend all the money dedicated to water right acquisitions under the Truckee River Water Quality Settlement Agreement. See *infra* notes 231-41 and accompanying text.

problems. Where environmental water needs dwarf the available funding, water advocates and decision-makers will have to look elsewhere for answers.³³

In short, this article does not suggest that publically funded acquisitions are any kind of panacea for environmental water needs. By the same token, it does not hold up any one public funding program as a model that any new program should strive to emulate. But given the potential for new programs to be developed (or at least considered) in many water-stressed areas of the West, there may be valuable lessons to be gained from a review of the origins and arrangements of existing programs. The next two sections provide this review, beginning with programs that rely on appropriated funds.

III. Water acquisition programs using legislatively appropriated funds

A. Federal appropriations: a handful of programs

For at least two decades, federal dollars have been used to acquire water for environmental purposes. In some cases Congress explicitly authorized environmental water acquisitions, while other programs proceeded in the absence of a specific statutory authorization. Instead of focusing on one or two such programs, this section briefly identifies several of them—all of which depend(ed) on federal appropriations for their funding—to provide an overview of their varied origins, priorities, and legal arrangements.

Pyramid Lake and the Lahontan Valley wetlands. In enacting Public Law 101-618 in 1990,³⁴ Congress sought to resolve a variety of water disputes in the Carson and Truckee river basins of northern Nevada, primarily relating to operation of the Bureau of Reclamation's

³³ For example, the Central Valley Project Improvement Act of 1992, *infra* notes 116-33 and accompanying text, directed the Interior Department immediately to “dedicate and manage” 800,000 acre-feet of Central Valley Project water for fish and wildlife. Pub. L. 102-575, § 3406(b)(2), 106 Stat. 4600, 4714 (1992). Thus, Congress simply required reallocation of this water for environmental uses. Although the statute also provided for water acquisitions for certain purposes (as discussed below), it did not rely on acquisitions for this giant block of water that was immediately needed to provide habitat for depleted fish and wildlife populations.

³⁴ Pub. L. 101-618, 104 Stat. 3289 (1990).

Newlands Project.³⁵ Perhaps the most serious problem was the decline of Pyramid Lake as a result of Newlands Project diversions from the Truckee River, which feeds the lake, into the Carson River, which does not. Decades of such diversions had dramatically lowered the level of Pyramid Lake, resulting in ESA listings for two fish species (cui-ui and Lahontan cutthroat trout) native to Pyramid Lake, and seriously damaging the tribal fishery of the Pyramid Lake Paiutes, whose reservation has the lake at its heart.³⁶ Early efforts to increase flows into the lake had led to a second problem, however: reduced Newlands Project deliveries in the Carson River basin curtailed irrigation return flows that supplied water to thousands of acres of Lahontan Valley wetlands, threatening important migratory bird habitat.³⁷ In short, both the lake and the wetlands needed more water.

In the Truckee-Carson-Pyramid Lake Water Rights Settlement Act, Congress authorized water right acquisitions for both these environmental purposes.³⁸ As part of a program to restore the endangered Pyramid Lake fish species, the Interior Secretary was authorized to acquire water and water rights, “and to transfer, hold, and exercise such water and water rights and related interests to assist the conservation and recovery of the Pyramid Lake fishery”³⁹ Similarly, the Secretary was authorized to acquire, transfer, hold and exercise water rights “to sustain, on a long-term average, approximately 25,000 acres of primary wetland habitat within the Lahontan

³⁵ Title I of this statute involved settlement of the water claims of the Fallon Paiute-Shoshone Indian Tribe of Nevada. The much longer Title II addressed the higher-profile water issues in the Carson and Truckee-Pyramid Lake basins, including interstate allocation between California and Nevada, environmental restoration, settlement of litigation, and fulfillment of the federal government’s trust obligation to Indian tribes. *See id.* § 202, 104 Stat. 3294.

³⁶ *See* S. REP. NO. 101-555, at 11-13 (1990).

³⁷ *Id.* at 16-17.

³⁸ The statute also authorized water right acquisitions by the Fallon Paiute Shoshone Indian Tribe, and although the Fallon Paiutes’ interests primarily involved irrigation, *id.* at 17-18, the authorization allowed the water acquired to be used for a range of purposes, including fish, wildlife, and water quality. Pub. L. 101-618, § 103, 104 Stat. 3290.

³⁹ Pub. L. 101-618, § 207(c)(1), 104 Stat. 3313. The statute mandated that such water rights be used, “to the maximum extent practicable, for the benefit of the Pyramid Lake fishery,” *id.*, and also required the Interior Secretary to manage acquired rights “in consultation with the Pyramid Lake tribe and affected interests.” *Id.* § 207(c)(2)(E), 104 Stat. 3314.

Valley wetlands”⁴⁰ Both provisions required that water be acquired only from willing sellers,⁴¹ and that acquired water rights be transferred under applicable state law.⁴² Significantly, the wetlands provision also included a state cost-share requirement, conditioning federal water acquisitions for this purpose on “an agreement with the State of Nevada for use by the State of not less than \$9 million of State funds for water and water rights acquisitions and other protective measures to benefit Lahontan Valley wetlands.”⁴³

Zuni Heaven. Congress addressed some of these same issues—degraded wetlands and unmet tribal on-reservation needs—in enacting the Zuni Indian Tribe Water Rights Settlement Act of 2003.⁴⁴ The Zuni homeland (Zuni Pueblo) is located in western New Mexico, but Congress in 1984 had established a small reservation in eastern Arizona on lands “which the Zuni Indians have used since time immemorial for sustenance and the performance of certain religious ceremonies.”⁴⁵ Creation of the “Zuni Heaven Reservation,” however, did not ensure that the tribe would have enough water to make the area suitable for its traditional ceremonial uses. Years later, a four-year negotiation produced a water settlement that would, among other things, “provide for the restoration of riparian wetlands of great cultural and religious significance to the tribe.”⁴⁶

The settlement act authorized \$3.5 million in Fiscal Year 2004 “to be used for the acquisition of water rights and associated lands, and other activities carried out, by the Zuni

⁴⁰ *Id.* § 206(a)(1), 104 Stat. 3308.

⁴¹ *Id.* § 206(a)(2)(A); § 207(c)(2)(B), 104 Stat. 3313.

⁴² *Id.* § 206(a)(1)(C), 104 Stat. 3308; § 207(c)(2)(D), 104 Stat. 3313. Further, both provisions required the Interior Secretary “to study and report on the social, economic, and environmental effects of the water rights purchase program authorized by this section.” *Id.* § 206(a)(4), 104 Stat. 3308; § 207(c)(5), 104 Stat. 3314.

⁴³ *Id.* § 206(d), 104 Stat. 3311.

⁴⁴ Pub. L. 108-34, 117 Stat. 782 (2003).

⁴⁵ Pub. L. 98-408, 98 Stat. 1533 (1984).

⁴⁶ S. Rep. 108-18, at 2 (2003), reprinted in 2003 U.S.C.C.A.N. 983, 984. The Zuni’s lead negotiator said that the agreement would mean “that we are going to finally see some results of our attempts at restoring the wetland conditions and the environment that would be very conducive to sustaining our spirit life forms in that area.” *Zuni Indian Tribe Water Settlement Act: Hearing Before the S. Comm. on Indian Affairs*, 107th Cong. 44 (2002) (statement of Wilfred Eriacho, Chairman of the Zuni Water Rights Negotiation Team).

Tribe to facilitate the enforceability of the Settlement Agreement, including the acquisition of at least 2,350 acre-feet per year of water rights” by the end of 2006.⁴⁷ Thus, the tribe itself was responsible for spending this money on water.⁴⁸ An additional \$15.75 million was provided for restoration activities on the Zuni Heaven Reservation, “including the Sacred Lake, wetlands, and riparian areas” as provided in the Settlement Agreement.⁴⁹ The statute further provided that water use on the Zuni Heaven Reservation for instream flow use, or for irrigation to establish or maintain wetlands, would be consistent with the purposes of the reservation.⁵⁰

Deschutes River Basin. The Oregon Resource Conservation Act of 1996⁵¹ addressed a number of issues involving Oregon lands and waters, including protection of the popular Opal Creek area of Santiam Canyon east of Salem.⁵² A recurring theme of the statute was stakeholder involvement in natural resource decisionmaking;⁵³ for example, it recognized an existing “Upper Klamath Basin Working Group” consisting of federal, state, local, tribal, and non-governmental representatives, and provided up to \$1 million annually in funding for projects proposed by consensus of this group.⁵⁴ It offered similar treatment to a similar “Deschutes River Basin Working Group”⁵⁵—but went on to specify that this group should give priority to “voluntary

⁴⁷ Pub. L. 108-34, § 4(b)(1), 117 Stat. 785. According to the Interior Department, the tribe may purchase up to 3,600 acre-feet of water annually under the agreement. Press Release, U.S. Department of the Interior, Secretary Norton, Assistant Secretary Anderson Sign Water Rights Settlement for Zuni Tribe (July 8, 2004) (on file with author).

⁴⁸ The Secretary was to distribute these funds to the tribe after receiving written notice and a tribal council resolution. Pub. L. 108-34, § 6(f)(1)(B), 117 Stat. 789.

⁴⁹ *Id.* § 4(b)(2), 117 Stat. 785.

⁵⁰ *Id.* § 8(b)(1)(E), 117 Stat. 795.

⁵¹ This statute was enacted as a rider to an omnibus appropriations bill. Pub. L. No. 104-108, Div. B, 110 Stat. 3009-1, 3009-523 (1996).

⁵² *Id.*, Title I.

⁵³ Along with recognizing the Klamath and Deschutes stakeholder groups described below, the statute created a stakeholder “advisory council” for the new Opal Creek Scenic Recreation Area, *Id.* § 106, and required the responsible federal agency to consult with the advisory council on a periodic and regular basis, *Id.* § 105(k)(1).

⁵⁴ *Id.*, Title II. Such projects included “ecological restoration projects, economic development and stability projects, and projects designed to reduce the impact of drought conditions” in the Upper Klamath Basin. *Id.*, § 201(b)(1).

⁵⁵ *Id.*, Title III. The working group comprised nine members from various private interests (including two from environmental groups and seven from specified economic interests), two from the Confederated Tribes of the Warm Springs Reservation, two each from federal and state agencies, and four from local governments. *Id.*, § 301(a)(1).

market-based incentives for ecosystem restoration including, but not limited to, water leases and purchases”⁵⁶

Given this substantive focus of the Deschutes River Basin Working Group, and the \$1 million per year authorized for ecological restoration projects proposed by it,⁵⁷ the statute effectively allocated federal funds for water acquisitions recommended by that group—although the money would go through the Bureau of Reclamation (USBR), subject to federal approval and cost-share requirements.⁵⁸ Congress in 2008 extended this program, legally recognized the name of “Deschutes River Conservancy Working Group,” and increased the annual authorization to \$2 million.⁵⁹ The Deschutes River Conservancy today describes itself as “a non-profit organization with a mission to restore streamflow and improve water quality in the Deschutes River Basin,”⁶⁰ and pursues flow restoration through water conservation projects as well as water leases and permanent transfers.⁶¹ Thus, unlike the typical public funding program for environmental water acquisitions, the authorization for Deschutes River Conservancy projects gives a central and official role to a nonprofit entity.

Klamath River Basin. As noted above, Congress in 1996 encouraged collaborative decision-making regarding Klamath Basin natural resources⁶² ... but within five years a legal and political war had broken out over the use of Klamath River water.⁶³ Conflicts involving irrigation, tribal water claims, and endangered species habitat had been simmering for years, and

⁵⁶ *Id.* § 301(d).

⁵⁷ *Id.* § 301(b)(1) (Working Group’s role in recommending projects), § 301(h) (authorizing up to \$1 million per year through 2001).

⁵⁸ *Id.* § 301(b)(1) (requiring that projects involving federal lands or funds be proposed to USBR and any other affected agency); § 301(b)(3) (directing USBR to pay “up to 50 percent of the cost of performing any project recommended by the Working Group and approved by the [Interior] Secretary,” up to \$1 million per year); § 301(b)(5) (providing that appropriated funds be “maintained in and distributed by” USBR).

⁵⁹ Pub. L. 110-229, § 509(a), 122 Stat. 754, 835-36 (2008).

⁶⁰ http://www.deschutesriver.org/About_Us/mission/default.aspx (last visited July 28, 2011).

⁶¹ http://www.deschutesriver.org/About_Us/Accomplishments/default.aspx (last visited July 28, 2011).

⁶² See *supra* note 54 and accompanying text.

⁶³ See generally DOREMUS & TARLOCK, *supra* note 22, at 87-113.

they boiled over when intense drought coincided with new requirements to provide water for endangered fishes in both the upper and lower parts of the Klamath Basin.⁶⁴ The 2001 Klamath water crisis showed rather clearly that there was too little water to sustain historic basinwide irrigation deliveries while also meeting the water needs of tribes and endangered fish species. This reality was the primary challenge facing USBR in developing a ten-year operating plan for the Klamath Project, which delivers water for irrigation in both California and Oregon.

The Klamath Water Bank arose from USBR's ESA consultation over this operating plan,⁶⁵ and was a key strategy for avoiding jeopardy to threatened coho salmon.⁶⁶ Water provided through the bank would increase from 30,000 acre-feet in 2002 to 100,000 acre-feet in 2005 and subsequent years, and would be managed to provide benefits for coho salmon in the Klamath River downstream of the project.⁶⁷ USBR implemented the water bank in the early years of the ten-year operating plan, relying on various short-term strategies to obtain the necessary water in any given year.⁶⁸ Funding for the bank came through the USBR budget, and became a specific item in the agency's budget request as of 2005, when it requested over \$7.6 million for this purpose.⁶⁹ The FY2009 budget ended these budget requests, however, as USBR discontinued the "pilot water bank" as a federal program in that year.⁷⁰

⁶⁴ See Reed D. Benson, *Giving Suckers (and Salmon) an Even Break: Klamath Basin Water and the Endangered Species Act*, 15 TULANE ENVTL. L.J. 197, 214-228 (describing events leading up to the 2001 Klamath water crisis).

⁶⁵ NAT'L MARINE FISHERIES SERVICE, BIOLOGICAL OPINION, KLAMATH PROJECT OPERATIONS (2002).

⁶⁶ *Id.* at 54.

⁶⁷ *Id.* at 54, 57.

⁶⁸ U.S. GOVERNMENT ACCOUNTABILITY OFFICE, KLAMATH RIVER BASIN: RECLAMATION MET ITS WATER BANK OBLIGATIONS, BUT INFORMATION PROVIDED TO WATER BANK STAKEHOLDERS COULD BE IMPROVED 14-16 (2005). In 2004, the water bank needed to provide 75,000 acre-feet and USBR spent just over \$5.7 million to obtain it. *Id.* at 16.

⁶⁹ See *id.* at 16-17.

⁷⁰ The agency's FY2009 budget request for the Klamath Project states that it "[b]egins transitioning the former pilot water bank into the Water User Mitigation Plan which will be administered by the Klamath Water and Power Authority." http://www.usbr.gov/budget/2009/MP_Region.pdf (last visited July 29, 2011). USBR transferred the old "water bank" program to the Klamath Water and Power Authority in 2009. <http://www.usbr.gov/mp/kbao/pilot.water.bank/index.html> (printed June 17, 2011, on file with author).

Nevada terminal lakes. Pyramid Lake is not the only lake in the Great Basin portion of Nevada that has suffered from water diversions;⁷¹ to the south, the waters of Walker Lake have declined both in quality and quantity as a result of upstream irrigation.⁷² These two lakes, as well as Summit Lake in far northern Nevada, once supported abundant populations of giant (but now threatened) Lahontan cutthroat trout that provided an important food source for native peoples.⁷³ All three of these lakes are important to Nevada-based tribes, as Pyramid and Summit Lakes are located within Indian reservations that bear their names; Walker Lake is on the southern edge of the Walker River Indian Reservation, through which flows the river that feeds the lake. Congress has repeatedly allocated federal money to increase flows to these lakes, starting with a 2002 Farm Bill provision that transferred \$200 million to USBR “to provide water to at-risk natural desert terminal lakes,”⁷⁴ soon followed by an appropriations measure requiring this money to be spent on Pyramid, Summit, and Walker Lakes.⁷⁵

The 2002 Farm Bill had expressly forbade use of the \$200 million to purchase or lease water rights.⁷⁶ The following year, however, Congress reversed course and appropriated \$2.5 million for water right acquisitions by the State of Nevada, “notwithstanding” the earlier restriction.⁷⁷ Congress in 2005 appropriated these funds for water right acquisitions in the Walker River Basin, including \$10 million for the Walker River Paiute Tribe⁷⁸ and additional

⁷¹ See *supra* note 36 and accompanying text.

⁷² <http://www.usgs.gov/walker/> (last visited July 29, 2011).

⁷³ The Summit Lake Paiute Tribe makes this statement on a special webpage devoted to the Lahontan cutthroat trout. http://www.summitlaketribe.org/Lahontan_Cutthroat_Trout.html (last visited July 29, 2011).

⁷⁴ Pub. L. No. 107-171, § 2507a), 116 Stat. 134, 275 (2002). The money was transferred to USBR from the Department of Agriculture’s Commodity Credit Corporation.

⁷⁵ Pub. L. No. 108-7, Div. D, § 207, 117 Stat. 11, 146 (2003).

⁷⁶ Pub. L. No. 107-171, § 2507b), 116 Stat. 134, 275 (2002). The statute did not make clear how USBR was to use this money to “provide water” to these lakes *without* acquiring water rights.

⁷⁷ The Energy and Water appropriations bill for FY2004 directed this money to the State of Nevada to “to purchase water rights from willing sellers and make necessary improvements to benefit Carson Lake and pasture,” in accordance with the Truckee-Carson-Pyramid Lake Water Settlement Act (*see supra* notes 34-43 and accompanying text). Pub. L. No. 108-137, § 217, 117 Stat. 1827, 1852 (2003).

⁷⁸ Pub. L. No. 109-103, § 208(b)(1), 119 Stat. 2247, 2269 (2005).

money for the University of Nevada⁷⁹ (later assigned to the National Fish & Wildlife Foundation).⁸⁰ A more recent appropriations bill directed \$25 million to the Walker River Irrigation District for “a 3-year water leasing demonstration program in the Walker River Basin to increase Walker Lake inflows.”⁸¹ Thus, the Terminal Lakes water acquisitions program is remarkable in two ways: Congress has directed significant funding to several different kinds of non-federal entities, and has appropriated this money *despite a specific prohibition* in the authorizing statute.⁸²

Big Hole River. Another Farm Bill program helped avert a potential crisis on Montana’s Big Hole River, home to the only surviving population of native, stream-dwelling arctic grayling in the lower 48 states.⁸³ In May 2004 the U.S. Fish & Wildlife Service raised the priority of the grayling as a “candidate” species under the ESA,⁸⁴ noting imminent threats to its survival caused by low flows and high water temperatures in its remaining habitat.⁸⁵ That year also saw serious drought conditions in Montana, raising the possibility of low flows and high water temperatures that would push the grayling that much closer to extinction—and an ESA listing. Under those circumstances, irrigators in the Big Hole River Basin approached the Montana office of the U.S.

⁷⁹ The statute appropriated \$70 million to the University of Nevada for two purposes, one of which was “to acquire from willing sellers land, water appurtenant to the land, and related interests in the Walker River Basin, Nevada.” *Id.*, § 208(a)(1), 119 Stat. 2247, 2268 (2005).

⁸⁰ Pub. L. No. 111-85, § 206, 123 Stat. 2845, 2856-58 (2009). The National Fish and Wildlife Foundation is a nonprofit entity, and has primary responsibility for implementing the Columbia Basin Water Transactions Program, *infra* notes 139-60 and accompanying text.

⁸¹ *Id.*, § 208(b)(1), 123 Stat. 2858-59. This program was to go forward “in accordance with an agreement between that district and the National Fish and Wildlife Foundation.” *Id.*, § 208(b)(1)(B)(i).

⁸² Congress has also appropriated water acquisitions funding without an underlying authorization, e.g. in 2002 on the Rio Grande in New Mexico. *See* Pub. L. No. 107-206, Ch. 5, 116 Stat. 820, 849 (2002) (appropriating \$4 million to USBR for an “emergency” lease of up to 38,000 acre-feet of water to benefit the Rio Grande silvery minnow).

⁸³ <http://www.fwp.mt.gov/education/angler/adoptAFish/sunRiver/grayling.html> (last visited July 29, 2011).

⁸⁴ Under the ESA implementing rules, a candidate species is one that is being considered for listing as threatened or endangered, but has not yet been proposed as such. 50 C.F.R. § 424.02(b).

⁸⁵ The Fish & Wildlife Service noted the existence of cooperative efforts by water users and others to leave enough water in streams to support grayling habitat. “Despite these efforts, there continue to be periods when flows are well below those considered ‘survival’ flows for grayling and water temperatures exceed the thermal tolerance of grayling.” Endangered and Threatened Wildlife and Plants, 69 Fed. Reg. 24,876, 24,881 (May 4, 2004).

Department of Agriculture's Natural Resources Conservation Service (NRCS), asking if the agency could provide some assistance.⁸⁶

NRCS found relevant authority in the Farm Bill's Environmental Quality Incentives Program (EQIP), which is geared partly to assist farmers in complying with existing environmental regulatory requirements and avoiding new ones.⁸⁷ The agency offered payments to Big Hole irrigators willing to forego exercise of their water rights in 2004, essentially covering the difference between irrigated and dryland hay production in that area. NRCS offered such payments only in that year, informing the irrigators that they would need to focus their future efforts on increasing the efficiency of their water use.⁸⁸ In some ways this effort by the NRCS could be seen as no big deal: it lasted only a year, involved a modest expenditure of perhaps \$300,000, and did not even lease water rights—only paid willing irrigators not to divert.⁸⁹ But it could also be seen as a successful, innovative use of a national Farm Bill program to avoid a potentially serious problem for both farmers and fish.

Common elements of programs funded through federal appropriations. The NRCS program on the Big Hole is unlike the others discussed in this section, not only because it involves USDA, but because it lacks any direct connection to an Indian tribe. Both the Nevada-based programs, as well as Zuni Heaven, involve direct and specific benefits to tribes. The Klamath Water Bank resulted from an ESA consultation, but the interests of Klamath Basin tribes in maintaining and improving their traditional fisheries has been a major factor in the

⁸⁶ Telephone interview with Carrie Moseley, Assistant State Conservationist for Operations, NRCS Montana Office, in Bozeman, Mont. (July 14, 2011).

⁸⁷ 16 U.S.C. 3839aa.

⁸⁸ E-mail from Carrie Moseley, Assistant State Conservationist for Operations, NRCS Montana Office, to Reed D. Benson, Professor of Law, University of New Mexico School of Law (June 27, 2011 (12:00 PM MDT) (on file with author). The NRCS in Montana has also used the EQIP program in this longer-term effort to increase irrigation efficiency, with resulting benefits for instream flows. MALLOCH, *supra* note 4, at 64-65.

⁸⁹ Telephone interview with Carrie Moseley, Assistant State Conservationist for Operations, NRCS Montana Office, in Bozeman, Mont. (July 14, 2011).

government's management of the Klamath Project. The Deschutes River authorization, while not primarily intended to benefit any tribe, did require two seats for the Confederated Tribes of the Warm Springs Reservation (whose reservation borders the Deschutes River) on the Deschutes Basin Working Group.⁹⁰ Thus, these federal programs—as well as one authorized by Congress in 1994 for the Yakima River Basin in Washington⁹¹--effectively served tribal as well as environmental purposes, going some way toward compensating for past failures in such matters.⁹²

Another feature of these federal programs, without exception, is that they are directed to a particular location. Most of them involve a single river, while the broadest one covers three lakes in Nevada. This site-specific approach is characteristic of Congress' authorizations for environmental restoration activities by the Bureau of Reclamation.⁹³ Although the Bureau has some general statutory authority which it potentially could use for environmental water acquisitions,⁹⁴ Congress has stopped short of setting up a general program.⁹⁵ So long as federal

⁹⁰ See *supra* note 55.

⁹¹ The Bureau of Reclamation's Yakima Project had been at the center of controversy for years, due to the impacts of project operations on salmon habitat in the Yakima River Basin, and thus on the tribal fishery of the Yakama (formerly Yakima) Indian Nation. See, e.g., *Kittitas Reclamation Dist. v. Sunnyside Valley Irrigation Dist.*, 763 F.2d 1032, 1035 (9th Cir. 1985). Thus, the Yakima River Basin Water Enhancement Project legislation, Pub. L. 103-434, Title XII, 108 Stat. 4526, 4550 (1994), could certainly be seen as benefiting the Yakama Nation's interest in restoring its salmon fishery. See H.R. REP. NO. 103-644, at 13 (1994) (stating that legislation was needed in the Yakima Basin partly "because increasing demands for water have often been met at the expense of anadromous fisheries and the needs of the Yakama Indian Nation."). This 1994 legislation authorized, among other things, up to \$10 million "for the initial acquisition of water from willing sellers or lessors specifically to provide instream flows for interim periods to facilitate the outward migration of anadromous fish flushing flows." *Id.*, § 1203(j)(4).

⁹² See generally *Nevada v. United States*, 463 U.S. 110 (1983) (noting the federal government's fiduciary duties to the Pyramid Lake Tribe, *id.* at 127, but rejecting current effort to assert claims on behalf of the tribe for water for the Pyramid Lake fishery, because they had not been asserted in earlier adjudication).

⁹³ I examined this practice in a recent article. Benson, *supra* note 24, at 153-58.

⁹⁴ *Id.* at 169-175 (describing grant program under the SECURE Water Act, and limited acquisition authority under the Reclamation States Emergency Drought Relief Act). A 2009 appropriations bill provided, somewhat cryptically, that USBR's spending on Drought Emergency Assistance should go "primarily for leasing of water for specified drought related purposes from willing lessors," in accordance with state law. Pub. L. No. 111-85, § 204, 123 Stat. 2845, 2856 (2009).

⁹⁵ My 2011 article on reclamation statutes concluded by suggesting that Congress should consider new legislation providing the Bureau with programmatic authority for environmental restoration. Benson, *supra* note 24, at 178-84. Such legislation obviously could provide for environmental water acquisitions.

appropriations can be used in only a few selected places, but the need for environmental water acquisitions is much more widespread, other programs will have to fill the void.

B. State appropriations: Colorado's Construction Fund earmark

Few of the western states have devoted appropriated funds to environmental water acquisition programs. Given the serious, ongoing fiscal problems confronting many states, the lack of activity in recent years is not surprising. In 2008, however, the Colorado Legislature took the significant step of authorizing an environmental water acquisitions program and appropriating \$1 million annually to fund it.

Under Colorado law, instream flow rights may be held only by the Colorado Water Conservation Board (CWCB).⁹⁶ The CWCB is authorized not only to appropriate new instream flow rights as needed "to preserve the natural environment to a reasonable degree," but also to buy, lease, or accept donations of water rights for environmental purposes.⁹⁷ A 2002 statute expanded the agency's authority to acquire water rights, and allowed it to use appropriated funds (other than a specified construction fund) for this purpose.⁹⁸ For the first few years after this statute, however, the CWCB spent no state funds to acquire water rights.⁹⁹

A bill to appropriate \$1 million per year specifically for CWCB environmental water acquisitions was introduced in the Colorado Legislature in February 2008.¹⁰⁰ This provision, however, was only one part of a much larger bill (HB 08-1346) that provided over \$70 million

⁹⁶ Colo. Rev. Stat. § 37-92-102(3) (authorizing CWCB to appropriate instream flow rights and prohibiting all others from obtaining such rights).

⁹⁷ *Id.* (authorizing CWCB to acquire from any person or entity, through various types of conveyance, "such water, water rights, or interests in water in such amounts as the [CWCB] determines is appropriate for stream flows or for natural surface water elevations or volumes for natural lakes to preserve or improve the natural environment to a reasonable degree.")

⁹⁸ See Reed D. Benson, "Adequate Progress," or Rivers Left Behind? *Developments in Colorado and Wyoming Instream Flow Laws Since 2000*, 36 ENVTL. L. 1283, 1298 (2006) (describing and citing 2002 statute).

⁹⁹ *Id.* at 1305.

¹⁰⁰ House Bill 08-1346, 66th General Assembly, 2nd Reg. Sess. (Colo. 2008); Colorado General Assembly, Summarized History for Bill Number HB08-1346 (on file with author).

for water project loans, and over \$5 million for a variety of water-related studies and initiatives.¹⁰¹ The Colorado Legislature annually enacts such legislation authorizing certain loans and payments from two special funds, including a Construction Fund that provides low-interest loans for water projects.¹⁰²

In a February 2008 report on HB 08-1346, the CWCB explained the rationale underlying the provision dedicating \$1 million in state funding for instream flow (ISF) water acquisitions:

Because not all ISF protection needs can be met through new ISF appropriations, the CWCB staff has been focusing on reinvigorating the water acquisition prong of the ISF program. Among other benefits, water acquisitions can be a valuable supplement to decreed ISF water rights or provide ISF protection on streams where a new appropriation could not be made due to water availability issues. Not all water rights owners are willing to donate their water to the CWCB; most would like to realize an economic benefit from conveying, loaning or leasing their water to the CWCB for ISF use.... The net effect of the funding provided by this [bill] would be more protection of the natural environment of Colorado's streams couple with economic benefit for those water rights owners interested in and willing to provide water to the CWCB for ISF use.¹⁰³

As introduced, HB 08-1346 essentially proposed four things regarding CWCB funding for environmental water acquisitions. First, it deleted the prohibition on use of Construction Fund money for water acquisitions.¹⁰⁴ Second, it provided that up to a million dollars in the Construction Fund “are continuously appropriated to the [CWCB] annually to pay for the costs of acquiring water, water rights, and interests in water for instream flow use.”¹⁰⁵ Third, it gave substantive direction to the CWCB in spending this money, placing top priority on “acquisitions

¹⁰¹ See COLO. WATER CONSERVATION BOARD, HOUSE BILL 08-1346, THE 2008 WATER PROJECTS BILL 1 (2008) (on file with author).

¹⁰² *Id.* The CWCB in 2008 described the Construction Fund as “a partially self-supporting revolving loan fund. Revenues come from the return of principal and interest on outstanding loans, interest earned on the fund’s cash balance in the state treasury, and federal mineral royalty distributions. The total equity of the fund exceeds \$293 million.” *Id.* The Construction Fund is governed by Colo. Rev. Stat. § 37-60-121, which provides that the “first priority of moneys available to the fund shall be devoted to projects which will increase the beneficial consumptive use” of waters to which Colorado is entitled under its interstate compacts. Colo. Rev. Stat. § 37-60-121(1)(b)(I).

¹⁰³ COLO. WATER CONSERVATION BOARD, HOUSE BILL 08-1346, THE 2008 WATER PROJECTS BILL (2008) (description of “project data” for “Funding Water Acquisitions for Instream Flow Use”) (on file with author).

¹⁰⁴ House Bill 08-1346, 66th General Assembly, 2nd Reg. Sess. § 27 (Colo. 2008) (as introduced).

¹⁰⁵ *Id.*, § 28(1).

for existing or new instream flow water rights to preserve the natural environment to a reasonable degree.”¹⁰⁶ Fourth, it directed the CWCB to adopt criteria and guidelines for using this new authority before actually spending any of the money.¹⁰⁷

These provisions apparently caused little controversy as HB 08-1346 cruised through the Colorado Legislature.¹⁰⁸ The water acquisitions section of the original bill survived intact, with only a tweak regarding secondary priorities for spending the money.¹⁰⁹ The final House and Senate votes were nearly unanimous, as 98 legislators voted in favor and only one against.¹¹⁰

Remarkably, the CWCB received a second, supplemental source of funding for environmental water acquisitions the following year. The Colorado Legislature enacted legislation addressing hunting and fishing licenses and related fees, and this 2009 statute authorized the CWCB to receive up to \$500,000 of annual revenues from the sale of “habitat stamps” to hunters and anglers.¹¹¹ In order to be eligible for this additional funding, however, the CWCB must first have expended its entire yearly appropriation of \$1 million from the

¹⁰⁶ *Id.* The bill also provided that the money could be used “in limited circumstances” to address issues arising under federal laws, including the Endangered Species Act and the Wild and Scenic Rivers Act. *Id.*

¹⁰⁷ *Id.*, § 28(2).

¹⁰⁸ The bill attracted support from a variety of interests, including both agricultural and environmental groups, and the water acquisition provisions apparently received little mention in hearings on the bill. Final Bill Summary on HB08-1346, H. Comm. on Agriculture, Livestock, & Natural Resources (March 12, 2008); Final Bill Summary on HB08-1346, S. Comm. on Agriculture, Natural Resources & Energy (April 17, 2008) (both on file with author) (identifying witnesses in committee hearings on HB08-1346 and summarizing their statements).

¹⁰⁹ The final bill retained the original language stating that water acquisitions “to preserve the natural environment to a reasonable degree” were the top priority for these funds, but revised the following sentence to read:

These revenues may also be used in limited circumstances for the costs of water acquisitions to preserve the natural environment of species that have been listed as threatened or endangered under state or federal law, or are candidate species or are likely to become candidate species, support wild and scenic alternative management plans, or provide federal regulatory certainty.

Colo. Rev. Stat. § 37-60-123.7(1). The original bill had narrower language regarding threatened and endangered species. House Bill 08-1346, 66th General Assembly, 2nd Reg. Sess. § 28(1) (Colo. 2008) (as introduced).

¹¹⁰ House Journal, 66th General Assembly, 2nd Reg. Sess. 1188 (April 9, 2008) (64-1 vote in favor); Senate Journal, 66th General Assembly, 2nd Reg. Sess. 1223 (April 29, 2008) (34-0 vote in favor). The annual appropriation from the CWCB construction fund of \$1 million for water acquisitions is codified at COLO. REV. STAT. § 37-60-123.7(1).

¹¹¹ Act of June 2, 2009, ch. 388, 2009 Colo. Session Laws 2096. Colorado requires anglers and hunters to purchase a “habitat stamp” in addition to a license to fish or hunt, and uses the funds to preserve fish and wildlife habitat. COLO. REV. STAT. § 33-4-102.7(1.5).

Construction Fund.¹¹² Thus, if it fully utilizes the habitat stamp money, the CWCB has \$1.5 million to spend on environmental water acquisitions each year.

Colorado is not the only western state to make appropriated funds available for this purpose. Washington provided over \$5 million in state funding from 2001-03, using a combination of direct legislative appropriations and salmon recovery funds;¹¹³ one commentator credited Washington with “taking a very innovative approach ... [of] essentially creating a state government water trust, with money and authority to enter the full array of transactions”¹¹⁴ Colorado’s public funding program is perhaps more noteworthy, however, because it provides an ongoing revenue stream of \$1 million per year, derived from a dedicated fund that was originally established to support more traditional water projects. Moreover, state law now provides a new, innovative source of money—habitat stamp revenues—that gives the CWCB a significant source of supplemental funding to acquire water rights.

Appropriations, however, are not the only potential source of public funds for environmental water acquisitions. In one important respect, appropriations are the worst kind of revenue for such programs because they typically require new legislative action every year, making them especially vulnerable to budget crunches and political opposition.¹¹⁵ To illustrate the range of potential funding options other than appropriations, the next section identifies six different programs, each relying on a different source of money.

IV. Public funding programs using revenue sources other than appropriations

A. Restoration payments by water users: Central Valley Project Restoration Fund

¹¹² COLO. REV. STAT. § 37-60-123.7(1.5).

¹¹³ See WASHINGTON DEPT. OF ECOLOGY, WASHINGTON WATER ACQUISITION PROGRAM (2003) (on file with author) (noting that Legislature had appropriated \$3.5 million during the 2001-03 budget biennium for water acquisitions, and the state Salmon Recovery Funding Board had approved another \$2 million for this purpose).

¹¹⁴ MALLOCH, *supra* note 4, at 106.

¹¹⁵ These problems are especially acute at the state level, where balanced budget requirements and line-item veto powers make annual appropriations a particularly unreliable source of funds from year to year.

One of the earliest public funding programs for environmental water acquisitions was established as part of the Central Valley Project Improvement Act (CVPIA),¹¹⁶ a 1992 statute whereby Congress significantly revised the law governing the Bureau of Reclamation’s colossal Central Valley Project (CVP) in California. A key element of the CVPIA was the Central Valley Project Restoration Fund, created to provide funding for a variety of purposes in addition to water acquisitions. The Restoration Fund is remarkable from a policy standpoint because most of its revenues come from annual payments made by the CVP’s traditional beneficiaries: irrigators and power contractors.

Congress enacted the CVPIA for various purposes, but restoration of fish and wildlife populations and their habitat was a primary focus of the legislation.¹¹⁷ Congress had authorized the CVP in stages beginning in 1935, and the project had provided major benefits to California irrigators: the project delivered roughly 7 million acre-feet of water per year on average, roughly 90 percent of which went for agriculture.¹¹⁸ Construction and operation of the CVP had also had serious environmental impacts, however, including sharp declines in Sacramento-San Joaquin salmon runs and the loss of significant wetland habitat in the Central Valley.¹¹⁹ Two key goals of the CVPIA were to double the natural production of anadromous fish in the Central Valley¹²⁰ and to provide water supplies sufficient to optimize waterfowl habitat at certain wildlife refuges,¹²¹ both within ten years.

¹¹⁶ Pub. L. No. 102-575, Title XXXIV, 106 Stat. 4600, 4706 (1992).

¹¹⁷ Congress listed six purposes for the CVPIA, *id.* § 3402, of which the first two were “to protect, restore, and enhance fish, wildlife, and associated habitats” in the affected areas of California, and “to address impacts of the Central Valley Project on fish, wildlife and associated habitats.” *Id.* at §3402(a)-(b).

¹¹⁸ S. REP. NO. 102-267, at 178 (1992).

¹¹⁹ *Id.* at 179-80.

¹²⁰ Pub. L. No. 102-575, § 3406(b)(1), 106 Stat. 4714.

¹²¹ *Id.*, § 3406(d)(2), 106 Stat. 4723; *see also* U.S. DEPARTMENT OF THE INTERIOR WATER ACQUISITION PROGRAM, LEVEL 4 WATER SUPPLIED TO CENTRAL VALLEY WILDLIFE REFUGES FACT SHEET (2003) (on file with author) (explaining that “Level 4” water supplies for the refuges—required by the CVPIA within ten years of enactment—would provide the water needed “to achieve optimum waterfowl habitat management”).

Although the statute dedicated a large block of CVP water—800,000 acre-feet—for fish and wildlife habitat restoration,¹²² it also authorized the Interior Department to supplement that block of water by acquiring additional supplies through various means, including purchase and lease of water and water rights.”¹²³ Using primarily these sources of water, the agency was directed to modify CVP operations “to provide flows of suitable quality, quantity, and timing to protect all life stages of anadromous fish....”¹²⁴ In addition, the CVPIA authorized the Interior Department to acquire water rights from willing sellers (through purchase or lease) to achieve the mandate of delivering adequate water supplies to the specified wildlife refuges within a decade.¹²⁵

The statute also created the Restoration Fund, and directed that at least two-thirds of its money be spent on habitat restoration, improvement and acquisition.¹²⁶ Appropriations from the Restoration Fund were authorized up to \$50 million annually (in October 1992 dollars).¹²⁷ The Interior Department would receive these appropriations,¹²⁸ but could in turn provide funding to state or local government entities, Indian tribes, or even nonprofit environmental groups it found to be capable of assisting in CVPIA implementation.¹²⁹

¹²² The statute required the Interior Secretary immediately to “dedicate and manage annually” 800,000 acre-feet of CVP yield “for the primary purpose of implementing the fish, wildlife, and habitat restoration purposes and measures” of the CVPIA, and for other environmental purposes including ESA compliance. Pub. L. No. 102-575, § 3406(b)(2), 106 Stat. 4715-16.

¹²³ The statute called on the agency to consider several options in developing and implementing a plan to secure supplemental water supplies for fish and wildlife. One option was “temporary and permanent land fallowing, including purchase, lease, and option of water, water rights, and associated agricultural land.” *Id.*, § 3406(b)(3), 106 Stat. 4716. Other specified options were water banking, water conservation, and changes in project operations, among others. *Id.*

¹²⁴ *Id.*, § 3406(b)(1)(B), 106 Stat. 4715.

¹²⁵ The statute called on the agency to secure these water supplies through a variety of “voluntary measures ... which do not require involuntary reallocations” of CVP water. *Id.*, § 3406(d)(2), 106 Stat. 4723.

¹²⁶ *Id.*, § 3407(a), 106 Stat. 4726. No more than one-third of the Restoration Fund was to be spent for other specified purposes, primarily mitigating the impacts of certain water storage and diversion facilities on anadromous fish populations. *Id.*

¹²⁷ *Id.*, § 3407(b), 106 Stat. 4726.

¹²⁸ *Id.*

¹²⁹ *Id.*, § 3407(e), 106 Stat. 4728 (allowing the Interior Secretary to “to provide funding to such entity on such terms and conditions as he deems necessary to assist in implementing the identified action”).

For purposes of this article, the Restoration Fund is important because it derives most of its revenue from annual payments made by CVP water and power users. The provisions specifying the nature and amount of such payments are complex and filled with contingencies. The basic idea, however, is that the Interior Department “shall assess and collect additional annual mitigation and restoration payments,¹³⁰ ... consisting of charges to direct beneficiaries” of the CVP, in amounts sufficient “to recover a portion or all of the costs of fish, wildlife, and habitat restoration programs and projects” under the statute.¹³¹ Such payments are to be set so that each year’s collections are “reasonably expected to equal the amount appropriated” from the Restoration Fund in that year.¹³² But while the Interior Department must require CVP water and power contractors to pay these amounts, the statute also caps such “additional annual payments” at \$6 per acre-foot of delivered CVP irrigation water, \$12 per acre-foot of delivered CVP water for municipal and industrial uses, and \$30 million per year in total (all in 1992 dollars).¹³³

The Restoration Fund was a key feature of the CVPIA, and the legislation as a whole was hotly controversial, as CVP irrigators and their political allies vehemently denounced it because of its potential impacts on California agriculture.¹³⁴ In the floor debates on final passage, however, the Restoration Fund was not a focus of opposition; indeed, few of the members who spoke on the CVPIA even mentioned the Restoration Fund or its reliance on payments by project irrigators.¹³⁵ Indeed, even a competing bill introduced by California Sen. Seymour—and

¹³⁰ These payments are “additional” to revenues raised under other provisions of the CVPIA. *Id.*, § 3407(c), 106 Stat. 4726.

¹³¹ *Id.*

¹³² *Id.*, § 3407(c)(2), 106 Stat. 4726-27 (providing for total collections of \$50 million per year in 1992 dollars even if appropriations fall short of that level).

¹³³ *Id.*, § 3407(d)(2), 106 Stat. 4727.

¹³⁴ See 138 CONG. REC. H11491-98 (1992) (statements of Reps. Dreier, Dooley, Herger, Lehman, Cunningham, and Condit); 138 CONG. REC. S17669-79 (1992) (statement of Sen. Seymour and letters submitted for the record in opposition to the bill).

¹³⁵ See 138 CONG. REC. H11491-11517 (1992). The most substantive remarks on the Restoration Fund, by Congressman Fazio of California, were added later to the Congressional Record. He noted that the bill “sets up a

supported by the farm community—called for a \$1 per acre-foot surcharge on CVP water deliveries for irrigation.¹³⁶ In the end, at least, even strident opponents of the CVPIA were not arguing that water and power users should not have to pay into a fund for restoring and acquiring fish and wildlife habitat.

Today, nearly all the money flowing into the Restoration Fund comes from the “additional mitigation and restoration payments” collected from CVP water and power contractors under § 3407(d). The Bureau of Reclamation’s 2011 budget anticipated receipts of about \$35 million from such payments in FY2010, and over \$49 million in FY2011.¹³⁷ Of nearly \$50 million requested from the Restoration Fund for 2011, this budget proposed to spend over \$19 million acquiring water and water rights for flows in the San Joaquin River basin and for wetland habitat.¹³⁸

B. Federal hydropower revenues: Columbia Basin Water Transactions Program

The Columbia Basin Water Transactions Program (CBWTP) is notable for two key aspects of its design. First, it is a regional program, supporting water acquisitions in the Columbia River Basin states of Idaho, Montana, Oregon, and Washington. Second, its source of funding is federal hydropower revenues: money for the CBWTP comes from the Bonneville

restoration fund that limits water and power user contributions to \$30 million,” with charges not to exceed \$6 per acre-foot. *Id.* at H11515. He also praised the provision calling for users to pay into the Restoration Fund in proportion to their share of water from the CVP. *Id.* at H11516 (referring to final provision of § 3407(d)).

¹³⁶ Dana Sebren Cooper and D. Michael Harvey, *An Upstream Swim: The Crafting and Passage of the Central Valley Project Improvement Act*, in *WATER LAW: TRENDS, POLICIES, AND PRACTICE 257* (Kathleen Marion Carr and James D. Crammond, eds., 1996).

¹³⁷ U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION, BUDGET JUSTIFICATIONS AND PERFORMANCE INFORMATION FISCAL YEAR 2011, CVP Restoration Fund 5 (2010) (on file with author).

¹³⁸ *Id.* at 7-8 (\$5.7 million to compensate the San Joaquin River Authority for providing flows in the San Joaquin River under the Vernalis Adaptive Management Program; \$8 million to acquire Level 4 water supplies for Central Valley wetlands; and \$5.7 million to acquire water on the San Joaquin River from tributary water rights holders).

Power Administration (Bonneville), which sells electricity from the Federal Columbia River Power System (FCRPS), generated at federal dams in the Columbia River Basin.¹³⁹

The Columbia River Basin saw major declines in its salmon and steelhead runs over the past few decades, leading in the 1990s to the listing of several runs as threatened or endangered. As more fish populations were listed or proposed for listing under the ESA, the region responded with a significant push to improve conditions for salmon survival, including restoration of degraded freshwater habitat. Despite the Pacific Northwest's rainy reputation, inadequate streamflows were identified as a serious habitat problem for many fish populations. Thus, flow restoration became part of the effort to protect and recover salmon and steelhead runs in the Columbia Basin, and water acquisitions were developing into a viable tool for this purpose.¹⁴⁰

Two major salmon recovery documents produced in 2000 called on Bonneville to establish a water acquisition program to benefit Columbia Basin fish populations, leading directly to the creation of the CBWTP. First, the Northwest Power Planning Council¹⁴¹ (Council) produced its 2000 Fish and Wildlife Program,¹⁴² which recommended that Bonneville “establish a funding agreement for land and water acquisitions,” including creation of a “dedicated budget within Bonneville’s fish and wildlife funding establishing the amount of

¹³⁹ Bonneville is a federal nonprofit agency that markets electric power generated in the Pacific Northwest, primarily at 31 federal dams operated as part of the FCRPS by the Corps of Engineers and USBR. Its total operating revenues in 2010 exceeded \$3 billion. Bonneville Power Administration, 2010 BPA Facts, *available at* http://www.bpa.gov/corporate/about_BPA/Facts/FactDocs/BPA_Facts_2010.pdf (last visited August 18, 2011).

¹⁴⁰ See generally Neuman, *supra* note 26, at 435 nn. 6-7 (describing conditions that led to development of environmental water market in the Pacific Northwest), 439-42 (describing Oregon Water Trust acquisitions from 1993 to 2003).

¹⁴¹ The Council was created by the Northwest Power Act, Pub. L. 96-501, 94 Stat. 2697 (1980), which provided for creation of the Pacific Northwest Electric Power and Conservation Planning Council, to be formed by two members each from Idaho, Montana, Oregon, and Washington, appointed by these states. *Id.* § 4(a), 94 Stat. 2698, codified at 16 U.S.C. § 839b. The Council now refers to itself as the Northwest Power and Conservation Council. <http://www.nwccouncil.org> (last visited August 18, 2011).

¹⁴² NORTHWEST POWER PLANNING COUNCIL, 2000 COLUMBIA RIVER BASIN FISH AND WILDLIFE PROGRAM (2000), *available at* <http://www.nwccouncil.org/library/2000/2000-19/FullReport.pdf> (last visited August 18, 2011). The Northwest Power Act requires the Council to develop the Fish and Wildlife Program “to protect, mitigate and enhance fish and wildlife” within the Columbia Basin. The Council produced the first Fish and Wildlife Program in 1982, and the 2000 edition was the fifth revision of the Program. See *id.* at 9.

funding for land and water acquisitions available per year, for a multi-year period.”¹⁴³ Later that year, the National Marine Fisheries Service (NMFS) issued its biological opinion (BiOp) for the FCRPS,¹⁴⁴ declaring that operation of the federal dams would jeopardize the continued existence of salmon runs listed under the ESA. The BiOp laid out a “Reasonable and Prudent Alternative” for FCRPS operations,¹⁴⁵ including Action 151, which called on Bonneville to “experiment with innovative ways to increase tributary flows by, for example, establishing a water brokerage.” The BiOp called on Bonneville to coordinate with NMFS in these “experiments,” to begin them as soon as possible, and to submit a report evaluating their efficacy in five years.¹⁴⁶

These 2000 Fish and Wildlife Program and FRCPS BiOp painted with a broad brush in outlining the water acquisitions program, indicating somewhat different priorities for this new venture. In stating goals for the program, the Council prioritized water acquisitions that directly benefit fish and wildlife, and that “address imminent risks to the survival of one or more species” listed under the ESA.¹⁴⁷ The BiOp focused more on the need for experimentation and innovation to address the “widespread” problem of low flows in streams tributary to the Columbia and Snake. “It is unclear whether and how solutions can be implemented through existing laws and administrative processes. To test new approaches to this problem, Bonneville will conduct experiments such as organizing a non-profit water brokerage to demonstrate transactional

¹⁴³ *Id.* at 48 (Implementation Provision A.8).

¹⁴⁴ NATIONAL MARINE FISHERIES SERVICE, 2000 FCRPS BIOLOGICAL OPINION (Dec. 21, 2000), available at http://www.nwd-wc.usace.army.mil/tmt/wqnew/biops/2000/combined_nmfs.pdf (last visited August 19, 2011). The Biological Opinion is the product of the interagency consultation process under ESA § 7. See *supra* note 18 and accompanying text.

¹⁴⁵ In the ESA consultation process, if a BiOp finds that an agency’s proposed action would cause jeopardy to a listed species, the BiOp must also include a Reasonable and Prudent Alternative that avoids jeopardy while meeting the purposes of the proposed action. 16 U.S.C. § 1536(b)(3)(A).

¹⁴⁶ *Id.* at 9-134.

¹⁴⁷ NORTHWEST POWER PLANNING COUNCIL, *supra* note 142, at 49. The document called for development of specific criteria for land and water acquisitions, and stated that such criteria should include a preference for acquisitions with benefits to fish and wildlife and listed species.

strategies for securing tributary flow ... in streams with significant non-federal diversions.”¹⁴⁸ It also indicated that water acquisitions should address water quality “where feasible,” and should use a competitive process to acquire water at the lowest cost. Underscoring the experimental nature of the program, the BiOp stated that a decision would be made whether to continue it after five years, following an independent review.¹⁴⁹

Both documents also addressed the institutional arrangements for the new program, and here again, emphasized somewhat different things. The Fish and Wildlife Program emphasized that the Council would make all final decisions regarding water acquisitions, that an advisory board would be appointed (with stakeholder input) to recommend acquisitions to the Council, and that criteria for acquisitions would undergo independent scientific review. It also specified that water would be acquired only from willing sellers, that state water law would be followed, and that no acquisition would proceed if it was opposed by both Council members from the affected state.¹⁵⁰ The BiOp called for coordination between Bonneville and NMFS in developing the acquisitions program, and in determining funding levels for the program after the initial five-year period (during which funding was estimated at \$5-10 million annually).¹⁵¹ Perhaps most interestingly, it also specified that a non-governmental organization should run the program, calling on Bonneville to “establish a new non-profit entity or contract with a non-profit entity(ies) to carry out this project”¹⁵²

¹⁴⁸ NATIONAL MARINE FISHERIES SERVICE, *supra* note 144, at 9-134.

¹⁴⁹ *Id.*

¹⁵⁰ NORTHWEST POWER PLANNING COUNCIL, *supra* note 142, at 48-49.

¹⁵¹ More specifically, the BiOp “estimated” that Bonneville would spend \$2.5 million on the program in year one, \$5 million in year two, and \$5-10 million in subsequent years “as justified by prospective transactions. NMFS and [Bonneville] should make joint decisions regarding funding beyond the \$5 million-per-year base in years 2 to 5, in cooperation with the [Council’s] prioritization process.” NATIONAL MARINE FISHERIES SERVICE, *supra* note 144, at 9-135.

¹⁵² *Id.* The BiOp called on Bonneville to create or select the non-profit entity in year one, to require that entity to develop an operations plan, and to have it fully operational in year two.

Bonneville proceeded as directed, selecting the National Fish and Wildlife Foundation (NFWF)¹⁵³ in 2002 as the non-profit entity to implement the program.¹⁵⁴ NFWF operates the CBWTP from its office in Portland, Oregon, but is not directly engaged in individual water transactions. Instead, CBWTP funds “qualified local entities,” which may be government agencies or nonprofit entities,¹⁵⁵ and these entities handle the transactions. CBWTP reviews proposed acquisitions and makes recommendations, but does not provide funding until Bonneville approves it.¹⁵⁶

The 2000 BiOp regarded the water acquisitions program as an experiment, but the CBWTP has become an established part of the effort to save and restore salmon populations in the Columbia Basin.¹⁵⁷ For example, the Council’s 2009 Fish & Wildlife Program stated that “Bonneville shall fund the continuation of the water transaction program to pursue water right acquisitions in subbasins where water quantity has been identified ... as a primary limiting factor,” and that the program “will continue to use both temporary and permanent transactions for instream flow restoration.”¹⁵⁸ Actual Bonneville funding for the

¹⁵³ NFWF describes itself as “a 501(c)(3) non-profit that preserves and restores our nation’s native wildlife species and habitats. Created by Congress in 1984, NFWF directs public conservation dollars to the most pressing environmental needs and matches those investments with private funds.”

<http://www.nfwf.org/Content/NavigationMenu/WhoWeAre/WhatWeDo/default.htm> (last visited June 11, 2011).

¹⁵⁴ <http://www.cbwtp.org/jsp/cbwtp/program/history.jsp> (last visited June 11, 2011).

¹⁵⁵ <http://www.cbwtp.org/jsp/cbwtp/program/partners.jsp> (last visited June 11, 2011).

¹⁵⁶ <http://www.cbwtp.org/jsp/cbwtp/program/history.jsp> (last visited June 11, 2011).

¹⁵⁷ In 2004, for example, the agencies responsible for operating the FCRPS updated the 2000 BiOp, and indicated simply that they would “[c]ontinue implementing streamflow and instream water transaction programs.” U.S. ARMY CORPS OF ENGINEERS, BUREAU OF RECLAMATION, AND BONNEVILLE POWER ADMINISTRATION, FINAL UPDATED PROPOSED ACTION FOR THE FCRPS BIOLOGICAL OPINION REMAND 26 (Nov. 24, 2004).

¹⁵⁸ NORTHWEST POWER AND CONSERVATION COUNCIL, COLUMBIA RIVER BASIN FISH AND WILDLIFE PROGRAM 62 (2009). The Council provided additional guidance to the program, including a direction to “consider the potential impact of climate change while making water transaction recommendations” as much as possible. *Id.*

program was just over \$4 million for Fiscal Year 2009,¹⁵⁹ and about \$4.12 million for Fiscal Year 2010.¹⁶⁰

C. Voter-approved bond funds: Nevada’s Question 1 program

In 2001, the Nevada Legislature referred a proposal to voters, which appeared as “Question 1” on the state’s 2002 general election ballot. Nevada’s voters approved Question 1, authorizing up to \$200 million in general obligation bonds, proceeds from the sale of which would go into a new Fund to Protect Natural Resources. This Fund would provide money for a diverse array of conservation measures, including water right acquisitions for various public purposes. This Nevada program is notable not only for its source of funding—general obligation bonds—but also because it offers an example of direct voter approval of money for water right acquisitions.

According to its proponents, the bill introduced in the 2001 Nevada Legislature¹⁶¹ represented two years’ worth of effort by a diverse coalition that included various state agencies, the Las Vegas Water District, the Nature Conservancy, and several local parks and recreation departments.¹⁶² The Director of the Nevada Department of Conservation and Natural Resources (DCNR)—whose agency stood to receive the largest block of funding if the measure was approved—was the lead witness in legislative hearings on the bill.¹⁶³ He identified the State

¹⁵⁹ NATIONAL FISH AND WILDLIFE FOUNDATION, COLUMBIA BASIN WATER TRANSACTIONS PROGRAM, FY09 ANNUAL REPORT (2010). Bonneville spent an additional \$448,212 on related Idaho water transaction expenses that were considered separate from the CBWTP. *Id.*

¹⁶⁰ NATIONAL FISH AND WILDLIFE FOUNDATION, COLUMBIA BASIN WATER TRANSACTIONS PROGRAM, FY10 ANNUAL REPORT (2011). The 2010 spending is not an “apples to apples” comparison with 2009, however, because it includes spending on items not previously considered part of the CBWTP, including the Idaho program mentioned in the previous footnote.

¹⁶¹ The bill was originally styled A.B. 615 in the 71st session of the Nevada Legislature (2001). An amended version of A.B. 615 became A.B. 9 in a special session later that year, when it was approved by the Legislature. <http://www.leg.state.nv.us/Session/71st2001/Reports/history.cfm?ID=4601> (last visited August 19, 2011).

¹⁶² *Minutes of the Senate Committee on Finance*, 71st Sess. 16 (June 4, 2001) (statement of Ame Hellman, State Director of The Nature Conservancy, on Assembly Bill 615).

¹⁶³ *Id.* at 15 (statement of R. Michael Turnipseed, Director, State Department of Conservation and Natural Resources, on Assembly Bill 615).

Director of The Nature Conservancy and the Administrator of the Division of State Lands as the bill's main architects.¹⁶⁴

In their legislative testimony, the bill's proponents noted that Nevada voters had approved (by a 2 to 1 margin) a \$50 million bond measure in 1990 for a narrower set of conservation purposes, but that the resulting money had mostly been spent.¹⁶⁵ They argued that the new bill would provide a source of matching funds for federal dollars directed to Nevada for conservation purposes, including money from the federal Land and Water Conservation Fund.¹⁶⁶ They acknowledged that the coalition had worked to revise the bill so that it identified a range of specific projects, both from northern and southern Nevada, which would receive funding if the measure was approved.¹⁶⁷ The DCNR director submitted a fact sheet calling the bill "a landmark environmental initiative designed to benefit, protect and preserve Nevada's state, regional and local natural resources."¹⁶⁸

Opposition to the bill in the legislature appears to have been remarkably thin. One committee hearing included a serious discussion of property tax impacts, but the focus was on whether the measure would cause certain counties to exceed an established cap on taxation rates,

¹⁶⁴ *Id.* at 16.

¹⁶⁵ *Id.* (statement of Ame Hellman, State Director of The Nature Conservancy, explaining that 1990 measure had generated almost \$50 million in funding, but that money had been "completely expended;" *Minutes of the Meeting of the Assembly Committee on Ways and Means*, 71st Sess. 2 (May 23, 2001) (statement of Hellman, noting that 66 percent of Nevada voters had approved the 1990 measure).

¹⁶⁶ *Minutes of the Senate Committee on Finance*, 71st Sess. 17 (June 4, 2001) (statement of Wayne R. Perock, Administrator, Division of State Parks, explaining that the State of Nevada was in line to receive up to \$70 million under the federal Land and Water Conservation Fund over the next ten years, but would have to meet a 50 percent cost share requirement for this funding; also noting the existence of many other federal and private funding sources that could be leveraged using the proposed bond funds).

¹⁶⁷ *Id.* at 18 (statement of Ame Hellman, State Director of The Nature Conservancy, explaining how the bill now included funding provisions for many more specific projects, especially in northern Nevada). As enacted, the legislation authorized funding for many different types of projects, ranging from creating a museum at the Las Vegas Springs Preserve (§2.5, \$35 million), to providing statewide grants for construction of recreational trails (§2.7(a)(1), \$7.25 million), to funding Washoe County's efforts "to enhance and restore the Truckee River corridor" (§2.6, \$10 million). A.B. 9, 17th Special Sess. (Nev. 2001).

¹⁶⁸ Fact Sheet, AB 615 Overview (page 3 of exhibit C presented by R. Michael Turnipseed, Director, State Department of Conservation and Natural Resources, at Assembly Committee on Ways and Means hearing on AB 615, May 23, 2001) (on file with author).

not on whether the proposal represented a worthy use of tax dollars.¹⁶⁹ Fairly late in the process one senator called the \$200 million “a lot of money,”¹⁷⁰ but the bill passed the Senate unanimously the next day, having earlier passed the Assembly by a vote of 35-4.¹⁷¹

On the 2002 ballot, Question 1 asked voters whether to authorize a general obligation bond issue of up to \$200 million “in order to preserve water quality; protect open space, lakes, rivers, wetlands, and wildlife habitat; and restore and improve parks, recreational areas, and historic and cultural resources[.]”¹⁷² In summarizing the arguments for passing Question 1, the Nevada Secretary of State’s office noted that Nevada was the fastest growing state in the country, that the bond measure would help protect the state’s natural resources from the impacts of that growth, and that the money from the last conservation bond had all been spent.¹⁷³ The contrary argument was simply that bonds required tax dollars, and that although “conservation projects may be needed, tax revenue should not be used for this purpose during times of financial uncertainty.”¹⁷⁴ That concern failed to persuade most Nevada voters, who approved Question 1 by a nearly 3 to 2 margin.¹⁷⁵

The full text of Question 1 was highly prescriptive about amounts of bond funding to be directed to specific purposes and locations, and many of its provisions authorized use of money for water acquisitions. In three places, for example, specific counties were allowed to spend

¹⁶⁹ *Minutes of the Meeting of the Assembly Committee on Ways and Means*, 71st Sess. 14-16 (June 1, 2001).

¹⁷⁰ *Minutes of the Senate Committee on Finance*, 71st Sess. 27 (June 4, 2001) (statement of Sen. O’Donnell).

¹⁷¹ <http://www.leg.state.nv.us/Session/71st2001/Reports/history.cfm?ID=4601> (last visited August 19, 2011). In the subsequent special session this bill became AB 9, and passed by votes of 38-2 in the House and 21-0 in the Senate. <http://www.leg.state.nv.us/Session/17th2001Special/Reports/history.cfm?ID=4829> (last visited August 19, 2011).

¹⁷² SECRETARY OF STATE, STATE OF NEVADA, STATEWIDE BALLOT QUESTIONS 2002, Question 1, p. 1 (on file with author).

¹⁷³ *Id.*, Question 1, p. 2.

¹⁷⁴ *Id.*

¹⁷⁵ The final count was 291,262 to 200, 143, or 59.3% in favor. *Id.*, Question 1, p. 1 (handwritten notation).

bond funds to “[a]cquire and develop land and water rights” for parks and river corridors.¹⁷⁶ More generally, \$20 million was earmarked for grants to counties and municipalities “for the acquisition of land and water or interests in land and water to protect and enhance wildlife habitat, sensitive or unique vegetation, historic or cultural resources, riparian corridors, wetlands and other environmental resources”¹⁷⁷ Another \$15 million was provided for contracts with nonprofit organizations to make acquisitions for these same purposes.¹⁷⁸ A further \$5 million was set aside for grants to government or nonprofit entities to acquire land and water for urban parks and greenbelts.¹⁷⁹ Question 1 specified that interests in land or water could not be acquired through eminent domain, and that water right acquisitions must not cause injury to other holders of water rights.¹⁸⁰

The language of Question 1 reflects the reality that water right acquisitions can serve a variety of important public purposes, from wildlife habitat to urban parks. And the overwhelming support for Question 1—among both legislators and voters—shows that investments in water acquisitions can be popular even in a conservative state such as Nevada.¹⁸¹

¹⁷⁶ These three provisions involved Clark County, to develop a regional wetlands park at Las Vegas Wash (\$2.4, \$10 million); Washoe County, to enhance and restore the Truckee River corridor (\$2.6, \$10 million); and Churchill, Douglas, or Lyon County (or certain cities in the same area) to enhance and restore the Carson River corridor (§2.7(a)(6), \$10 million). These funds could also be used for other purposes, including providing recreational facilities, parking, and river access. *Id.*, Question 1, pp. 3-4.

¹⁷⁷ *Id.*, Question 1, p. 4 (such acquisitions required to be “pursuant to an adopted plan for open spaces”).

¹⁷⁸ *Id.* (any state funding “must be matched by an amount of money or value of services, material or equipment that is equal to 50 percent of the cost of the acquisition”).

¹⁷⁹ *Id.*

¹⁸⁰ *Id.*, Question 1, p. 5.

¹⁸¹ A somewhat less conservative state, California, also authorized public funding for environmental water acquisitions through a statewide ballot initiative in 2002. 2002 Cal. Legis. Serv. Prop. 50 (West). The measure authorized up to \$825 million “for the balanced implementation of the CALFED Bay-Delta Program,” including up to \$180 million

for water supply reliability projects that can be implemented expeditiously and thereby provide near-term benefits, including, but not limited to, projects that facilitate groundwater management and storage, water transfers, and acquisition of water for the CALFED environmental water account. In acquiring water, preference shall be given to long-term water purchase contracts and water rights.

CAL. WATER CODE § 79550(d). The measure authorized a total of \$3.44 billion on bonds, CAL. WATER CODE § 79580, proceeds of which were directed to a variety of water-related purposes including the CALFED program.

D. Dedicated percentage of lottery proceeds: Oregon’s Measures 66 and 76

Oregon voters, too, have directly authorized the use of public money for water right acquisitions (among many other things) by approving Measure 66 in 1998 and Measure 76 in 2010. Unlike Nevada’s Question 1, however, these measures reached the ballot as a result of citizen petitions rather than legislative referrals.¹⁸² Oregon’s initiatives are similar to Question 1 in that they direct substantial public funding to a variety of purposes relating to conservation and recreation, but they provide that money from a different revenue stream: state lottery proceeds.

Measure 66 appeared on Oregon’s 1998 general election ballot as a proposed amendment to the state constitution.¹⁸³ The ballot title explained that a “yes” vote would dedicate 15 percent of state lottery proceeds to parks and beaches, salmon and wildlife habitat, and watershed protection; a “no” vote would continue to restrict lottery funding to job creation, economic development, and education.¹⁸⁴ The measure required that half of this 15% of net lottery proceeds go to a “parks and natural resources fund” to be spent chiefly on state parks and ocean beaches, and the other half “be distributed for the public purpose of financing the restoration and protection of native salmonid populations, watersheds, fish and wildlife habitats and water

Proposition 50 passed with more than 55 percent of the vote. <http://www.sos.ca.gov/elections/sov/2002-general/sum.pdf> (last visited August 19, 2011).

¹⁸² Oregon’s initiative process allows voters to get a measure on the general election ballot without going through the legislature. Such measures may be either constitutional amendments or statutes. The petitioners must first obtain the Secretary of State’s approval to circulate signature sheets and covers, and must then gather and submit a sufficient number of valid signatures to qualify the measure for the ballot. For 2010 the number of valid signatures needed to qualify a constitutional measure for the ballot was over 110,000.

http://www.sos.state.or.us/elections/pages/publications/manuals/state_initiative_referendum/overview.html (last visited August 22, 2011).

¹⁸³ OREGON SECRETARY OF STATE, OFFICIAL 1998 GENERAL ELECTION ONLINE VOTERS GUIDE, Measure Contents, <http://www.sos.state.or.us/elections/pages/history/archive/nov31998/guide/measure/mcontent.htm> (last visited August 22, 2011).

¹⁸⁴ OREGON SECRETARY OF STATE, OFFICIAL 1998 GENERAL ELECTION ONLINE VOTERS GUIDE, Measure 66 ballot title, <http://www.sos.state.or.us/elections/pages/history/archive/nov31998/guide/measure/m66.htm> (last visited August 22, 2011).

quality in Oregon.”¹⁸⁵ It also specifically prohibited the Oregon Legislature from limiting expenditures from the parks and natural resources fund.¹⁸⁶

Conservation groups and parks advocates were actively involved in promoting Measure 66,¹⁸⁷ and their arguments emphasized the need to protect Oregon’s parks and waters from being degraded by budget cuts, population growth, and other threats.¹⁸⁸ Although it did raise some concerns, based partly on the potential impacts of redirecting a portion of lottery proceeds,¹⁸⁹ the opposition to Measure 66 was far less spirited than the support: the official Oregon voter’s guide contained twenty-one statements in support and only one in opposition, and the latter largely focused on the evils of gambling.¹⁹⁰ Measure 66 eventually prevailed by a margin greater than 2 to 1, and carried 28 of 36 counties, losing only in 8 smaller counties east of the Cascades.¹⁹¹

The language authorizing water right acquisitions was certainly not the most prominent—or most clearly written—feature of Measure 66. It appeared in the “natural resources” (as opposed to parks) section, which described permissible uses for the money directed to protection

¹⁸⁵ OREGON SECRETARY OF STATE, OFFICIAL 1998 GENERAL ELECTION ONLINE VOTERS GUIDE, Measure 66 text §4(5), <http://www.sos.state.or.us/elections/pages/history/archive/nov31998/guide/measure/m66.htm> (last visited August 22, 2011).

¹⁸⁶ *Id.*

¹⁸⁷ The chief petitioners for the initiative petition that would become Measure 66 were two members of the State Parks Commission and the director of the conservation group Oregon Trout. OREGON SECRETARY OF STATE, OFFICIAL 1998 GENERAL ELECTION ONLINE VOTERS GUIDE, Argument in Favor by Booth, Stewart, and Pampush, <http://www.sos.state.or.us/elections/pages/history/archive/nov31998/guide/measure/m66.htm> (last visited August 22, 2011). But two notable industry groups, the Oregon Building Industry Association and the Oregon Forest Industry Council, lent their names to a voters’ pamphlet letter along with roughly 20 environmental, sporting, and “friends” groups. *Id.*, Argument in Favor by 1,000 Friends of Oregon et al.

¹⁸⁸ Such argument appear throughout the twenty-one “arguments in favor” of Measure 66 in the 1998 Voter’s Pamphlet. *Id.*, Arguments in Favor of Measure 66.

¹⁸⁹ These arguments are summarized in a remarkably thorough analysis of Measure 66 prepared by a committee of the City Club of Portland and published weeks before the election. CITY CLUB OF PORTLAND, BALLOT MEASURE 66: LOTTERY FUNDS FOR PARKS AND WATERSHEDS (Oct. 23, 1998) (on file with author).

¹⁹⁰ OREGON SECRETARY OF STATE, OFFICIAL 1998 GENERAL ELECTION ONLINE VOTERS GUIDE, Argument in Opposition by Marbet, <http://www.sos.state.or.us/elections/pages/history/archive/nov31998/guide/measure/m66.htm> (last visited August 22, 2011).

¹⁹¹ The final margin was 742,038 to 362, 247. A majority voted “no” only in Baker, Grant, Harney, Lake, Malheur, Sherman, Wallowa, and Wheeler Counties. <http://www.sos.state.or.us/elections/pages/history/archive/nov31998/other.info/m66.htm> (last visited August 22, 2011).

and restoration of salmonid populations, watersheds, fish and wildlife habitat, and water quality.¹⁹² Such funds were to be spent on five listed categories of activities, the fourth of which was “[e]ntering into agreements to obtain from willing owners determinate interests in lands and waters that protect watershed resources, including but not limited to fee simple interests in land, leases of land or conservation easements.”¹⁹³ Thus, while addressing water, the language focused largely on land acquisition. It clearly authorized acquisition of various kinds of interests in land and water, and required that any acquisition be from a willing seller or lessor. The Oregon Watershed Enhancement Board—the entity responsible for disbursing natural resources funding under Measure 66—eventually would promulgate detailed rules establishing standards and procedures for allocating funds to water acquisition projects.¹⁹⁴

Measure 66 included a 2015 sunset date, and essentially required a citizen re-vote in 2014.¹⁹⁵ Rather than wait until then, however, parks and wildlife advocates sought to have voters decide the issue in 2010. They again used the initiative process successfully, qualifying the proposal for the general election ballot, where it appeared as Measure 76. This new measure would not only make permanent the 15 percent of lottery proceeds for parks and other purposes,

¹⁹² OREGON SECRETARY OF STATE, OFFICIAL 1998 GENERAL ELECTION ONLINE VOTERS GUIDE, Measure 66 text §4b, <http://www.sos.state.or.us/elections/pages/history/archive/nov31998/guide/measure/m66.htm> (last visited August 22, 2011).

¹⁹³ *Id.*, §4b(4). The other listed categories under this heading were habitat conservation activities, watershed and riparian education efforts, and watershed and water quality enhancement plans, and enforcement of laws and regulations relating to fish, wildlife, and habitat protection.

¹⁹⁴ OR. ADMIN. R. 695-046-0010 to 695-046-0170. Under these rules, “Water acquisition project grant awards will only provide funding to assist with the purchase or lease price for an interest in water. Interests in water include short-term instream leases, including split season use instream leases, and permanent and time-limited instream transfers.” OR. ADMIN. R. 695-046-0025. The rules state four criteria for evaluating water acquisition grant applications: ecological benefits of the project; financial partners and other supporters of the project; the project’s effects on the “local and regional community”; and the project’s legal and financial soundness. OR. ADMIN. R. 695-046-0040.

¹⁹⁵ OREGON SECRETARY OF STATE, OFFICIAL 1998 GENERAL ELECTION ONLINE VOTERS GUIDE, Measure 66 text §5a, <http://www.sos.state.or.us/elections/pages/history/archive/nov31998/guide/measure/m66.htm> (last visited August 22, 2011).

but would also expand and revise the constitutional wording on how the money could be spent.¹⁹⁶

The 2010 election might have seemed like bad timing for Measure 76. Given Oregon's grim economic picture in the latter part of that year,¹⁹⁷ one may have expected serious conflict over a measure that would permanently allocate a major chunk of annual lottery revenue—officially estimated at \$87 million for 2011¹⁹⁸--for purposes such as salmon habitat. Taking nothing for granted, Measure 76 proponents placed more than 40 statements of support in the official 2010 voter's pamphlet.¹⁹⁹ Amazingly, however, not one statement of opposition appeared. The final election results were even more remarkable, as Measure 76 not only received better than 69 percent approval statewide, but even won a majority in *every county*.²⁰⁰

¹⁹⁶ OREGON SECRETARY OF STATE, OFFICIAL 2010 GENERAL ELECTION ONLINE VOTERS GUIDE, Measure 76 text, http://www.sos.state.or.us/elections/pages/history/archive/nov022010/guide/measure/m76_text.htm (last visited August 22, 2011). For example, Measure 76 created a new “natural resources subaccount” for the 50% of proceeds not going to parks, and prohibited the Legislature from limiting expenditures from it, just as Measure 66 had done for the parks subaccount. *Id.*, § 4b(1). It also included new provisions to ensure accountable spending. *Id.*, § 4c.

¹⁹⁷ Oregon's unemployment rate significantly exceeded the national average throughout 2010. For September and October 2010, for example, Oregon's seasonally adjusted unemployment was 10.5 percent, nearly a full point above the national rate. Press Release, Oregon Employment Dept., Oregon Statewide Unemployment Rate – October 2010 (Nov. 17, 2010), available at http://www.oregon.gov/EMPLOY/COMM/news/october_2010_unemployment.shtml (last visited August 22, 2011).

¹⁹⁸ OREGON SECRETARY OF STATE, OFFICIAL 2010 GENERAL ELECTION ONLINE VOTERS GUIDE, Estimate of Financial Impact, http://www.sos.state.or.us/elections/pages/history/archive/nov022010/guide/measure/m76_bt.htm (last visited August 22, 2011).

¹⁹⁹ These “argument in favor” statements came from a variety of entities—including farmers, business owners, teachers, and various government officials as well as environmental and park advocates—and raised a wide range of arguments, including economic ones. For example, nine businessmen and women signed a letter stating that Measure 76 would preserve stable funding for environmental projects, producing “thousands of jobs across Oregon and millions of dollars in total economic impact” OREGON SECRETARY OF STATE, OFFICIAL 2010 GENERAL ELECTION ONLINE VOTERS GUIDE, Argument in Favor by Thorndike et al.,

http://www.sos.state.or.us/elections/pages/history/archive/nov022010/guide/measure/m76_fav.htm (last visited August 22, 2011). Then-Congressman David Wu wrote a letter focusing entirely on the value of Measure 76 in helping secure federal funding: “I know the advantage of bringing federal matching funds back home to help us all through tough times.... Measure 76 helps put Oregon at the top of the list for matching funds for things like clean water protection, job creation, and preservation of our natural treasures.” *Id.*, Argument in Favor by Wu.

²⁰⁰ <http://www.sos.state.or.us/elections/doc/history/nov22010/results/m76.pdf> (last visited August 22, 2011).

Consider that in that same election, Republican U.S. Senate candidate Jim Huffman—a.k.a. Professor James Huffman, honored in this symposium—lost to incumbent Ron Wyden by more than a quarter million votes statewide, but beat Wyden in 19 of Oregon's 36 counties.

<http://www.sos.state.or.us/elections/doc/history/nov22010/results/us.pdf> (last visited August 22, 2011).

Measure 76 made a few substantive revisions to the constitutional text,²⁰¹ and it certainly raised the visibility and clarity of the water acquisitions language. The acquisitions provision jumped from last to first in the list of acceptable purposes for natural resources funding, and now authorized grants to “[a]cquire from willing owners interests in land or water that will protect or restore native fish or wildlife habitats, which interests may include but are not limited to fee interests, conservation easements or leases.”²⁰² Unlike the Measure 66 language—which mentioned land three times and water only once—this new provision seemed to place water and land acquisitions on the same plane. Moreover, Measure 76 added a new item to the list of approved purposes, authorizing grants for “projects to protect or restore natural watershed functions to improve water quality or stream flows.”²⁰³ Thus, whereas the 1998 measure seemed to downplay water acquisitions as a potential use of the directed funds, the 2010 version was more direct in stating that money would be spent to obtain water rights and restore stream flows.

Here again, Measures 66 and 76 (like Question 1 in Nevada) go far beyond water, providing money for a range of public purposes. But the strong support the Oregon measures received in two general elections shows that statewide voters can indeed be mobilized to ensure significant funding—in this case, a portion of lottery proceeds worth tens of millions per year—for natural resources conservation, including the purchase and lease of water rights.²⁰⁴

²⁰¹ For example, Measure 76 authorized funding to benefit “native fish and wildlife,” whereas Measure 66 had focused more narrowly on “wild salmonid populations.” OREGON SECRETARY OF STATE, OFFICIAL 2010 GENERAL ELECTION ONLINE VOTERS GUIDE, Measure 76 text, §4b(1)(b)-(c) http://www.sos.state.or.us/elections/pages/history/archive/nov022010/guide/measure/m76_text.htm (last visited August 22, 2011).

²⁰² *Id.*, § 4b(2)(a).

²⁰³ *Id.*, § 4b(2)(c).

²⁰⁴ Colorado also has a major portion of its lottery proceeds earmarked for conservation and recreation projects under the Great Outdoors Colorado (GOCO) program, approved by voters in 1992. The GOCO initiative added language to the Colorado Constitution earmarking most of the net proceeds of state lottery games to a new Great Outdoors Colorado Trust Fund. COLO. CONST. art. XXVII, §§2-3. The GOCO Program is intended “to preserve, protect, enhance and manage the state’s wildlife, park, river, trail and open space heritage.” COLO. CONST. art. XXVII, §§1(1). The constitution authorizes four different GOCO grant programs, including one for outdoor recreation, and this latter program may provide grants to “[p]rovide water for recreational purposes through the

E. Voluntary contributions by water utility customers: Albuquerque’s Living River Fund

One of the most recent public funding programs for environmental water acquisitions—and perhaps the smallest in dollar terms—is the Living River Fund, administered by the Albuquerque-Bernalillo County Water Utility Authority (the Authority). One might argue that it is not a public funding program at all, because the money going into the Living River Fund comes from voluntary payments by private entities. But because it involves a public entity—the Authority—soliciting, collecting, holding and (someday) spending money contributed specifically for environmental water acquisitions, it is best viewed as a public funding program.

The Living River Fund arose from the lengthy and bitter litigation over the effect of the Endangered Species Act on operations of federal water projects in New Mexico’s Rio Grande Basin.²⁰⁵ Environmental groups sued USBR, arguing that the agency was failing to meet its duties under ESA § 7 in operating the Middle Rio Grande and San Juan-Chama Projects, and thus putting the endangered Rio Grande silvery minnow at risk of extinction.²⁰⁶ After a significant victory for the plaintiffs in the Tenth Circuit Court of Appeals,²⁰⁷ Congress enacted an appropriations rider which effectively removed the San Juan-Chama Project (SJCP) from the

acquisition of water rights or through agreements with holders of water rights, all in accord with applicable state water law.” COLO. CONST. art. XXVII, §§1(b)(IV). This is GOCO’s only language specifically authorizing water right acquisitions, and thus, GOCO may be viewed as directing public funds primarily to secure *recreational* rather than environmental water. The GOCO wildlife program, however, may provide grants to “[p]rotect crucial wildlife habitats through the acquisition of lands, leases or easements and restore critical areas.” COLO. CONST. art. XXVII, §§1(a)(IV). GOCO has evidently read this language to authorize grants to acquire water “for aquatic habitat restoration or enhancement pursuant to Colorado water law. GREAT OUTDOORS COLORADO, FACT BOOK 2011 (on file with author).

²⁰⁵ Much has been written about this litigation. See, e.g., Beth Richards, Case Note, *The Pump Don’t Work Because the Bureau Took the Handle: The United States Bureau of Reclamation’s Discretion to Reduce Water Deliveries to Comply with the Endangered Species Act*, 4 WYO. L. REV. 113 (2004); Ethan R. Hasenstein, Note, *Frankenstein and Pitbull? Transmogrifying the Endangered Species Act and “Fixing” the San Juan-Chama Project after Rio Grande Silvery Minnow v. Keys*, 34 ENVTL. L. 1247 (2004); Lara Katz, *History of the Minnow Litigation and its Implications for the Future of Reservoir Operations on the Rio Grande*, 47 NAT. RESOURCES J. 675 (2007).

²⁰⁶ See *Rio Grande Silvery Minnow v. Keys*, 469 F.Supp.2d 973 (D. N.M. 2002). The Corps of Engineers was also a defendant early in the litigation, but the court held that the statutes governing flood control operations on the Rio Grande gave the Corps no discretion to comply with the ESA. *Id.* at 996-99.

²⁰⁷ *Rio Grande Silvery Minnow v. Keys*, 333 F.3d 1109 (10th Cir. 2003), *vacated as moot*, 355 F.3d 1215 (10th Cir. 2004).

litigation and shielded it from future ESA challenges regarding the silvery minnow.²⁰⁸ The Authority, which is the major beneficiary of the SJCP and was in the process of converting its municipal water supply from groundwater to SJCP water, then reached a settlement with the environmental plaintiffs.²⁰⁹ One of the Authority's commitments in the settlement was to establish the Living River Fund.

The settlement agreement contained a single paragraph on the Living River Fund, largely addressing the purpose for the program. The Authority agreed to establish “a residential check-off program whereby residents may choose to pay an additional \$1.00/month on their monthly water bill provided that such additional sums are allocated exclusively to acquire water to increase flows in the Rio Grande.”²¹⁰ The agreement also required the Authority to make available 30,000 acre-feet of storage space in an upstream reservoir, which would then be available to store water acquired for environmental purposes; the document provided that water obtained through the Living River Fund would be stored there and “used to increase flows in the Rio Grande and protect federally-listed species dependent on the river.”²¹¹

The settlement allowed the Authority to recover the administrative costs of running the program from the donations themselves, and directed the Authority to fill in the details and carry out the program.²¹² Other than specifying the use of donated funds, however, the document imposed no particular obligations or restrictions on the Authority. For example, it specified no timeframe for using the fund to actually acquire water, contained no requirement for the Authority to promote the program, and gave the Authority no incentive to maximize donations.

²⁰⁸ Pub. L. No. 108-137, § 208, 117 Stat. 1827, 1849-50 (2003).

²⁰⁹ Settlement Agreement between *Rio Grande Silvery Minnow v. Keys* Plaintiffs, the City of Albuquerque and the Albuquerque-Bernalillo County Water Utility Authority, *Rio Grande Silvery Minnow v. Keys*, No. 99 CV 1320 (D. N.M.) (2005) (on file with author).

²¹⁰ *Id.* at 4.

²¹¹ *Id.* at 2-4.

²¹² *Id.* at 4.

Given that the Authority has carte blanche over the program, and seemingly no stake in its success, it is not surprising that the Living River Fund has gotten off to a very slow start. Contributions have been in the range of \$5000 to \$6000 per year,²¹³ indicating that only perhaps 500 Albuquerque residential customers donate an additional \$1 per month—a strikingly low sum, given that the Authority serves a population of nearly 600,000 people.²¹⁴ Monthly water bills contain a box next to the statement “Check here to contribute \$1.00 to the Living River Fund (Be sure to add \$1 to your payment),” but never explain what the Living River Fund is or where customers can find more information. The Authority’s website does contain general information on the Living River Fund,²¹⁵ but not in the pages explaining water bills or how to pay them; instead, it is at the bottom of a drop-down list of “important links,” below such items as “cockroach control” and “compost.”²¹⁶

Another example of a voluntary check-off program for river conservation is the Colorado Healthy Rivers Fund. It was created by the Colorado Legislature, which passed a statute “to provide Colorado citizens the opportunity to support local watershed protection efforts by allowing citizens to make a voluntary contribution on their state income tax returns for such

²¹³ E-mail from David Morris, Public Affairs Manager, Albuquerque-Bernalillo County Water Utility Authority, to Reed D. Benson, Professor of Law, University of New Mexico School of Law (June 29, 2011, 13:41 MDT) (on file with author).

²¹⁴ ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY, ANNUAL INFORMATION STATEMENT 6 (2011), <http://www.abcwua.org/pdfs/2011ais.pdf>. The Authority served water to 172,766 residential meters as of June 2010. *Id.* Assuming that 500 accounts donated each month for a total of \$6000, participation in the Living River Fund would be less than three-tenths of one percent.

²¹⁵ The Authority’s webpage states, “The Living River Fund will be used to establish a water rights purchase program in an effort to provide sustained flows for the Rio Grande and the endangered species that depend on it.” Albuquerque Bernalillo County Water Utility Authority, Living River Fund, <http://www.abcwua.org/content/view/349/568> (last visited August 29, 2011). Most of the information on this page, however, deals with how customers can (and cannot) donate money to the Fund.

²¹⁶ Albuquerque Bernalillo County Water Utility Authority, Important Links, <http://www.abcwua.org/content/view/214/385> (last visited August 29, 2011). The Authority also held a press conference and did a “bill stuffer” regarding the Living River Fund. E-mail from David Morris, Public Affairs Manager, Albuquerque-Bernalillo County Water Utility Authority, to Reed D. Benson, Professor of Law, University of New Mexico School of Law (June 29, 2011, 13:41 MDT) (on file with author).

purpose.”²¹⁷ It required Colorado state tax return forms to contain a line allowing the taxpayer to designate what amount, if any, s/he wished to contribute to the fund;²¹⁸ the money would be used for grants “to any qualified resident of Colorado to work toward the restoration and protection of land and natural resources within watersheds in Colorado.”²¹⁹ In practice, taxpayer donations have been modest, averaging about \$90,000 per year.²²⁰ The Colorado Healthy Rivers Fund is evidently not a water acquisitions program: recent grants have not funded water acquisitions,²²¹ and while neither the grant guidance²²² nor the authorizing statute²²³ specifically bars grants for this purpose, neither offers much encouragement either. The program merits this passing mention, however, because it offers another approach for collecting voluntary contributions—a positive check-off on state tax returns—that potentially could be used to fund environmental water acquisitions.²²⁴

²¹⁷ 2002 Colo. Sess. Laws Ch. 281 (creating the Colorado Watershed Protection Fund). A later statute changed the name to the Colorado Healthy Rivers Fund. 2008 Colo. Sess. Laws Ch. 333, codified at COLO. REV. STAT. §§39-22-2402, 2403.

²¹⁸ COLO. REV. STAT. 39-22-2402.

²¹⁹ COLO. REV. STAT. 39-22-2403(3). Two state agencies, the Colorado Water Quality Control Commission and the Colorado Water Conservation Board, would award these grants, *id.*, but the statute also provides that these agencies administer the fund in consultation with the Colorado Watershed Assembly, a nonprofit entity that serves as an umbrella group to local watershed groups in Colorado. COLO. REV. STAT. 39-22-2403(2), 39-22-2401.

²²⁰ The fund received \$88,585 in donations in 2010 for the 2009 tax year—about \$1,500 less than the average annual amount. COLORADO WATER CONSERVATION BOARD, COLORADO HEALTHY RIVERS FUND 2010 ANNUAL REPORT (2011) (on file with author).

²²¹ *Id.* (summarizing Colorado Healthy Rivers Fund grants in 2010 and the first quarter of 2011).

²²² Colorado Healthy Rivers Fund Grant Program Guidance (2010), *available at*

<http://www.cweb.state.co.us/LoansGrants/colorado-healthy-rivers-fund-grants/Documents/CHRFProgramGuidance.pdf> (last visited August 29, 2011) (explaining that project grants could be used for any of several specified purposes, “and a wide variety of other riparian, streambank and habitat restoration efforts,” but never mentioning water acquisitions or *flow* restoration).

²²³ If anything, the statute seems to subtly discourage water right acquisitions by prohibiting use of the fund to pay “to remove any diversion or improvement structure.” COLO. REV. STAT. 39-22-2403(4).

²²⁴ A recent white paper by the nonprofit organization Carpe Diem West identifies and analyzes several “user contribution programs,” and although these programs are primarily geared towards protecting the quality of water supply sources, they may offer useful lessons in the related context of environmental water acquisitions. CARPE DIEM WEST, USER CONTRIBUTION PROGRAMS: LINKING UPSTREAM WATERSHED HEALTH TO THE HEARTS, MINDS & WALLETS OF DOWNSTREAM WATER USERS (2010), *available at* http://www.carpediemwest.org/sites/carpediemwest.org/files/UCPReportFINALOctober2010_0.pdf (last visited August 29, 2011).

F. Payments in settlement of litigation: Truckee River Water Quality Settlement Agreement

Like the Living River Fund, the Truckee River Water Quality Settlement Agreement was created through settlement of environmental litigation, with the idea that water right acquisitions would help improve aquatic conditions and habitat on a particular river. Otherwise, however, the two have little in common. The Truckee Agreement requires both local and federal public entities to expend substantial sums of money—eight figures each for the United States and for a group of localities—specifically for water right acquisitions, by a certain deadline. Thus, it represents a truly public and substantial funding program established to help settle an environmental lawsuit.

The waters of the Truckee River have been the focus of an incredible volume and variety of litigation for the past half-century. Many of the cases have been brought by the Pyramid Lake Paiute Tribe, which has long been concerned about the decline of Pyramid Lake (the heart of the Tribe's reservation) and its fisheries due to water diversions from its main source, the Truckee.²²⁵ Following the Supreme Court's 1983 decision in *Nevada v. United States*,²²⁶ it was clear that the *Winters* doctrine of federal reserved water rights would not provide the legal basis for restoring Pyramid Lake and its fisheries. The Tribe did not give up, however, and continued to pursue litigation with the goal of increasing flows from the Truckee River into the lake.²²⁷

²²⁵ *E.g.*, Pyramid Lake Paiute Tribe of Indians v. Morton, 354 F. Supp. 252 (D. D.C. 1973); United States v. Alpine Land and Reservoir Co., 878 F.2d 1217 (9th Cir. 1989); Pyramid Lake Paiute Tribe v. United States Dep't of the Navy, 898 F.2d 1410 (9th Cir. 1990).

²²⁶ 463 U.S. 110 (1983) (holding that *res judicata* doctrine barred federal government's claims on behalf of the tribe for water rights to restore and sustain the Pyramid Lake fishery).

²²⁷ See Michael C. Blumm, David H. Becker, and Joshua D. Smith, *The Mirage of Indian Reserved Water Rights and Western Streamflow Restoration in the McCarran Amendment Era: A Promise Unfulfilled*, 36 ENVTL. L. 1157, 1188-93 (2006) (summarizing Pyramid Lake Paiutes' efforts to use the law to restore the lake and its fishery).

The Tribe filed two lawsuits against federal, state, and local government entities, largely focused on water quality issues in the Truckee.²²⁸ The parties reached a settlement agreement in 1996,²²⁹ the centerpiece of which was a water right acquisitions program to be funded by the federal and local governments. Acquisition of Truckee River water rights was intended to improve the river’s water quality and increase flows to Pyramid Lake.²³⁰

The Truckee Agreement required two different expenditures of \$12 million each for Truckee River water right acquisitions,²³¹ with the goal of spending those amounts within five years. One of the \$12 million mandates applied to the U.S. Interior Department, which agreed to seek appropriations in that amount by October 1, 2000, and to use the money “for the expeditious acquisition of Truckee River water rights.”²³² In addition, the Cities of Reno and Sparks and the County of Washoe committed a total of \$12 million to acquire such water rights “as nearly as possible at the same rate” as the Interior Department.²³³ The agreement further provided that if

²²⁸ Pyramid Lake Paiute Tribe of Indians v. United States Environmental Protection Agency, CV-R-85-025-DWH (D. Nev.); Pyramid Lake Paiute Tribe of Indians v. United States Environmental Protection Agency, CV-R-86-438-DWH (D. Nev.). These cases involved “Truckee River water quality standards for temperature, the Endangered Species Act, the Clean Water Act, and the construction and expansion of the wastewater treatment plant that eventually became known as the Truckee Meadows Water Reclamation Facility.” The Tribe sued the U.S. Environmental Protection Agency and Department of the Interior, The State of Nevada, and the Cities of Reno and Sparks. Don Springmeyer, *The Pyramid Lake Paiute Tribe, The Truckee River and Pyramid Lake—Decades of Battles for Better Instream Flow Quantity and Quality 6* (paper presented at the 29th Annual American Bar Ass’n Water Law Conference 2011), available at <http://www.wrslawyers.com/pdf/2011/Springmeyer-ABA-Conference-Paper.pdf> (last visited August 30, 2011).

²²⁹ Truckee River Water Quality Settlement Agreement, Pyramid Lake Paiute Tribe of Indians v. United States Environmental Protection Agency, No. CV-R-85-025-DWH and CV-R-86-438-DWH (D. Nev.) (1996) (on file with author).

²³⁰ *Id.* at 1. The Agreement also recognized that such acquisitions could “improve habitat conditions for the fish of Pyramid Lake and have the potential to increase the nutrient assimilative capacity of the Truckee River and reduce non-point source loadings of pollutants to the Truckee River.” *Id.*

²³¹ The Agreement stated its intent that the money be used to acquire water rather than lands, and provided that if funds were used to acquire lands as well as waters, that the lands be sold separately and the proceeds of such sales used to acquire more water rights. *Id.* at 2-3.

²³² The Interior Department committed to spend the \$12 million within five years “subject to the availability of appropriations.” *Id.* at 3.

²³³ *Id.* at 2. The Agreement did not specify how the \$12 million was to be allocated among the three local entities.

the local governments failed to spend the full amount on water rights within five years, the balance of the \$12 million would be placed in escrow for further acquisitions.²³⁴

The federal and local governments were not only required to acquire Truckee River water rights, but also to manage the water²³⁵ for specified purposes. The Agreement required the parties to manage and use the water

primarily to augment instream flows in the Truckee River from the Reno/Sparks area to Pyramid Lake to assist in the compliance with water quality standards, and also to improve water quality and to maintain and preserve the lower Truckee River and Pyramid Lake for purposes of fish and wildlife, including threatened and endangered species, and recreation.²³⁶

It also prescribed management priorities for the acquired water: supporting water quality in a specified reach of the Truckee, then maintaining aquatic and riparian habitat in the lower river, and finally promoting aesthetics and recreation from the Reno/Sparks area down to the lake.²³⁷

By contrast, the Truckee Agreement said little or nothing on other key elements of the required water right acquisitions program(s). Most interestingly, perhaps, the Agreement never explicitly stated that water would be acquired only from willing sellers. Money would be used for “Truckee River water rights,” but the Agreement said nothing further about the kind of water rights to be acquired, except to exclude those from the Carson Division of the Newlands Project.²³⁸ And although it required both the federal and local governments to spend money to acquire water rights, it never specified a particular entity to handle the acquisitions.

In practice, water right acquisitions have proceeded more slowly than anticipated in the Truckee Agreement. Thus, in 2001, the parties executed an amendment extending the timeline

²³⁴ *Id.* at 2-3.

²³⁵ The agreement contemplated storage of the acquired water in federal reservoirs in the Truckee River Basin, subject to various conditions. *Id.* at 6-7. Storage would allow for release of the water at times, and in quantities, to maximize the water quality and habitat benefits of the acquired water.

²³⁶ *Id.* at 4.

²³⁷ *Id.* at 4-5.

²³⁸ *Id.* at 6.

for acquisitions to fifteen years instead of the original five.²³⁹ The amendment recited that the local governments, “for reasons beyond their control, will not be able to complete their expenditure and purchases within the original time frame,” but had demonstrated their good faith in pursuing acquisitions, eliminating the need for the escrow provision of the 1996 agreement.²⁴⁰ As of early 2011, near the end of the fifteen year period of the revised Agreement, the \$24 million had nearly all been spent on water right acquisitions.²⁴¹

For purposes of this article, the local governments’ implementation of the Truckee Agreement is noteworthy in two respects. First, they have contracted with a specialized nonprofit entity, Great Basin Land and Water,²⁴² to handle water right negotiations and acquisitions.²⁴³ Second, they have funded their \$12 million obligation through user fees—specifically, by a portion of the revenues collected from users of their sewer systems.²⁴⁴ Thus, the Truckee Agreement offers an example of an acquisitions program funded through a municipal rate base, as well as a program that was established through settlement of litigation.²⁴⁵

²³⁹ Amendment to the Truckee River Water Quality Settlement Agreement (2001) (on file with author).

²⁴⁰ *Id.* The amendment noted that the local governments had already spent more than \$5.4 million in acquiring water rights, and were pursuing further acquisitions. It also stated that the Interior Department was “likewise encountering serious difficulties in expending its funds” to buy water rights.

²⁴¹ Springmeyer, *supra* note 228, at 7.

²⁴² According to its website, Great Basin Land and Water is a nonprofit organization dedicated to “preserving and enhancing the ecological, natural, scenic, historical and/or recreational values of important land and water resources primarily in the Great Basin areas of Nevada, Utah and California.” Water right acquisitions providing environmental, aesthetic and recreational benefits are one of the organization’s key tools.

http://www.greatbasinlandandwater.org/index.php?option=com_content&view=article&id=1&Itemid=3 (last visited August 30, 2011).

²⁴³ Staff Report from Jennifer M. Ruefer, Water Resources Planning Manager, Washoe County, to Board of County Commissioners Sept. 4, 2007) (on file with author) (explaining that the local governments had contracted with Great Basin Land and Water as the “purchasing agent” for water rights under the Truckee Agreement, and proposing to extend the contract into 2011). Great Basin Land and Water states that it has assisted the local governments and the Pyramid Lake Tribe in this effort since 1998, acquiring over 5,000 acre-feet of water rights.

http://www.greatbasinlandandwater.org/index.php?option=com_content&view=article&id=4&Itemid=5 (last visited August 30, 2011).

²⁴⁴ “The water rights acquisition funds in support of the [Truckee Agreement] are generated by a dedicated portion of the sewer user and hookup fees collected by the Cities of Reno and Sparks and Washoe County from customers served by the Truckee Meadows Water Reclamation Facility.” Staff Report, *supra* note 243.

²⁴⁵ Another litigation settlement example involves the Albuquerque-Bernalillo County Water Utility Authority. As discussed above, the Authority settled a dispute with environmental plaintiffs regarding its use of water from the

The foregoing review does not discuss all of the public programs for environmental water acquisitions, but does illustrate the many different ways that they have been started, structured, and funded. This diversity shows the wide range of options available for creating and designing a program. It also makes it difficult to distill generally applicable lessons about these programs as a group ... but the conclusion offers a few.

V. Conclusion

The foregoing review of public funding programs for environmental water acquisitions shows the remarkable variety of such programs established in the West. This article has focused on the many different revenue sources involved, but that is only part of the diversity. There are programs operated by every level of government, from federal to local. The environmental purposes run the gamut, including everything from endangered species and water quality, to wetlands and urban parks, to tribal fisheries and ceremonial uses. The legal origins also vary widely, ranging from the citizen initiative process, through Congressional appropriations, settlement of federal litigation, to the “black box” of interagency consultation under ESA § 7. Many kinds of entities have been entrusted with handling water acquisitions, including federal agencies, state agencies, tribes, nonprofit organizations, and others. Finally, these programs have taken hold all across the region—not just on the West Coast, but also in Colorado, Montana, Nevada, and New Mexico. Literally and figuratively, these programs are all over the map.

The diverse funding sources of these programs seem to represent a variety a principles on who should pay for environmental water acquisitions. The CVP Restoration Fund reflects the

federal San Juan-Chama Project. *Supra* notes 205-12 and accompanying text. In addition to creating the Living River Fund, that settlement also required the Authority to provide \$225,000 in funding for a “pilot water leasing program for the Middle Rio Grande area via agricultural forbearance to increase flows in the Rio Grande and protect federally-listed species dependent on the river.” Settlement Agreement, *supra* note 209, at 4. That money came from funds dedicated to the Authority’s project to obtain its primary drinking water supply from the SJCP. E-mail from David Morris, Public Affairs Manager, Albuquerque-Bernalillo County Water Utility Authority, to Reed D. Benson, Professor of Law, University of New Mexico School of Law (July 1, 2011, 08:53 MDT) (on file with author).

idea that water users have contributed to environmental problems that they should help pay to remediate, akin to the “polluter pays” principle.²⁴⁶ The supplemental “habitat stamp” funding for the Colorado acquisitions program may reflect the notion that the primary beneficiaries of water acquisitions, in this case anglers and hunters, should pay for them. The Living River Fund looks to volunteers despite the inevitable free rider problems,²⁴⁷ presumably relying on those who feel most passionately about the Rio Grande or most guilty about their household water use.

Programs funded by appropriations or general obligation bonds (such as Nevada’s) place the burden on the taxpaying public, consistent with a view that everyone, more or less, is responsible for the problem and/or will benefit from the solution. Lottery dollars may be the hardest funding source to explain, given that lottery players as a class seemingly have no special connection to any form of water use; thus, the principle underlying Measures 66 and 76 seemingly is simple pragmatism, i.e., “whatever works.” While these principles may be philosophically inconsistent, they are not mutually exclusive—that is, there is no reason why one public funding program could not draw money from all of these sources and more.

While there may be no “best” source of money for such programs, some are obviously better than others. The better revenue streams will not only provide enough money for a meaningful level of water acquisitions, but will be reliable over time. The CBWTP and the Measure 66/76 program, supplied with money from federal hydropower revenues and state lottery proceeds, respectively, enjoy relatively stable funding. A lump sum to be spent over time, such as the money made available through the Truckee River Settlement Agreement and Nevada’s Question 1 bond sales, is predictable but exhaustible, requiring renewal if the needs for water acquisitions outlast the dollars provided. Annual appropriations, of course, are perpetually

²⁴⁶ To some extent, at least, this same idea underlies the hydropower funding of the CBWTP and the local government funding of the Truckee River Water Quality Settlement Agreement.

²⁴⁷ See *supra* note 29 and accompanying text.

renewable but endlessly unpredictable, subject to huge fluctuations based on political wind shifts as well as budgetary ups and downs. By contrast, funding from positive checkoff programs may be both renewable and predictable, but also small; the trickle of money donated thus far to the Living River Fund²⁴⁸ is nowhere near adequate for ecologically meaningful water right acquisitions on the Rio Grande.

This hodgepodge of revenues is even more intriguing given that a particular water acquisition may be funded by multiple programs, each with a different type of money. For example, because the Deschutes River Conservancy statutory authorization provides for a maximum 50% funding for recommended projects, the DRC might cover the remaining costs of an acquisition with money from the CBWTP and the State of Oregon under Measure 66/76,²⁴⁹ such an acquisition would thus rely on a mix of federal tax dollars, federal power revenues, and state lottery proceeds. Some of the funding programs, such as Nevada's Question 1, were partly motivated by the availability of federal dollars requiring a state/local cost share.²⁵⁰ This factor suggests that a westwide program of funding specifically for environmental water acquisitions, with a cost-share requirement, could help spur the development of corresponding programs at the state and local levels.

What has been the primary motivation for creating such programs thus far? Nothing has been more influential than the federal environmental laws, especially the Endangered Species Act. ESA consultations led directly to the creation of the CBWTP and the Klamath Water Bank, and the presence of endangered fish in Pyramid Lake was a significant factor in the Carson-

²⁴⁸ See *supra* notes 213-14 and accompanying text.

²⁴⁹ Telephone interview with Scott McCalou, Program Director, Deschutes River Conservancy, in Bend, Or. (June 17, 2011).

²⁵⁰ See *supra* note 166 and accompanying text. This same argument was made in support of Measure 76. See *supra* note 199.

Truckee-Pyramid Lake Settlement Act.²⁵¹ Settlement of an ESA lawsuit created the Living River Fund, and environmental litigation under the Clean Water Act (along with the ESA) ended in the Truckee River Water Quality Settlement Agreement. Avoiding potential listing of the Big Hole River arctic grayling population provided both motivation and justification for use of the EQIP program by the Montana NRCS in 2004. In short, without the requirements of the ESA to protect listed species—or the threat of such requirements—many of the West’s environmental water acquisition programs probably would never have launched.²⁵²

Some of the state programs arose differently, however, emerging from the political process in response to factors other than federal requirements. Oregon’s Measures 66 and 76 were entirely citizen initiatives; Colorado’s appropriation to the CWCB was adopted by the General Assembly; and Nevada’s Measure 1 got both legislative and voter approval. But all three enactments had one thing in common: funding for environmental water acquisitions was only one small part of a larger package of programs, and the package as a whole had broad political support. The Oregon initiatives promised support for state parks, as well as for a range of water quality and wildlife measures. The 2008 Colorado statute had money for water project loans and a wide range of studies, as well as the annual \$1 million for acquisitions. The Nevada measure specified funding for a range of projects and programs statewide, assembled to attract votes from north and south. It is questionable whether money for environmental water acquisitions, standing alone, could have been approved in any of these states ... but packaged with funding for popular projects or causes, it won overwhelmingly in all three.

²⁵¹ See, e.g., Pub. L. 101-618, § 202(f), 104 Stat. 3294 (one purpose of statute was fulfilling goals of the ESA by promoting restoration of the Pyramid Lake fishery).

²⁵² Once again, the ESA “hammer” shows its value in helping motivate cooperative—or in this case, market-oriented—efforts to protect water-dependent species and their habitat. See Benson, *supra* note 17, at 53-54.

The motivations and origins of a program greatly influence its scope. Not surprisingly, the programs created in response to federal environmental law as applied to a particular river are narrowly focused on that river,²⁵³ such as the Klamath, the Truckee, or the Rio Grande.²⁵⁴ The political process, by contrast, favors programs with broader appeal; thus, the three state programs mentioned in the preceding paragraph all provide acquisition funding that can be spent anywhere in the state. This difference in scope suggests that, despite the importance of the ESA in prompting the creation of water acquisition programs, the political process may be the best hope for funding that can be used in more places and can deliver more kinds of public benefits.

One last point can be made about public funding for environmental water acquisitions: it is no longer a new and untried idea. Nearly all of the programs discussed above are at least eight years old, and several of the most notable funding sources—such as the CVP Restoration Fund, the Truckee River Water Quality Settlement Agreement, and the Oregon lottery money—were created in the 1990s. Colorado’s laws providing new sources of revenue have probably been the most significant development of the past five years. If more states—or Congress, or local governments—make a similar effort to provide reliable funding, then willing-seller acquisitions will become an increasingly important means of addressing the West’s environmental water needs.

²⁵³ The same is true of programs motivated by the needs of a particular tribe, as noted above. *See supra* notes 90-95 and accompanying text.

²⁵⁴ The CBWTP is arguably an exception, in that it covers much of Idaho, Oregon and Washington, and part of Montana. This relatively broad scope can probably be explained by the large size of the Columbia River Basin, and by two other factors: the regional nature of the Northwest Power Planning Council that helped create the program, *see* 16 U.S.C. § 1839b, and by the large percentage of the Pacific Northwest that is home to at least one population of salmon or steelhead listed under the ESA. <http://www.noaa.gov/Regional-Office/upload/ESA-land-area-10-10.pdf> (last visited August 13, 2011).