GETTING OUR FEET WET: AN INTRODUCTION TO WATER TRUSTS

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Water trusts, private organizations that acquire water rights for conservation, are emerging as important actors in instream flow protection in the western United States. Using the Oregon and Washington Water Trusts as case studies, this Article discusses water trusts within three contexts: their origin in land conservation, their adaptation from Oregon to Washington, and their operation among similar organizations enhancing streamflow. Water trusts have retained elements from land conservation, while pioneering tools and incentives to function within western water law and to complement and partner with state programs. This analysis of water trusts and their evolution has implications for future public and private instream flow protection, and for the evolution of institutions and law for land and water conservation.

I. INTRODUCTION

Water trusts are private, nonprofit organizations that acquire water rights in order to enhance instream flow¹ for conservation purposes.² Recognizing that riverine habitat and species suffer as a result of the over-appropriation of water to consumptive uses in arid and Mediterranean climates,³ water trusts rely upon market transactions to acquire and transfer water rights to instream uses. The model is emerging as a valuable tool for protecting instream flows and promoting water conservation purposes such

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¹ Instream flow refers to "the precise quantity and timing of water flows necessary to sustain one or more specified instream uses of water." DAVID M. GILLILAN & THOMAS C. BROWN, INSTREAM FLOW PROTECTION: SEEKING A BALANCE IN WESTERN WATER USE 8 (1997). Used more generally, it means a "nondiversionary, in-place use of water with little or no resulting consumptive use." James D. Crammond, Leasing Water Rights for Instream Flow Uses: A Survey of Water Transfer Policy, Practices, and Problems in the Pacific Northwest, 26 ENVTL. L. 225, 226 (1996). Both the quantity and quality of instream flow are important. See TERRY L. ANDERSON & PAMELA SNYDER, WATER MARKETS: PRIMING THE INVISIBLE PUMP 111 (1997).

² The following is a modified version of the Oregon Water Trust's self-definition: "A private non-profit group that uses a voluntary, market-based approach to enhance stream flows by acquiring consumptive water rights to restore flows and streams in Oregon." ORE-GON WATER TRUST, DESCRIPTION, *at* http://www.owt.org/ (last visited Mar. 24, 2004) (on file with the Harvard Environmental Law Review).

³ Mediterranean climates are characterized by warm, dry summers with little or no rainfall and mild, wet winters. "Seasonality and variability in rainfall is the principle attribute of the mediterranean-type climate." Avital Gasith & Vincent H. Resh, *Streams in Mediterranean Climate Regions: Abiotic Influences & Biotic Responses to Predictable Seasonal Events*, 30 ANN. REV. ECOLOGY & SYSTEMATICS 51, 53 (1999).

as enhancement of fisheries, water quality, habitat, and recreation. In an era that is increasingly looking to market-based approaches to address environmental concerns, water trusts are a significant innovation for the reallocation of water between consumptive and instream use.

Water trusts operate primarily in the western United States, where they are reacting to and facilitating significant changes in western water law. Through legislation, states have begun to redefine what is considered a beneficial use of water to include instream uses, and some states allow private organizations to acquire water rights for such instream purposes. Still, water trusts are new and relatively rare players in the western water scene.

Although the water trust model may have applicability across other western states, I use the term "water trust" to describe specifically the Oregon Water Trust ("OWT"), the Washington Water Trust ("WWT"), the Montana Water Trust, the Colorado Water Trust, and Great Basin Land and Water.⁴ Some state agencies also acquire and hold water rights for transfer to instream flows,⁵ and water trusts collaborate with these agencies to promote the public programs.

This Article focuses on the OWT and WWT. They provide valuable case studies because they are the oldest and most experienced water trusts in the United States. Instream water rights were incorporated into the appropriative system in Washington and Oregon at earlier dates than in most other western states (1971 and 1987, respectively). Legislative and administrative changes in these states then allowed private organizations, such as water trusts, to participate actively in instream flow protection. The OWT, founded in 1993, was the first water trust, and the WWT, founded in 1998, modeled itself directly on the OWT. The OWT and WWT are frequently consulted in the establishment of similar programs⁶ and provide outreach to other interested groups.

⁶ Some environmental organizations and land trusts also have programs for water rights acquisition. The Trust for Public Land, Environmental Defense, Ducks Unlimited, and the Resource Renewal Institute's Water Heritage Trust actively procure water rights for

⁴ Great Basin Land and Water operates in the Great Basin Desert Area, primarily in Nevada. LAND TRUST ALLIANCE, CONTACT INFORMATION FOR LAND TRUSTS, at http://www.lta.org/findlandtrust/UT2.htm#Great%20Basin%20Land%20Water%20Trust (last visited Apr. 26, 2004) (on file with the Harvard Environmental Law Review).

⁵ The Oregon Water Resources Department, the Texas Water Development Board (through the Texas Water Trust), and the Idaho Water Resources Board are authorized to hold water rights but possess neither the administrative capacity nor the appropriated funds to acquire them, except through donation. Ronald A. Kaiser & Shane Binion, *Untying the Gordian Knot: Negotiated Strategies for Protecting Instream Flows in Texas*, 38 NAT. RESOURCES J. 157, 173 (1998). Washington's Department of Ecology (through the Trust Water Rights Program), the Montana Department of Fish, Wildlife and Parks, Utah's Division of Wildlife Resources and Division of Parks and Recreation, and the Colorado Water Conservation Board are permitted to acquire and hold instream water rights. See CLAY J. LANDRY, SAV-ING OUR STREAMS THROUGH WATER MARKETS: A PRACTICAL GUIDE 34 (1998). The Montana Department of Fish, Wildlife and Parks ("DFWP") is not permitted to permanently dedicate water to instream flows, only to acquire leases. Environmental QUALITY COUNCIL, FINAL REPORT TO THE 56TH LEGISLATURE: MONTANA DEPARTMENT OF FISH, WILDLIFE, AND PARKS' WATER LEASING STUDY A-1 to A-3, A-15 (1998).

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In this Article, I explore three aspects of water trusts: the appropriateness of applying the "land trust model" to the protection of instream flows; the evolution of the water trust model across states; and the development of water trusts relative to other institutional arrangements for instream flow protection. This analysis of water trusts is important at both the macro- and micro-levels.

At the macro-level, water trusts are part of a larger trend of devolution of federal authority to state and local levels, and particularly to private organizations.⁷ As a result of this "rise of third-party government,"⁸ public-private partnerships⁹ have increased, raising questions of their democratic legitimacy, the appropriateness of the use of public funds for private purposes, and the loss of the flexibility and autonomy of nonprofit groups.¹⁰ Water trusts provide a fruitful case study of this move from government command-and-control regulation to private, voluntary conservation approaches that use market transactions. Because they often work closely with state governments, water trusts present an opportunity to assess the reasons for and implications of "collaborative governance."¹¹

At the micro-level, water trusts offer an interesting glimpse into the growing arena of private instream flow protection and provide an equally significant perspective on land conservation, specifically as companions to land trusts. Land trusts, as defined by the Land Trust Alliance ("LTA"),¹² are "directly involved in protecting land for its natural, recreational, scenic, historical or productive value," and are "distinguished by their first hand involvement in land transactions or management."¹³ This broad definition alludes to the large and varying scope of the land trust movement, encom-

⁷ SALLY K. FAIRFAX & DARLA GUENZLER, CONSERVATION TRUSTS 8 (2001).

⁸ Third-party government refers to the increased use of arrangements in which public institutions share decision-making authority and discretion over the use of public funds with non-federal, and specifically private organizations. *See* Lester M. Salamon, *Rise of Third-Party Government*, 16 BUREAUCRAT 27, 30 (1987).

⁹ See generally Land Conservation Through Public/Private Partnerships (Eve Endicott ed., 1993) [hereinafter Endicott]; Lester M. Salamon, Partners in Public Service: Government-Nonprofit Relations in the Modern Welfare State 40–49, 83–99 (1995).

¹⁰ See Lee P. Breckenridge, Nonprofit Environmental Organizations and the Restructuring of Institutions for Ecosystem Management, 25 ECOLOGY L.Q. 692, 705 (1998) (describing a strand of literature that raises concerns about the possible convergence of nonprofit organizations toward rigid structures of decision-making more characteristic of the public sector). See also STEVEN RATHGEB SMITH & MICHAEL LIPSKY, NONPROFITS FOR HIRE: THE WELFARE STATE IN THE AGE OF CONTRACTING 12–13 (1993).

¹¹ Breckenridge, *supra* note 10, at 692.

¹² The LTA is an umbrella organization for land trusts and provides leadership for the private land conservation movement. LAND TRUST ALLIANCE, ABOUT THE LAND TRUST ALLIANCE, *at* http://www.lta.org/aboutlta/index.html (last visited Mar. 24, 2004) (on file with the Harvard Environmental Law Review).

¹³ LAND TRUST ALLIANCE, STARTING A LAND TRUST: A GUIDE TO FORMING A LAND CONSERVATION ORGANIZATION 1 (1990) [hereinafter Starting a Land Trust].

instream flow protection, but the acquisition program is not the core of their work. See LANDRY, supra note 5, at 25–38 (providing a more comprehensive list of public and private organizations using market approaches for instream flow protection).

passing public and private organizations at local, regional, and national levels. Since the 1980s, land trusts have emerged as key actors in conservation of private land in the United States. According to the National Land Trust Census, land trusts have protected more than 6.2 million acres of open space.¹⁴ Although land trusts are often praised for their contribution to conservation, they may have less positive implications as well.¹⁵ Given that water trusts have borrowed much of their institutional model from land trusts, and have gained both legitimacy and publicity from their close association with the land trust movement, they may inherit some of these problems.

Finally, water trusts provide insight into the adaptation of models for resource conservation across different legal systems. To a large extent, they operate on the assumption that the land trust model is exportable to instream flow protection. Therefore, we must determine how exportable the land trust is, not only to a different resource (water), but also a different legal system governing its use and allocation. In this Article, I connect the literature addressing instream flow protection to the extensive body of literature on the use of trusts and market-based principles for ecological and conservation purposes,¹⁶ which has often focused on specific organizations and tools (e.g., land trusts or easements).¹⁷ Thus, an examination of water trusts provides a glimpse both into larger trends in the national

¹⁶ See generally KARL HESS, JR., ROCKY TIMES IN ROCKY MOUNTAIN NATIONAL PARK: AN UNNATURAL HISTORY (1993); PETER BARNES, WHO OWNS THE SKY?: OUR COMMON ASSETS AND THE FUTURE OF CAPITALISM (2001); FOREST OPTIONS GROUP, THE SECOND CENTURY REPORT, at http://www.ti.org/2c.html (last visited Apr. 2, 2004) (on file with the Harvard Environmental Law Review); FAIRFAX & GUENZLER, supra note 7; Janet L. Madden, Tax Incentives for Land Conservation: The Charitable Contribution Deduction for Gifts of Conservation Easements, 11 B.C. ENVTL. AFF. L. REV. 105 (1983).

¹⁴ LAND TRUST ALLIANCE, *supra* note 12.

¹⁵ Some critics suggest that their private nature allows them to circumvent conventional avenues for public accountability and raise questions of enforcement and of the use of public funds (through tax preferences) for essentially private purposes. The marketbased method for conservation also raises questions of the effectiveness of using marketdriven measures for ultimately ecological goals, perhaps resulting in patchwork and parcel conservation that may fall short of encompassing an entire ecosystem. Further, their perpetuity leads to questions of their future utility, as subsequent owners may perceive easements as involuntary, and as trusts may be unable to adapt to changing conditions (e.g., an economic recession or dramatically increasing property costs). See generally Federico Cheever, Public Good and Private Magic in the Law of Land Trusts and Conservation Easements: A Happy Present and a Troubled Future, 73 DENV. U. L. REV. 1077 (1996); Bruce Yandle, Land Trusts or Land Agents, 17 POL. ECON. RES. CENTER REP. 6 (1999); Leigh Raymond & Sally K. Fairfax, The "Shift to Privatization" in Land Conservation: A Cautionary Essay, 42 NAT. RESOURCES J. 599, 635–39 (2002). The overall theme is that long-term implications of land trust activities are unknown.

¹⁷See 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) (providing the first in-depth analysis of water trusts). See also Barton H. Thompson, Jr., Markets for Nature, 25 WM. & MARY ENVTL. L. & POL'Y REV. 261 (2000); WASHINGTON WATER TRUST, OPPORTUNITIES AND OBSTACLES: ACQUIRING AND PROTECTING INSTREAM WATER RIGHTS IN WASHINGTON (1999) [hereinafter OPPORTUNITIES AND OBSTACLES].

political environment and into developing resource conservation tools whose effect has yet to be adequately studied.

After briefly reviewing western water law and its application to instream flow protection, I will (1) examine the origin of the water trust model in land conservation; (2) compare the OWT and WWT; and (3) compare the OWT to two other private, nonprofit organizations also operating under Oregon law that use different approaches to enhance instream flows.

My analysis yields three conclusions. First, although water trusts have adopted many facets of the land trust movement, they are not carbon copies. Differences arise in adapting the land trust model from the common law governing land to western water laws and policies. Water trusts provide insight into the export and modification of institutions across different legal systems. Second, comparison of water trusts across Washington and Oregon demonstrates that state water law shapes the opportunities for and constraints on water trusts. In turn, the water trusts' activities influence the form of state instream flow protection programs and the activities of state agencies. Third, controlling for the effects of state water law reveals other reasons for variation across institutions. Organizations devoted to the protection of instream flows vary in response to three regional factors: historical and political tensions, existing alliances and partnerships, and the economic viability of specific tools and incentives.

II. WESTERN WATER LAW AND INSTREAM FLOW PROTECTION: AN OVERVIEW OF LAW AND POLICIES

Substantial legal and administrative changes in state law and policy were necessary to permit private instream flow protection by water trusts. I will introduce and address these changes by providing a brief overview of water law in the western United States and examining how Washington and Oregon water laws have been modified to allow for instream flow protection by private organizations.

A. Western Water Law

Water law in the United States is governed by the doctrines of prior appropriation and riparian rights. Generally, riparian doctrine is used in eastern states and prior appropriation prevails in the West, but ten states (nine of which are western) have dual systems combining prior appropriation and riparian rights.¹⁸

Riparian rights doctrine was inherited from English common law and "defines water rights in terms of use of water in association with ownership

¹⁸ JOSEPH L. SAX ET AL., LEGAL CONTROL OF WATER RESOURCES 9 (2000). California, Kansas, Mississippi, Nebraska, North Dakota, Oklahoma, Oregon, South Dakota, Texas and Washington have adopted mixed systems. *Id.*

of land."¹⁹ Under this system, water rights are available to landowners holding parcels adjacent to watercourses. A landowner, however, retains only a right to use the water, and not a right to the water itself. When water is scarce, use is governed by standards of reasonable use, which is determined with respect to the ability of other riparians to make simultaneous reasonable use of the watercourse.²⁰ The relationship among riparian landowners is "one of parity rather than priority."²¹ Furthermore, "[w]ater rights are relative rather than absolute ... when water flows [are] insufficient to meet all uses, the deficiencies [are] borne as a common loss, with each user cutting back by the same proportion."²² Riparian water rights are not lost through non-use but rather pass with title to the land.

While the riparian doctrine functioned well in the East, where it rains frequently, it was less effective in the West, where water is scarce and/or unpredictable. Because a riparian right is highly variable, "expanding and contracting with the number of users and with the varying flow of the stream,"²³ the doctrine was unacceptable to miners and farmers in the West. They required more secure protection of water rights. In addition, restricting water rights solely to riparian land seemed arbitrary to Westerners²⁴ and prevented the spreading of scarce water for irrigation to non-adjacent land. The doctrine of prior appropriation developed to address conditions in the arid West.²⁵

Like riparian rights, prior appropriation creates a right to use but not own water. In prior appropriation schemes, the ownership of the water corpus and the authority to determine its allocation generally lie with the states.²⁶ Unlike riparian doctrine, the validity of water rights is independent of land ownership, and instead relies upon putting the water to beneficial use, which "is the basis, measure, and limit of these water rights."²⁷ His-

¹⁹ Id. at 20.

²⁰ *Id.* at 26. Ronald Kaiser also lists some factors that can be examined to determine reasonable use: "1) purpose of use; 2) suitability of the use to the watercourse; 3) economic value of the use; 4) extent and amount of harm to each party; 5) practicality of avoid[ing] harm by adjusting the method and amount of use for each landowner; and 6) justice of requiring the user causing the harm to bear the loss." Ronald Kaiser, A Primer on Western Water Law Related to Instream Flows at 2, Paper Presented at the Land Trust Alliance Rally, Austin, Tex. (Oct. 28, 2002) (on file with the Harvard Environmental Law Review).

²¹ GILLILAN & BROWN, supra note 1, at 15.

²² Id. at 14.

²³ Robert G. Dunbar, Forging New Rights in Western Waters 60 (1983).

²⁴ See SAX ET AL., supra note 18, at 22 ("There is no necessary correlation between contiguity of land to water and the ability of a parcel to benefit from use of the water. Use of water may be of greater value on non-riparian tracts than on riparian lands.").

²⁵ See generally DUNBAR, supra note 23 (providing a history of the development and evolution of prior appropriation in the West).

²⁶ See GILLIAN & BROWN, supra note 1, at 22. "What we hold is that following the act of 1877, if not before, all non-navigable waters then a part of the public domain became *publici juris*, subject to the plenary control of the designated states" California Oregon Power Co. v. Beaver Portland Cement Co., 295 U.S. 142, 163–64 (1935).

²⁷ Gregory J. Hobbs, Jr., *Priority: The Most Misunderstood Stick in the Bundle*, 32 ENVTL. L. 37, 41 (2002) (referencing Williams v. Midway Ranches Prop. Owners Ass'n, 938 P.2d

torically, beneficial use referred to physical diversion from the stream or river, and became synonymous with consumptive or out-of-stream agricultural, industrial, domestic, and mining uses. Until recently, habitat and species protection were not considered beneficial uses of water, and instream flows were not incorporated into the prior appropriation system.²⁸ As a corollary to this concept of beneficial use, rights-holders lose their rights when they cease to use water in a beneficial manner. This is commonly referred to as the "use-it-or-lose-it" principle. Water not put to beneficial use for some statutory period of time is subject to relinquishment or forfeiture.

Water is allocated according to priority under prior appropriation. Users who are first in time to divert water to a beneficial use are granted priority over later water users with junior claims. When water is scarce, "seniority allows the person with the oldest water right to take their [sic] full measured amount of water before anyone with a junior right can take the water,"²⁹ even if junior appropriators lie upstream to those with senior water rights. It is possible for a stream to be over-appropriated when existing water rights allocate more water to users than passes through the river or stream at a given time.

Prior to uniform state legal systems governing appropriation of water, a water right was often claimed by posting a notice at the site of diversion and then applying water to beneficial use.³⁰ Appropriation is now administered through complex state bureaucracies. A water right specifies the purpose of use, place of use, point of diversion, amount of water,³¹ season of use, and priority date.

Water rights can be created and altered in a number of ways, three of which are most relevant to water trust operations. First, in modern times, appropriation remains an option, though probably not a very useful one. As previously noted, an appropriation must satisfy the beneficial use requirement, and the state may also deny the appropriation if doing so is in the public interest, or if a stream has been closed to appropriation by administrative rule. Also, in an over-appropriated stream, a late priority date can render a "paper" right relatively meaningless. For example, existing rights on accessible streams may date back to the late 1800s and allocate all or the majority of the regular water supply to senior appropriators, thus leaving little or no water for junior instream flow rights.³²

^{515, 521-23 (}Colo. 1997)).

²⁸ See DONALD WORSTER, RIVERS OF EMPIRE (1985) (discussing the notions of progress and development in the American West and their relationship to the development and conceptualization of water resources).

²⁹ Kaiser, supra note 20, at 3.

³⁰ DUNBAR, *supra* note 23, at 73-85.

³¹ Water quantities are usually expressed in cubic feet per second ("cfs"), a measurement for the "product of a stream's cross section and velocity." GILLILAN & BROWN, *supra* note 1, at 7.

³² LANDRY, supra note 5, at 3.

Second, water right specifications can be changed and altered through state administrative processes, called transfers or changes of use. To a large extent, the state is passive regarding initiation of changes to water rights; water rights-holders generally must initiate any changes of use. For example, the quantity, type of use, time of use, and point of diversion can all be changed with the approval of the state agency. Change of use applications are subject to close scrutiny, as state administrative agencies determine the validity of the right and possible impairment to existing rights caused by the change (the "no-injury" principle).³³

Third, water rights can be leased, purchased, and donated, usually without loss of the original priority date. And although they remain independent of land ownership, water rights often accompany the title to the land on which they are used; this is referred to as appurtenance. Appropriative rights thus bring the security of real property rights and the flexibility of being able to alter existing rights to meet changing needs and values.³⁴

B. Private Instream Flow Protection: Washington and Oregon

1. Changing Values

Instream flow protection refers to "the legal, physical, contractual, and/or administrative methods that have been used to ensure that enough water remains in streams to sustain instream [flows]."³⁵ Scholars have identified three stages in the history of instream flow protection: denial, recognition, and implementation.³⁶

As previously described, prior appropriation implicitly denied the importance of instream flows. The notion that beneficial use required diversion precluded the identification of instream uses as beneficial without substantial legal changes to the doctrine of prior appropriation. Without

³³ ANDERSON & SNYDER, supra note 1, at 82–84.

³⁴ DUNBAR, *supra* note 23, at 209–10.

³⁵ GILLILAN & BROWN, *supra* note 1, at 8. Several authors outline the prospects for private instream flow protection in the western United States. *See* John Borden, *Oregon's Minimum Perennial Stream Flows, in* INSTREAM FLOW PROTECTION IN THE WEST 357 (Lawrence J. MacDonnell, Teresa A. Rice, & Steven J. Shupe eds., 1989) (providing for an overview of instream flow protection possibilities in Oregon); Robert F. Barwin & Kenneth O. Slattery, *Protecting Instream Flow Resources in Washington State, in* INSTREAM FLOW PROTECTION IN THE WEST, *supra*, at 371 (detailing Washington's instream flow regime); Gregory A. Thomas, *Conserving Aquatic Biodiversity: A Critical Comparison of Legal Tools for Augmenting Streamflows in California*, 15 STAN. ENVTL. L.J. 3 (1996) (addressing instream flows and aquatic biodiversity in California); Ray Jay Davis, *Utah Instream Flow Protection*, 2 RIVERS: STUDIES IN THE SCIENCE, ENVTL POL'Y & L. OF INSTREAM FLOW 154 (1991) (providing information on instream flow protection in Utah); Kaiser & Binion, *supra* note 5 (detailing existing instream flow protection strategies in Western states in search of possibilities for Texas).

³⁶ A. Dan Tarlock & Doris K. Nagel, Future Issues in Instream Flow Protection in the West, in INSTREAM FLOW PROTECTION IN THE WEST, supra note 35, at 137.

these changes, a water right used for instream purposes would not be beneficial, and therefore would be subject to forfeiture.

Particularly in the 1960s and 1970s, the environmental movement and the shifts from industrial to service economies redirected conservation goals toward recreation and ecosystem protection, which led to a greater recognition of the value of instream flows. Some states that initially listed only consumptive uses as beneficial added more "modern' purposes, such as instream uses for recreation and fish and wildlife [S]tatutory expressions of beneficial use have changed to reflect changes in values and changes in scientific understanding."³⁷ Market environmentalists have attempted to measure the economic value of instream flows relative to other water rights,³⁸ and some have concluded that "instream values can be equal to or greater than water values in many consumptive uses, especially in important recreation and wildlife areas."³⁹ Thus, with changing values, instream flows are recognized as valuable interests, not only for fish, wildlife, and habitat, but also for recreation.

2. Implementation in Oregon and Washington

Washington and Oregon initially acknowledged both riparian rights and prior appropriation. But mixed systems can be problematic; as Robert G. Dunbar describes, "[i]t was a strange arrangement, yoking into one system two discordant rights."⁴⁰ As a result, legislatures and courts have incrementally "whittled away at riparian rights."⁴¹

In Oregon, the legislature restricted the scope of riparian rights:

[The legislature] passed statutes abolishing *unexercised* riparian rights . . . Riparians continue to enjoy a riparian right to any water they were diverting and using at the time that the legislation was passed But riparians cannot divert more than that amount except by appropriating the water. Riparians who were not using water when the legislation was passed, or during any grace period, enjoy no riparian right.⁴²

Washington's courts have similarly restricted the scope and power of riparian rights. Whereas "[i]n 1891 and again in 1917, the Washington legis-

³⁷ Janet C. Neuman, Beneficial Use, Waste, and Forfeiture: The Inefficient Search for Efficiency in Western Water Use, 28 ENVTL L. 919, 924 (1998).

³⁸ Bonnie G. Colby, *The Economic Value of Instream Flows—Can Instream Values Compete in the Market for Water Rights?*, in INSTREAM FLOW PROTECTION IN THE WEST, *supra* note 35, at 87 (examining five types of economic benefits from instream flows: recreation, local economies, non-user values, water quality, and fish and wildlife).

³⁹ Id. at 91.

⁴⁰ DUNBAR, supra note 23, at 67.

⁴¹ SAX ET AL., supra note 18, at 304.

⁴² Id. at 305.

lature adopted detailed appropriation codes that explicitly protected riparian rights," the state supreme court subsequently limited how they could be exercised.⁴³ As a result of these statutes and decisions, Washington and Oregon have mixed systems that are predominantly appropriative. Therefore, the protection of instream flows has been incorporated into essentially appropriative systems.

3. Legal Changes: Recognition of Instream Uses as Beneficial

Regulatory initiatives preceded the recognition of instream water rights.⁴⁴ Minimum streamflows (sometimes called base flows) were established to (1) review new appropriations for their possible harm to fish, habitat, and recreation, and if necessary, to close the stream or river to future appropriation; and (2) prohibit water withdrawals by current appropriators if the stream drops below a certain level.⁴⁵ In Washington, minimum streamflows were established through the 1967 Minimum Water Flows and Levels Act.⁴⁶ In Oregon, minimum streamflows were established under the 1955 Minimum Perennial Streamflow Act and then subsequently converted to instream water rights, discussed below, upon their recognition in 1987.⁴⁷ As property rights, instream water rights seemingly offer greater protection and security than regulatory options, which may be subject to potential legislative and administrative modification.

A central component of instream flow protection in Washington and Oregon, and the tool on which water trusts base their activities, is the instream water right. Incorporation of these rights into the system of prior appropriation first requires the legal acknowledgement of instream uses as beneficial. States then permit either the appropriation of instream rights or the transfer of existing rights to instream flows or both. An appropriated right would possess the priority date of its appropriation, while the transfer would allow the instream right to retain the senior priority date of the original right.

⁴³ *Id. See* State ex rel. Liberty Lake Irr. Co. v. Superior Court for Spokane County, 91 P. 968, 969 (1907).

⁴⁴ For a more comprehensive discussion of the strategies available for protecting instream flows, see generally Steven J. Shupe, *Keeping the Waters Flowing: Stream Flow Protection Programs, Strategies And Issues In the West, in* INSTREAM FLOW PROTECTION IN THE WEST, *supra* note 35, at 1; Tarlock & Nagel, *supra* note 36, at 137; GILLILAN & BROWN, *supra* note 1; Kaiser & Binion, *supra* note 5.

⁴⁵ ANDERSON & SNYDER, *supra* note 1, at 117 ("Rather than allowing private entities to acquire, hold, and transfer rights to instream flows, states have more commonly chosen to maintain instream flows by reserving water from appropriation, establishing minimum stream flows by bureaucratic flat, conditioning new water permits, or directing state agencies to acquire and hold instream flow rights.").

⁴⁶ WASH. STATE DEP'T OF ECOLOGY, SETTING INSTREAM FLOWS IN WASHINGTON STATE, Publication No. 98-1813-WR, at 2 (2001); WASH. Rev. Code § 90.22 (1992).

⁴⁷ Or. Rev. Stat. § 537.346 (2003).

Instream rights were recognized in Washington under the 1971 Water Resources Act,⁴⁸ and in Oregon under the 1987 Instream Water Rights Act.⁴⁹ The recognition of instream uses as beneficial came at such a late priority date as to render most new appropriations useless: "Unfortunately, by the time flow protection was mandated by law, the flows from many rivers in Washington were fully appropriated with more water allocated to out-of-stream uses than flowed in the rivers."⁵⁰ In recognizing instream uses as beneficial and permitting the appropriation and transfer of instream water rights, states have incorporated instream values into the prior appropriation system and opened the door for public and private acquisition.

4. Institutional Changes: Appropriations, Transfers, and Private Organizations

State legislatures have granted varying amounts of authority to state agencies and private organizations to appropriate or otherwise acquire (through purchase, lease, or donation) instream water rights. In Oregon, three state agencies—the Department of Environmental Quality, the Parks and Recreation Department, and the Department of Fish and Wildlife—are permitted to apply for water right appropriations, which then receive a junior priority date.⁵¹ The Water Resources Department reviews applications for water rights and water transfers. The Water Resources Department is authorized to hold instream rights sold, leased, or donated by private actors but lacks funding to acquire rights for transfer.⁵²

In Washington, the State Department of Ecology ("DOE") has authority under the 1991 Water Resources Management Act to acquire water rights through purchase, lease, or donation.⁵³ The rights are then held under the Trust Water Rights Program.⁵⁴ Additionally, House Bill 1165 (1999)⁵⁵ appropriated \$1 million to DOE for the Water Rights Purchasing Pilot Project, which purchases and leases water rights. DOE not only approves water appropriations and transfers, but also holds in trust water rights that it has purchased, leased, or received.⁵⁶ Additional administrative changes have eased the process of transfer to instream water rights. For

⁴⁸ WASH. REV. CODE § 90.54 (1992).

⁴⁹ Or. Rev. Stat. §§ 537.332, 537.348 (2003).

⁵⁰ OPPORTUNITIES AND OBSTACLES, *supra* note 17, at 4.

⁵¹ Interview with Andrew Purkey, former Executive Director Oregon Water Trust, in Portland, Or. (Aug. 5, 2002) (on file with the Harvard Environmental Law Review).

⁵² Id.

⁵³ Wash. Rev. Code § 90.42.080 (1992).

⁵⁴ WASH. REV. CODE §§ 90.38, 90.42 (2004).

⁵⁵ WASH. REV. CODE § 43.98A (2004).

⁵⁶ WASH. REV. CODE § 90.42.80 (1991).

example, DOE has established an expedited approval process for transfers with intended conservation benefits.⁵⁷

In both Washington and Oregon, private organizations are allowed to acquire water rights through sale, donation, and lease but are prohibited from holding instream water rights themselves. After being changed to instream uses, such rights must be transferred to and held by the state. In Oregon, the statutory definition of an instream right excludes private organizations from ownership: "'Instream Water Right' means a water right held in trust by the Water Resources Department for the benefit of the people of the state of Oregon to maintain water instream for public use."⁵⁸

Reluctance to allow private organizations to hold instream water rights is a complex issue.⁵⁹ The agricultural community has been the most vocal in opposing private holding of instream rights, fearing detrimental effects on the agriculture-based local economies.⁶⁰ Opponents' arguments appear strikingly similar to those offered against the "dead hand" in the common law, which view unfavorably tools (like perpetual easements) that place constraints on property in perpetuity, and thereby allow a deceased landowner to control future land use from the grave.⁶¹ Similarly, opponents fear that private holding of instream water rights will result in the permanent withdrawal of water rights from the market and from agricultural use. Proponents counter, however, that the doctrine of prior appropriation affirms water rights as private property, thereby supporting the equal treatment of instream and consumptive uses, and the legitimate role of private actors in acquiring and holding such rights like any other user.

Although water trusts are legally prohibited from holding instream rights, they may play an important role in offsetting many of the obstacles in the existing state systems for instream flow protection.⁶² These obstacles include inadequate funding, ineffective enforcement, the procurement of water rights with junior priority dates, and slow and expensive bureaucratic processes.⁶³

⁵⁷ Wash. Admin. Code § 173-152-050(2)(b).

⁵⁸ OR. REV. STAT. § 537.332 (2003).

⁵⁹ See Jack Sterne, Instream Rights & Invisible Hands: Prospects for Private Instream Water Rights in the Northwest, 27 ENVTL. L. 203, 219 (1997).

⁶⁰ *Id.* at 222. Opponents have questioned the legitimacy of private organizations controlling a resource meant to benefit the public good, and argue that private holding may hamper future economic growth, cause injury to other users, and introduce the potential for water rights speculation. *Id.* at 230.

⁶¹ FAIRFAX & GUENZLER, *supra* note 7, at 30.

⁶² See Sterne, supra note 59, at 220. See also Richard Wahl, Acquisition of Water to Maintain Instream Flows, 1 RIVERS: STUDIES IN THE SCIENCE, ENVIL POL'Y, & L. OF INSTREAM FLOW 195 (1990) ("[A] program of private acquisitions, if appropriately structured, can be a useful complement to acquisitions of instream flow by state agencies.").

⁶³ Sterne, *supra* note 59, at 215–22.

5. Influential Factors in Legal and Administrative Reform

At least four other factors may contribute to the incorporation of instream water rights in Washington and Oregon: the presence of water markets, scientific knowledge, institutional effectiveness, and political environment. First, the presence of an active water market facilitates the valuation and pricing of water and eases the process of acquiring water rights for instream flows. When markets are present, information is more readily available, parties are able to make more informed decisions, water is valued according to more established prices, and transaction costs may be decreased for water trusts and state agencies.

Second, the availability of scientific data on hydrology and the needs of fish helps agencies and private organizations in targeting potential streams for acquisitions. Generally, measurements of instream flow needs have been based on the requirements of fish.⁶⁴

Third, state agencies play a key role in determining the efficiency and effectiveness of instream water rights. Various factors contribute to effectiveness, including whether an agency has a backlog in processing water rights, the degree to which rights are monitored and enforced, the stringency of forfeiture laws, and whether the state has previously identified priority basins and set minimum streamflows.

Fourth, the political power of interests in the region can have negative or positive implications for instream flow protection. Agricultural interests have traditionally opposed instream flow protection. The extent of their cohesion and political mobilization can determine the fate of instream flow protection at legislative or administrative levels of decisionmaking. In Oregon, for example, agricultural interests attempted, unsuccessfully, to overturn the 1987 law that established instream water rights.⁶⁵ In response, the OWT and WWT have targeted groups like anglers and recreationists in coalition-building efforts to increase support for instream flow protection. Authors A. Dan Tarlock and Doris K. Nagel note that "[i]nstream flow protection rests on the twin bases of public acceptance and economic rationality."⁶⁶ Both have played an important role in the acceptance and implementation of instream flow efforts in Washington and Oregon.

III. THE EMERGENCE OF THE WATER TRUST MODEL

Two questions about the relationship between land and water trusts are relevant: (1) What elements of the land trust model have the water

⁶⁴ GILLILAN & BROWN, supra note 1, at 45.

⁶⁵ Neuman & Chapman, *supra* note 17, at 178.

⁶⁶ Tarlock & Nagel, supra note 36, at 137.

trusts retained? (2) When the water trusts have departed from the land trust model, what are their reasons for doing so?

To answer these questions, I will first provide a brief background on what a land trust is and why it has been looked upon as a promising model for water trusts. Second, I will assess three central attributes of the land trust movement—incentive-based conservation, perpetuity, and public-private partnership—in the water arena. The application of the institutions of land conservation to water conservation provides a framework that can be used to explore water trusts as institutions, land trusts as their predecessors and counterparts, and the export and adaptability of resource management institutions across legal systems.

Both the OWT and WWT have drawn heavily from land trusts as institutional models, modifying land trust organizational structures, strategies, and underlying principles as needed. As Neuman and Chapman have observed, "The vision behind the formation of the Oregon Water Trust was to take the tools of the land trust movement, employed so successfully by the Trust for Public Lands and the Nature Conservancy, and apply the same approach to the acquisition of water."⁶⁷ However, as water trusts have evolved, they have diverged significantly from the land trust model that they initially adopted. This divergence largely reflects differences between land and water law.

A. The Land Trust Model

For the purposes of this Article and for comparability with private water trusts, I will focus on private land trusts, defined by the LTA, again, as "nonprofit organizations . . . distinguished by their first-hand involvement in land transactions or management."⁶⁸ The land trust acquisition process includes brokering a real property transaction with a landowner, acquiring (through purchase, donation, or sometimes lease) either land in fee simple or a conservation easement,⁶⁹ and managing the land or transferring it to a government agency.⁷⁰

Land trusts provided a promising model for the OWT for at least four reasons. First, land trusts have emerged as a key tool for the conservation of private lands within the United States. Their public acceptance and popularity, indicated, for example, by the number of acres they acquire and their

⁶⁷ Neuman & Chapman, supra note 17, at 139.

⁶⁸ STARTING A LAND TRUST, supra note 13, at 1.

⁶⁹ "A conservation easement . . . is a legal agreement between the owner of a property and a nonprofit organization or government agency in which the owner agrees to restrict future uses of a parcel of land The organization or agency ensures such compliance by periodic inspection and, if necessary, legal action." STARTING A LAND TRUST, *supra* note 13, at 84. See also Ellen Edge Katz, Conserving the Nation's Heritage Using the Uniform Conservation Easement Act, 43 WASH. & LEE L. REV. 369 (1986).

⁷⁰ Adina Merenlender et al., Land Trusts and Conservation Easements: Who is Conserving What for Whom?, 18 CONSERVATION BIOLOGY 65 (2004).

proliferation in recent years,⁷¹ suggest their transferability to other arenas of conservation, as well as their complementarity to ongoing advocacy efforts.

Second, close ties between land and water imply that land trust activities could (and perhaps should) spill over into water conservation. Not surprisingly, many of the board members and staff of the OWT and WWT are employees or former employees of the Trust for Public Land, the Nature Conservancy, and other land trusts; therefore, many have been immersed in the ideology of the land trust movement. Water trust board members and staff maintain close contact with their counterparts in the land trust movement. Land trusts also frequently work with water in land transactions, for example, in designating goals to improve water quality through open space preservation, in creating buffer zones around watersheds, in acquiring water rights appurtenant to land,⁷² and, recently, in tying water rights to the land through conservation easements.⁷³ The close association of land trusts to water resources suggests that the institutions of land conservation may be adaptable to the protection of instream flows.

Third, the nature of both land and water rights as private property⁷⁴ suggests that the market environmentalism of the land trust movement might be easily adapted to the use of market mechanisms in water rights acquisitions.⁷⁵ A basic assumption of market environmentalism is that markets are essential to the efficient allocation of natural resources. While government intervention⁷⁶ has traditionally been regarded as the proper response to potential market failures (e.g., uncertainty, information costs, and third-party effects), market advocates question the government's ability to respond effectively and efficiently to market failures.⁷⁷ They suggest that water rights holders are entrepreneurs capable of performing their own cost-benefit analyses and working within functioning markets,⁷⁸ and

⁷⁴ Water rights represent a usufructory right, but are real property nonetheless. *See* A. DAN TARLOCK, LAW OF WATER RIGHTS AND RESOURCES § 3.04[2] (1998).

⁷⁵ See generally ANDERSON & SNYDER, supra note 1, at 111–32. See also Zach Willey, Behind Schedule and Over Budget: The Case of Markets, Water and Environment, 15 HARV. J.L. & PUB. POL'Y 391, 392–93, 406–12 (1992); Bonnie G. Colby & Tamra Pearson d'Estrée, Evaluating Market Transactions, Litigation, and Regulation as Tools for Implementing Environmental Restoration, 42 ARIZ. L. REV. 381, 382–83, 393–94 (2000); Thompson, supra note 17, at 267–94.

⁷⁶ See Anderson & Snyder, *supra* note 1, at 18–19; Terry L. Anderson, Water Markets: Ending the Policy Drought? (1983).

⁷⁷ ANDERSON & SNYDER, *supra* note 1, at 27. See Thompson, *supra* note 17, for a discussion of the relationship between voluntary acquisition and mandatory conservation in instream water rights markets.

⁷⁸ So long as water rights are "well defined, enforced, and transferable." ANDERSON &

⁷⁴ This is not to ignore the well-founded criticisms of land trusts, but rather to note that the land trust movement is generally well-regarded. *See supra* note 15.

⁷² Water rights have traditionally been passed along with the title to land on which the water is used. Principles like appurtenance suggest that the legal systems governing land and water are not mutually exclusive.

⁷³ Organizations such as the Mesa Land Trust and the Lower Arkansas Valley Water Conservancy District in Colorado have begun to include language on water rights in their conservation easements.

argue that private organizations, like land or water trusts, also have vital roles to play. Some of the perceived advantages of water markets relative to government intervention are: allocating water in response to changing demands, conditions, technologies and values; reallocating water in the event of droughts and water shortages; encouraging conservation by allowing those who conserve to profit thereby; promoting efficiency by allocating water already appropriated and thus reducing the need to divert more; and providing for increased streamflow.⁷⁹ In sum, the theories of market environmentalism, also emphasized in the land trust movement, suggest that water trusts can serve an important function within water markets and complement state instream flow programs and regulatory tools.

Fourth, recent changes in Oregon water law created the legal possibility to explore the adoption of the land trust model where it previously could not have existed. Prior to the enactment of the 1987 Instream Water Rights Act,⁸⁰ private organizations were not permitted to acquire instream water rights, nor were they a recognized property right under state law. The Act allowed instream water rights to be allocated through marketbased mechanisms and opened the door for private organizations to enter the market.⁸¹

Of all the attributes transferred from land to water conservation, perhaps the most visible is the name of the organization, the water trust.⁸² In fact, the original working title for the OWT was the Trust for Public Water, drawing from the national organization, the Trust for Public Land. Although the use of "trust" in the term "land trust" has no specific legal meaning,⁸³ it does allude to the fiduciary relationship apparent in the work of these organizations. The land trust operates as a trustee of sorts, holding land or conservation easements for the benefit of the public and the environment.⁸⁴ This holds true for water trusts, which similarly acquire water rights and submit them for transfer to an instream, and thus public, use.⁸⁵

Despite their origin in the land trust model, water trusts today play a very different role in conservation. Water trusts have both adopted and

SNYDER, supra note 1, at 23.

⁷⁹ SAX ET AL., *supra* note 18, at 224–25.

⁸⁰ Or. Rev. Stat. §§ 537.332, 537.348 (2003).

⁸¹ See supra notes 48–50 and accompanying text. Currently, a number of state statutes recognize instream water rights but continue to preclude acquisition by private organizations. See supra note 5.

⁸² The use of the title "water trust" is also rhetorically significant. In Carol Rose's examination of Joseph Sax's employment and expansion of the public trust doctrine, she emphasizes that "the environmentalist case hinges not only on the physical resources that are so important and evocative in themselves, but also on the *rhetorical* resources that are available to us" Carol M. Rose, *Joseph Sax and the Idea of the Public Trust*, 25 ECOLOGY L.Q. 351, 362 (1998).

⁸³ FAIRFAX & GUENZLER, supra note 7, at 21.

⁸⁴ See id. See also ALEXANDER R. ARPAD, Private Transactions, Public Benefits, and Perpetual Control over the Use of Real Property: Interpreting Conservation Easements as Charitable Trusts, 37 REAL PROP. PROB. & TR. J. 91 (2002).

⁸⁵ Thompson, *supra* note 17, at 266.

deviated from the general land trust model with its elements of incentivebased conservation, perpetuity, and public-private partnership.

B. Incentive-Based Conservation

Incentive-based conservation refers generally to the use of mechanisms that compensate property owners for voluntary natural resource conservation⁸⁶ and involve transactions between willing participants (e.g., the land trust and the owner of the parcel).87 Incentive-based conservation is frequently included under the larger umbrella of market environmentalism.⁸⁸ With regard to most land and water trusts, it also includes a "public goods market,"89 an arrangement in which "the government or a philanthropic organization uses the marketplace rather than regulation to provide a public good with diffuse benefits to a large segment of the population."90 Diverse incentives (e.g., monetary compensation, tax deductions, the ability to continue present land use, maintenance of the property on tax rolls, tailoring of conservation easements to individual needs) operate to allocate land to environmental uses without substantial regulation. For example, by opting to purchase private property from willing sellers, a land trust or governmental agency may circumvent regulatory requirements such as zoning for open space. Some have speculated that incentive-based conservation may, in the long term, be perceived as tantamount to or convergent with regulation;⁹¹ however, it is viewed by the land trusts' initial clients as a less threatening option than "command and control" regulation.92

The principle is similar with regard to the purchase, lease, or donation of water rights. Generally, water rights are considered property rights, and a water trust conducts a transaction with a willing seller, donor, or lessor. This transaction acts to complement much of the regulation regarding instream flows, as previously described. Water trusts have thus adopted incentive-based conservation into their institutional models.⁹³ However, land and water trusts differ with respect to the incentives employed to procure property rights.

⁸⁶ See Merenlender et al., supra note 70. See generally Raymond & Fairfax, supra note 15.

⁸⁷ STARTING A LAND TRUST, *supra* note 13, at 84.

⁸⁸ See generally ANDERSON & SNYDER, supra note 1.

⁸⁹ Thompson, *supra* note 17, at 267–93.

⁹⁰ Id. at 266.

⁹¹ See Cheever, supra note 15, at 1093; Nancy Ehrenreich, A Trend?: The Progressive Potential in Privatization, 73 DENV. U. L. REV. 1235, 1245 (1996).

⁹² STARTING A LAND TRUST, *supra* note 13, at 2.

⁹³ OREGON WATER TRUST, OUR APPROACH, *at* http://www.owt.org (last visited Mar. 24, 2004) (on file with the Harvard Environmental Law Review); WASHINGTON WATER TRUST, MARKET BASED, *at* htp://www.thewatertrust.org/whatwedo/wwd_market.html (last visited Mar. 24, 2004) (on file with the Harvard Environmental Law Review).

C. Land Trusts and Water Trusts: Tools and Incentives

Land trusts rely heavily upon easements as a tool for conservation because they provide a variety of benefits. For land trusts, easements are typically more cost-effective than purchasing land in fee simple and allow a trust to maintain control over the inspection and stewardship of the property. Conservation easements also offer powerful incentives to donors and sellers through tax deductions, the ability to maintain present land use, and the capacity to sculpt agreements to personal needs.⁹⁴

As tax deductions are one of the incentives for the donation or sale of easements and land in fee simple to land trusts, it is useful to examine whether they occupy as central a role in the donation of water rights to water trusts. In theory, tax deductions for some permanent water right donations are possible under the federal tax code.⁹⁵ Appropriative water rights qualify as a real property interest, and their permanent donation has the potential to serve as an incentive and tool for water trusts.⁹⁶ Because riparian rights are tied to the land, their donation may be ineligible for income tax deductions.⁹⁷

In practice, water trusts have been less successful than land trusts in using tax deductions to promote transactions. Although the WWT has recognized the legal possibility of pursuing tax deductions as incentives, it has yet to use them in practice, and the OWT has involved the charitable deduction in only one transaction. Only a permanent donation of a water right qualifies an owner to claim the deduction under federal law, and land use laws in Oregon have complicated the possibilities of offering tax incentives at the state level.⁹⁸ The majority of water trust transac-

⁹⁵ Id. The tax deductions may also apply to land trusts that include water rights in easements. See supra note 73.

⁹⁶ LANDRY, *supra* note 5, at 41 n.15.

⁹⁸ Interview with Andrew Purkey, supra note 51. See also LANDRY, supra note 5, at 23

⁹⁴ Tax deductions for landowners include charitable contribution deductions as well as reductions in estate and property taxes. Obviously, these are not the only incentives. See generally Ellen Rilla & Alvin Sokolow, California Farmers And Conservation Easements: Motivations, Experiences, and Perceptions in Three Counties, (California Farmland & Open Space Policy Series Research Paper No. 4, 2000); PAUL ELCONIN & VALERIE A. LUZADIS, EVALUATING LANDOWNER SATISFACTION WITH CONSERVATION RESTRICTIONS 9–10 (1997). Under the federal tax code, donors are eligible to receive charitable contribution deductions through the gift of a "qualified real property interest, to a qualified organization, exclusively for conservation purposes." I.R.C. § 170(h)(1) (2000). A qualified real property interest includes either the entire interest of the donor or a partial interest: "a restriction (granted in perpetuity) on the use which may be made of the real property," also known as a conservation easement. I.R.C. § 170(h)(2) (2000).

⁹⁷ See Kelly A. Cole, A Market-Based Approach to the Protection of Instream Flow: Allowing a Charitable Contribution Deduction for the Donation of Conservation Easement in Water Rights, 6 HASTINGS W.-NW. J. ENVTL. L. & POL'Y 325 (2000) (arguing that the tax code should be amended to include appropriative and riparian rights). Both Washington and Oregon recognize the riparian and prior appropriation doctrines as systems of governance, but as previously mentioned, prior appropriation can be considered the dominant doctrine.

tions are leases, and thus do not qualify the lessor for tax deductions. However, income tax deductions do not appear to a be a major incentive for permanent donations either. The former Executive Director of the OWT suggested that socio-economic factors, specifically the income of the donors, have played an important role in determining the effectiveness of using tax incentives to promote water conservation.⁹⁹ In some of the OWT's relations with cattle ranchers, the ranchers perceived the suggestion of income tax deductions as insensitive and suggested that the deduction would be nominal given their income.¹⁰⁰ Income tax deductions do not appear to play as large a role in water right donations as they have in private land conservation.

The OWT's former executive director identified two major incentives for individual water right donations and sales (both permanent and temporary). First, those who donate or sell leases often value the protection of their water right from forfeiture.¹⁰¹ Under Oregon state law, a water right may be subject to forfeiture after five years of non-use.¹⁰² However, the state legal system protects instream water rights from forfeiture while they remain an instream flow.¹⁰³ A second motivation is an economic incentive provided through either monetary compensation or improvements to irrigation systems.¹⁰⁴ Through the Conserved Water Program, the OWT funds all or a portion of a project to make water use more efficient (for example, converting from flood to sprinkler irrigation), and then receives a portion (at least twenty-five percent) of the water saved.¹⁰⁵ Potentially, the client can receive both financial compensation from the trust and protection from forfeiture. A mix of other motivations accompanies these incentives, including altruism and gaining a return on water that will not be used to irrigate (because of unprofitable crops or bad weather conditions).

In sum, incentive-based conservation guides the activities of both land and water trusts. However, charitable contribution deductions and other tax incentives deployed by land trusts are less useful to water trusts. Because the incentives that encourage clients to conduct transactions with water trusts do not encourage long-term or permanent preservation, they do not typically qualify for federal tax deductions. Instead, incentives have been either monetary or legal—protecting water rights from forfeiture by transfer to instream flow for an established time period.

¹⁰³ Id.

⁽suggesting that tax deductions at the state level may also be a possibility).

⁹⁹ Interview with Andrew Purkey, *supra* note 51.

¹⁰⁰ Id.

¹⁰¹ Id.

¹⁰² Or. Rev. Stat. § 540.610 (2003).

¹⁰⁴ Interview with Andrew Purkey, supra note 51.

¹⁰⁵ Or. Rev. Stat. § 537.455-.500 (2003).

D. Perpetuity

The LTA cautions against temporary protection methods in land conservation, stating that "[t]he bottom line . . . is that the chosen approach must reasonably ensure long-term protection for the conservation resources found on the property."¹⁰⁶ Furthermore, "[a] land trust should not invest a signifi-cant amount of time or money in a temporary protection arrangement unless it has very good reasons for doing so."¹⁰⁷ In contrast, water trusts have operated primarily to provide temporary protection. Two elements of perpetuity are important for water trust activities: the finality of the transaction (i.e., lease versus sale), and the permanent holding of rights.

Unlike land trusts, water trusts have relied on temporary tools such as leases.¹⁰⁸ In 2001, for example, the OWT conserved 93.55 cfs by lease (donated or paid) and only 8.11 cfs by permanent sale or donation.¹⁰⁹ Although the original focus and long-term goal of water trusts was indeed to acquire water rights permanently, water trusts have deviated from this aim for at least two reasons. First, lack of familiarity with their work, compounded by hostility and uncertainty on the part of the agricultural community, has made leasing a more feasible option.¹¹⁰ The water trust is able to introduce clients to the process and build trust over time. Second, because protection from forfeiture is a major incentive, leasing is a realistic approach: it allows clients both to enhance streamflow and to protect their rights from forfeiture and then reassert those rights when circumstances change.

One scholar suggests three advantages to using leases: first, they allow clients and organizations to familiarize themselves with water rights transactions and with the state transfer process; second, they allow water trusts to counter critics' contentions and citizens' fears that local communities will suffer adverse effects from instream flow transfers (e.g., that they undermine the agricultural economic base and reduce return flows);

¹⁰⁶ Land Trust Alliance, The Standards and Practices Guidebook: An Operating Manual for Land Trusts 9-3 (1993).

¹⁰⁷ Id. at 9-8.

¹⁰⁸ LANDRY, supra note 5, at 13. He notes that from 1990 to 1997, "short-term leases of less than five years accounted for the majority of market transactions" (including public and private water rights acquisitions). *Id. See also* James D. Crammond, *Leasing Water Rights for Instream Flow Uses: A Survey of Water Transfer Policy, Practices, and Problems in the Pacific Northwest*, 26 ENVTL. L. 225 (1996).

¹⁰⁹ OREGON WATER TRUST, DETAILED LIST OF 2001 SEASON DEALS, *at* http://www. owt.org/deals2001.htm (last visited Mar. 24, 2004) (on file with the Harvard Environmental Law Review).

¹¹⁰ Sterne, *supra* note 59, at 222 ("The opposition of the agricultural and development communities is probably the biggest stumbling block to private holding of instream rights.... [They] have frequently opposed proposals to establish instream rights, particularly private rights."). *See also* Neuman & Chapman, *supra* note 17, at 177–78.

and third, they offer flexibility through such tools as split-season leases and dry-year options.¹¹¹

From a long-term (or a land trust) perspective, leasing may be a less than beneficial use of resources; it represents a temporary option that must be re-funded and renegotiated and could be lost in the future. However, leasing may function as a precursor to more permanent acquisition, introducing a hesitant community to the transaction process, and thereby paving the way for more permanent options. The OWT has had some success in converting leases to permanent acquisitions, and a leasing option allows irrigators to "test the waters."¹¹²

A second element underlying land trust operations is that private holding of conservation easements or land in fee simple will ensure perpetual protection; for water trusts, this translates into the assurance that acquired rights remain instream flows indefinitely. But under Oregon and Washington state water laws, private organizations cannot hold the water rights they acquire; instead rights are held by the state. In theory, instream water rights are legally protected from future change of use by both the state programs and the contract negotiated between the water trust and the water rights holder. A possibility still exists, however, that this arrangement may not guarantee that water will be permanently protected for instream flows. Water rights may not be insulated from politics and policy changes. State agencies in difficult political environments, such as times of drought or increasing pressure to allocate water to municipalities, could undermine the protection of instream flows. The OWT and WWT believe that the water trust provides permanency by protecting the rights from shifts in bureaucratic policy. They have, however, departed from the land trust model's emphasis on permanency¹¹³ because leases provide short-term advantages over permanent acquisition, and because state law prohibits private holding of instream water rights.¹¹⁴

E. Public-Private Partnership

As partnerships between private land trusts and public agencies have become increasingly common, the line between public and private has

¹¹¹ LANDRY, supra note 5, at 21-23.

¹¹² Id. at 21.

¹¹³ Land trusts have embraced permanency, not only because of its ideological implications (i.e., the perpetual protection of open space for future generations), but also as a result of the structure of IRS tax rulings that recognize the grantors of perpetual easements for tax deductions. See Julia D. Mahoney, Perpetual Restrictions on Land and the Problem of the Future, 88 VA. L. REV. 739, 741–42 (2002).

¹¹⁴ At present, the contractual agreement between the trust and the water right holder may provide an additional level of protection not present in transactions between only the water right holder and the state. In addition, water trusts have not abandoned the idea that private holding may occur in the near future.

become blurred.¹¹⁵ For example, some land trusts pre-acquire land with the intention of "flipping" it to government agencies.¹¹⁶ Land trusts are playing "increasingly complex and powerful roles in brokering and implementing arrangements to achieve ecological goals."117 Eve Endicott argues that the government has become reliant on private organizations in land conservation for at least three reasons: first, through speed, flexibility and creativity, "non-profit organizations bring agility to projects"; second, they "create an 'atmosphere of possibility" and are able to raise funds from those who are more comfortable working with the nonprofit sector than government: third, they provide resources in the form of people, institutions, infrastructure, and funding,¹¹⁸ as well as "mobilize resources not available to governments."¹¹⁹ I add a fourth attribute, articulated by Michael O'Neill: the ability to "experiment with new strategies of social action, respond quickly to new social needs, and generally provide 'social risk capital."¹²⁰ Nonprofit organizations, particularly water trusts, may provide social risk capital in the form of financial, human, technical, and institutional resources to jump-start, leverage, advance, and sustain existing state programs.

Water trusts bring potential solutions to the failure of public agencies to protect instream flows. Institutionally, they may also divert much of the opposition, particularly from the agricultural community, away from the state. By investing in the actualization of state programs that were once only statutory possibilities, water trusts also make it easier for the state to participate in instream flow protection. States may be lacking particularly in the areas of acquiring rights with senior priority dates; adequately funding programs; enforcing existing instream rights; and structuring efficient bureaucratic processes for instream flow protection.¹²¹ Water trusts can be perceived as compensating for and enhancing the activities of the state through public-private partnership.

This partnership between private water trusts and public agencies is very much a marriage of legal necessity. The complementarity is clear in three manifestations of water trust-government partnerships: (1) rule formation and policy interpretation, (2) water right acquisition, and (3) monitoring

¹¹⁵ See Raymond & Fairfax, *supra* note 15, at 604. See also SALLY K. FAIRFAX, LAU-REN GWIN, MARY ANN KING, LEIGH S. RAYMOND & LAURA WATT, BEYOND BUCKS AND ACRES: THE LIMITS TO LAND ACQUISITION AS A CONSERVATION STRATEGY, 1780–2003 (forthcoming 2005); CRAIG W. THOMAS, BUREAUCRATIC LANDSCAPES: INTERAGENCY CO-OPERATION AND THE PRESERVATION OF BIODIVERSITY (2003).

¹¹⁶ STARTING A LAND TRUST, *supra* note 13, at 89. See generally Raymond & Fairfax, *supra* note 15.

¹¹⁷ Breckenridge, *supra* note 10, at 692.

¹¹⁸ ENDICOTT, supra note 9, at 4-5.

¹¹⁹ Breckenridge, supra note 10, at 701-02.

¹²⁰ MICHAEL O'NEILL, THE THIRD AMERICA: THE EMERGENCE OF THE NONPROFIT SECTOR IN THE UNITED STATES 16 (1989) (describing the role of nonprofit organizations in general, and recognizing the origins of major social movements within the nonprofit sector).

¹²¹ See Sterne, supra note 59, at 203.

and enforcement. The three elements provide a focus for analysis of partnerships that reflects not only areas of significant collaboration, but also key phases in establishing effective regimes for instream flow protection. Rule formation and policy interpretation represents a foundation in the development of both public and private infrastructure and institutional capacity for protecting instream flows. Acquisition of water rights represents perhaps the most critical step in securing protection, and as a result of the existing legal structure, is highly dependent upon the cooperation of public and private institutions. Monitoring and enforcement ensures that acquisitions and administrative policies are implemented in practice.

1. Rule Formation and Policy Interpretation

The WWT and OWT have played influential roles in formulating administrative rules and interpreting policy. In this respect, the state operates to set constraints on, as well as create opportunities for, water trust activities, but these constraints and opportunities are also influenced by the water trusts. The process has also created an opportunity to form a mutually beneficial relationship between the trust and the state. Neuman and Chapman note that at the time of the OWT's first acquisition, the appropriate rules and forms were not yet created. They write, "[t]he Trust was fortunate to have the resources to support working with Department staff and participating in administrative rulemaking processes to help develop, influence, and test the evolving programs."¹²² Regarding the evolving rules for water leasing, they continue, "[t]rust staff became key participants in a two year process of rule development for a leasing program, helping to 'road-test' the process as it went along."¹²³

Because the state programs regarding instream water rights transfers are relatively new, both the OWT and WWT have played important roles in policy development, experimentation, and designing administrative rules and infrastructure. Additionally, because they are among the few private organizations engaged in such work, they possess a sort of monopoly over influence. This is not to suggest agency capture or water trust capture by the state, but rather a symbiotic relationship in which the state relies upon the resources and "groundwork" or "site-specific" work of the trusts to actualize and test administrative rules, and the trusts rely upon the state to provide the legal, institutional, and physical infrastructure to ensure a timely and secure transfer of water rights.¹²⁴

In this capacity, the OWT and WWT have also pushed the boundaries of the law and the willingness of the agencies to enforce it, particularly regarding private holding of instream water rights. The OWT re-

¹²² See Neuman & Chapman, supra note 17, at 173.

¹²³ Id.

¹²⁴ Breckenridge, *supra* note 10, at 693.

quested that one of its permanent acquisitions be considered water trust property despite restrictions in Oregon against private holding. The Oregon Water Resources Department responded by issuing the right as a "flow augmentation" right in the OWT's name.¹²⁵ The WWT is also in a strong position to test the laws governing private holding. Under Washington law, two possible methods exist for protecting instream flows: the Trust Water Rights Program (in which private holding is prohibited), and the Transfer Statute,¹²⁶ under which private holding may be an option.¹²⁷ While the Trust Water Rights Program only permits holding of instream rights by the DOE,¹²⁸ the Transfer Statute permits water rights holders to apply to DOE for a change of use. The Transfer Statute does not explicitly prohibit a private organization like the WWT from holding an instream water right.¹²⁹ At present, the WWT has operated exclusively to procure water rights and submit them for transfer to the Trust Water Rights Program, and has yet to test the possibility of private holding.

2. Acquisition

Water trusts and state agencies both engage in the acquisition and transfer of instream flows. However, while state law permits acquisition by private entities, it does not permit private holding of those newly acquired rights. The state is the only institution that can hold the acquired rights, but it also lacks the necessary resources (both human and monetary) for acquisitions, while water trusts possess the funds and resources to acquire rights but cannot legally hold them. In this circumstance, private water trusts have operated as brokers and intermediaries for the state through advertising programs to constituents, negotiating transactions, funding those transactions, and completing the necessary paperwork for transfers.

Water trusts also possess significant advantages over the state in securing funding. They may have more diversified sources of income (foundation, corporate, and individual donations; mitigation funds; and the use of public funds from state and federal agencies)¹³⁰ that enable them to mobilize resources to ensure active state instream flow programs. In Washington, for example, the state's Trust Water Rights Program (1991) was operating statewide before the establishment of the WWT (1997), but began to acquire water rights only as the WWT began activities.¹³¹ Espe-

¹²⁵ See Neuman & Chapman, supra note 17, at 170. See also Interview with Janet Neuman, President, Oregon Water Trust, in Portland, Or. (Aug. 2, 2002) (on file with the Harvard Environmental Law Review).

¹²⁶ Wash. Rev. Code Ann. § 90.03.380 (2003).

¹²⁷ OPPORTUNITIES AND OBSTACLES, *supra* note 17, at 9.

¹²⁸ Id. at 7–9.

¹²⁹ Id.

¹³⁰ Sterne, *supra* note 59, at 221.

¹³¹ Interview with Angela Nicholson, Conservation Associate, Washington Water Trust,

cially in the early stages of state programs, water trusts may also provide social risk capital to state agencies by completing acquisitions that currently face opposition from agricultural and other interests.

The role of water trusts as brokers is illustrated by a unique transaction between the WWT and the Washington Department of Fish and Wildlife (WDFW). The two organizations maintain a good working relationship, usually in assessing the biological benefit of returning flows to certain streams. However, the WDFW also manages its own land and water rights and opted to donate a number of leases to the WWT. The WDFW could have easily negotiated the lease with DOE but chose instead to approach the WWT. Whether the lease was acquired by the WWT or DOE, the outcome would be essentially the same: the water rights would eventually be held by DOE in the Trust Water Rights Program. The Conservation Associate for the WWT suggested that because the trust was doing outreach to promote the Trust Water Rights Program, it perhaps became more visible and accessible to clients than DOE.¹³² The WWT served, in this case, as a private intermediary between two state agencies: the donating agency (WDFW) and the agency holding instream water rights (DOE).

3. Monitoring and Enforcement

Water trusts and state agencies coordinate efforts for monitoring and enforcing instream water rights. Although rights are held by the state, water trusts also monitor acquired rights. Monitoring ranges from firstlevel monitoring, ensuring that contract provisions have been met by clients (for example, visual inspection to determine that clients are leaving specified land fallow), to second-level monitoring, ensuring that rights are not being undermined by other water users on the stream.¹³³ The OWT and WWT both have monitoring regimes and involve the state parties necessary to the acquisition process. The OWT, for example, will discuss monitoring needs with "the landowner, adjoining water right holders, the

in Seattle, Wash. (Aug. 1, 2002) (on file with the Harvard Environmental Law Review). It is notable that The Texas Water Trust, a public program operating in a state where private holding is prohibited, holds only one water right and poses quite a stark contrast to the relative success of state programs in Washington and Oregon. Texas Parks and Wildlife, First Water Rights Donated to Texas Water Trust, *at* http://www.tpwd.state.tx.us/news/030915e.phtml (last visited Apr. 21, 2004) (on file with the Harvard Environmental Law Review). This supports one argument for allowing private organizations to engage in instream flow protection. See also Janet Neuman & Stan Isley, *Trust Water Rights Program, Washington, in* RESTORING THE WATERS (Natural Res. Law Ctr., ed.) 10 (1997).

¹³² Interview with Angela Nicholson, supra note 131.

¹³³ See Oregon Water Trust, *Monitoring: The Key to Protecting Instream Water Rights*, FISH FLOW NEWS, Fall 1999, at 1, 6. Monitoring often requires phone calls, visual inspections, monitoring gauging stations, and notifying state watermasters when a concern is raised. Interview with Andrew Purkey, *supra* note 51; Interview with Yolanka Wulff, former Executive Director, Washington Water Trust, in Seattle, Wash. (Aug. 1, 2002) (on file with the Harvard Environmental Law Review); Interview with Angela Nicholson, *supra* note 131.

local Water Resources Department watermaster, and the district fish biologist of the Oregon Department of Fish and Wildlife."¹³⁴ The OWT is also engaged in a third level of monitoring to assess if the additional flow results in benefits to fish and habitat.

Water trusts also hold state agencies accountable for enforcing instream water rights:

[S]tate water agencies are notoriously underfunded for field work and enforcement. Water rights enforcement is a complaint driven process, and the squeaky wheel gets the grease; that is, when a water right holder complains that his right is not being met, the watermaster surely investigates. If it is the Department itself that is the squeaky wheel for instream rights, complaining is not likely to occur because the enforcement staff is already overworked trying to respond to user complaints.¹³⁵

Although water trusts are dependent upon the state to actually *enforce* water rights, they play an important role in ensuring that the rights are protected from violations and hold state watermasters accountable for enforcing them.

F. Summary

Making the land trust model fit the protection of instream flows has required modification of two basic aspects of the land trust approach. First, although water trusts have embraced incentive-based conservation and the use of market mechanisms in acquiring rights, they rely less on tax deductions, using different incentives not available in land conservation, such as protection from forfeiture. Prior appropriation, in part, structures the available incentives. Second, although aspiring to protection in perpetuity, water trusts have accepted temporary protections like leases and state holding of rights. State law, social factors, and the lack of willing sellers and donors appear to constrain permanent protection by water trusts.

Water trusts have followed the model of the land trust movement more closely in developing functional relationships with the state in formulating policy and infrastructure, and acquiring water rights. Like land trusts, they act as stewards in monitoring and enforcing those rights. One of their primary and most important roles, similar to some land trusts, is to act as a broker for public agencies. Through partnerships primarily with the state, water trusts provide "social risk capital" by promoting, jumpstarting, and leveraging resources for private and public instream flow

¹³⁴ Neuman & Chapman, supra note 17, at 162.

¹³⁵ Id. at 172.

protection. Water trusts have embraced aspects of the land trust model, but have also departed from it in significant ways, and these departures, to a large extent, reflect unique elements of state water law.

IV. THE OREGON AND WASHINGTON WATER TRUSTS: A Comparative Analysis

The OWT found its model in land trusts, and the founders of the WWT subsequently turned to the OWT as a model for their institution: "the [WWT] will be modeled after its highly successful counterparts for land acquisition, the Nature Conservancy and the Trust for Public Lands, and, of course, its prototype, the [OWT]. We will coordinate with the [OWT] to use its experience to advantage in Washington."¹³⁶ The OWT was established in 1993 and represented a cooperative alliance between state and local leaders.¹³⁷ The WWT was created in 1998 by two advocacy groups in Washington, American Rivers (AR) and the Center for Environmental Law and Policy (CELP), but is separate from both.

The OWT and WWT are quite similar: they are both private, nonprofit organizations with similar missions, acquisition strategies, and organizational structures. Their differences can primarily be attributed to two factors: (1) differing stages of development and (2) differences in state water law. The former may provide insight into the evolution of water trusts over time, and the latter illuminates how state water law both constrains and creates opportunities for water trusts.

A. Development: Scope, Size, and Activity

The size of the water trust, the scope of its activities, and the nature of the water right acquisition process appear to vary with amount of experience. The OWT and WWT differ in size, as well as with respect to the geographic scope of their work. The OWT consists of five staff members and eleven board members; the WWT has three staff and six board members.¹³⁸ Whereas the OWT operates in five priority basins¹³⁹ that span much of the state, the WWT has concentrated primarily in Eastern

¹³⁶ American Rivers & the Center for Environmental Law and Policy, Proposal to the Northwest Area Foundation to Establish a Washington Water Trust 2 (Sept. 1996) (on file with the Harvard Environmental Law Review).

¹³⁷ See Neuman & Chapman, supra note 17, at 135.

¹³⁸ These numbers are from August 2002 and, particularly for the WWT, may have changed since the data collection.

¹³⁹ The OWT's priority basins are the Deschutes, John Day, Umatilla, Rouge, and Umpqua Basins. "Each of these basins was identified based upon the potential success of instream water rights to provide critical streamflow for anadromous and resident fish populations and enhance water quality." OREGON WATER TRUST, PRIORITY BASINS: WHERE THE OREGON WATER TRUST WORKS, *at* http://www.owt.org (last visited Feb. 27, 2004) (on file with the Harvard Environmental Law Review).

Washington.¹⁴⁰ The WWT is, however, currently engaged in evaluating options in Western Washington.¹⁴¹ Over time, the OWT has expanded in size and scope, and the WWT is already moving to follow that trajectory.

In addition, the manner in which water trusts negotiate acquisitions is closely linked to the duration of the trusts' work. The WWT appears to spend more of its time and efforts engaged in outreach and soliciting desired rights from clients,¹⁴² while the OWT is seeing the benefits of its early outreach efforts. Through those efforts and by word of mouth,¹⁴³ the OWT has the option of selecting and prioritizing among acquisitions sought out by clients.¹⁴⁴ Thus, the organizational structure and acquisition strategy of the OWT and WWT differ in part because they are at different developmental stages. The differences may be significant, but are likely not static.

B. Differences in State Water Law: Constraints and Opportunities for Water Trusts

Just as differences in the legal systems governing land and water necessitated changes to the land trust model as it was applied to instream flow protection, differences in state water law have had significant effects on adapting the OWT approach to Washington state law. The 1877 Desert Land Act¹⁴⁵ and the 1935 Supreme Court opinion in *California Oregon Power Co. v. Beaver Portland Cement Co.*¹⁴⁶ affirm, although not without ambiguity or controversy, that states generally hold power over water resources within their borders. Thus, state rather than federal law is a major determinant of the form and function of water trusts and instream flow protection in the western United States. There are three differences between Washington and Oregon water law and policy that significantly affect water trust activities: (1) consumptive versus paper water rights, (2) the authority of state agencies, and (3) the existence of a state conserved water rights program.

¹⁴⁰ The WWT's priority basins are the Methow, Okanogan, Upper Yakima, Snake, and Walla Walla River Basins. WASHINGTON WATER TRUST, PRIORITY BASINS, *at* http://www.thewatertrust.org/whatwedo/wwd_priority.html (last visited Feb. 27, 2004) (on file with the Harvard Environmental Law Review).

¹⁴¹ See id. ("The Water Trust is in the process of evaluating acquisition opportunities west of the Cascades in the Dungeness, Green, Nooksack, Kitsap, Nisqually, Sammamish, Snohomish, Puyallup, White and Chehalis River Basins.").

¹⁴² Interview with Yolanka Wulff, *supra* note 133; Interview with Angela Nicholson, *supra* note 131.

¹⁴³ Interview with Andrew Purkey, *supra* note 51.

¹⁴⁴ Id.

¹⁴⁵ Desert Land Act, ch. 107, 19 Stat. 377 (1877).

^{146 295} U.S. 142 (1935).

1. Consumptive Versus Paper Water Rights

First, a central element in the process for transferring water rights to instream flows is the recognition of rights as either based upon the full paper water right or its historical consumptive use. Paper water rights are recognized by Oregon; this practice provides that "the quantity of a water right defined by court decree, certificate, or permit ... is the proper foundation for determining the rate and duty available for transfer."¹⁴⁷ In essence, even if a water right holder has failed to put all of the water to beneficial use, she is entitled, without forfeiture, to the quantity of water stated on the legal document guaranteeing the right, provided that she is "ready, willing, and able" to put the full right to use.¹⁴⁸ Thus, the entire amount of the paper water right is transferable.

Transfers based on historical consumptive use, as practiced in Washington, are quantified by determining the actual number of acres irrigated and the amount of water actually put to beneficial use, rather than the quantity listed on a permit.¹⁴⁹ Therefore, the only water that can be transferred is the amount that historically has been put to beneficial use. The WWT's Executive Director has characterized this test of historical consumptive use as an additional hurdle in the WWT's acquisition of water rights because the transfer process comes under close scrutiny.¹⁵⁰ Water rights holders may be more reluctant to submit their rights for such review by DOE, out of fear that they will emerge from the transfer process with reductions to their rights.

2. Authority of State Agencies

Second, the authority of the state agency to purchase water rights has implications for water trust work. The Oregon State Legislature has not appropriated funds for the Oregon Water Resources Department to acquire water rights through purchase, whereas the DOE has both authority and funds to do so. Because the state is a parallel actor in acquiring private water rights, DOE has the potential to influence WWT transactions through its own practices (and vice versa). Early in the WWT's efforts, this produced some obstacles. In basins where DOE had been active, it had, at times, overpaid for water rights.¹⁵¹ As a result, DOE had devel-

¹⁴⁷ Memorandum from the Oregon Water Trust, Some Concepts for a Transfer Injury Analysis, to the Transfer Rule Advisory Committee (n.d.) (on file with the Harvard Environmental Law Review).

¹⁴⁸ OR. REV. STAT. § 540.610(3) (2003). The user must have "a facility capable of handling the entire rate and duty authorized under the right" and be "otherwise ready, willing and able to make full use of the right." *Id.*

¹⁴⁹ Oftentimes this is calculated as an average of the use in recent years. SAX ET AL., supra note 18, at 236 n.25.

¹⁵⁰ Interview with Yolanka Wulff, supra note 133.

¹⁵¹ Id.

oped higher expectations for the value of water rights and increased the cost of WWT transactions in the area. The WWT and DOE have since developed a more coordinated effort, but the experience demonstrates that lack of coordination between water trusts and states in areas without established water markets can lead to frustration. On the other hand, while DOE's work may create some negative implications for the WWT, it also demonstrates the state's acknowledgement and financial support of instream flow protection, which may benefit the WWT.

3. Conserved Water Rights Program

Third, Oregon water law encourages conservation through the Conserved Water Program,¹⁵² while Washington law has no such provisions. As a result, state law does not grant the same tools to the WWT as to the OWT. In Oregon, the Conserved Water Program provides incentives for water rights holders to use water more efficiently. Under its provisions. water rights holders who reduce their water use, often through improving technology and water distribution systems, may retain seventy-five percent of the water conserved, and may use that water on additional lands, sell or lease it, or dedicate it to instream flows.¹⁵³ The additional twentyfive percent must be transferred to an instream right and held by the state. The OWT "works with the state conserved water program by offering financial support for conservation efforts in exchange for dedicating saved water to in-stream flows."154 It targets potential projects, assists in submitting applications, funds all or a portion of projects, and secures at least twenty-five percent of the water conserved for instream flows.¹⁵⁵ Because Washington does not have a conserved water program, the WWT operates with one less tool in its toolbox than the OWT. The lack of specificity and established regulations in Washington exclude conserved water rights from the WWT's instream flow protection strategy.

In sum, the WWT and OWT are similarly structured organizations that differ both as a result of state water law and of the amount of time they have been active in instream flow protection. It is apparent that differences in state law (e.g., recognition of instream uses as beneficial, authorization of and appropriation to state agencies, participation of private organizations) explain much of the variation in the form of instream

¹⁵² See Or. Rev. Stat. §§ 537.455-.500 (2001).

¹⁵³ See OREGON WATER RESOURCES DEPARTMENT, ALLOCATION OF CONSERVED WA-TER PROGRAM, at http://www.wrd.state.or.us/programs/stewardship/conserved.shtml (last visited Feb. 27, 2004) (on file with the Harvard Environmental Law Review).

¹⁵⁴ Neuman & Chapman, supra note 17, at 145–46.

¹⁵⁵ Twenty-five percent of the conserved water represents the minimum amount dedicated to instream use: "[a]ny portion of the conserved water retained by the water right holder can be donated, leased, or sold to [the] OWT." OPPORTUNITIES AND OBSTACLES, *supra* note 17, at 64. OR. REV. STAT. § 537.470(3) (2003) provides that twenty-five percent shall be converted to an instream water right if deemed necessary for instream flow purposes.

flow protection across the United States. As case studies in states that have already enacted instream flow legislation, the OWT and WWT comparison goes a step further. It demonstrates the extent to which state law and state involvement continue to sculpt the character of *private* instream flow protection, specifically. In Washington, the absence of a Conserved Water Rights Program, and the potential for scrutiny when rights are analyzed for historical consumptive use (rather than the full paper water right), may limit the WWT's ability to engage its clients with the same tools and opportunities that the OWT enjoys. In addition, having the state as a parallel actor in instream water rights acquisition changes the dynamics of water rights valuation and the potential for public-private cooperation.

Water trust age and experience also explain some of the differences between the OWT and WWT. The OWT has a larger organization and broader geographic scope, and possesses the ability to be more selective in water rights acquisitions that it both receives and proactively solicits. Because these characteristics can be attributed to the duration of the trust's work, it is likely that the WWT will undergo a similar expansion in size, scope, and activity over time. Indeed, by increasing its staff size and geographic scope, it is already pursuing that path.

V. INSTITUTIONAL MODELS IN OREGON: AN INTRASTATE Comparative Analysis

Because state law determines many of the opportunities and constraints for organizations protecting instream flows, it is useful to look at the different tools deployed within a single state. This analysis not only provides a context for water trusts among active nonprofit organizations in Oregon, but also identifies other institutional models and the factors leading to their formation. I particularly focus on why these other organizations, established years after the OWT¹⁵⁶ and with awareness of its existence,¹⁵⁷ chose different institutional arrangements.

The Deschutes Resources Conservancy ("DRC") and the Klamath Basin Rangeland Trust ("KBRT") are similar to the OWT in a number of

¹⁵⁶ The OWT was established in 1993. Neuman & Chapman, *supra* note 17, at 135. The KBRT was established in 2001. E-mail from Chrysten Lambert, Executive Director, Klamath Basin Rangeland Trust, to author (Mar. 15, 2004) (on file with Harvard Environmental Law Review). The DRC was established in 1996. DESCHUTES RESOURCES CONSERVANCY, STRA-TEGIC PLAN 10 (2003), *available at* http://www.deschutesrc.org/about/stratplan03.pdf (last visited Feb. 27, 2004) (on file with the Harvard Environmental Law Review) [hereinafter DRC].

¹⁵⁷ The DRC has collaborated on several occasions with the OWT. Interview with Gail Achterman, former Executive Director, Deschutes Resources Conservancy, in Portland, Or. (Aug. 5, 2002) (on file with the Harvard Environmental Law Review). While the OWT and KBRT have yet to cooperate in specific areas, each organization is actively aware of the activities of the other. Interview with David Van't Hof, former legal counsel for KBRT and Attorney, Stoel Rives LLP, in Portland, Or. (Aug. 6, 2002) (on file with the Harvard Environmental Law Review).

ways: they are nonprofit organizations seeking to enhance streamflow primarily through the use of market-based mechanisms. Although one might expect to see the organizations adopt similar institutional models for comparable functions in the same legal environment, the three vary considerably. Three types of institutional models are represented: a land trust, a water trust, and a conservancy.¹⁵⁸ The differences can be attributed to at least three factors: (1) the geography and (2) politics of the region of their operation, and (3) the results of their specific public-private partnerships.

A. The Klamath Basin Rangeland Trust

The KBRT was established by two ranchers in Oregon's Wood River Valley, a sub-region of the Klamath Basin.¹⁵⁹ Recognizing the discrepancy between water supply and demand along the Klamath River, the land trust aims to "increase the quantity and quality of water in the Klamath Basin by conserving irrigation water in the Wood River Valley."¹⁶⁰ The Wood River Valley has a unique relationship to the Klamath River. It is one of three rivers that drains into Upper Klamath Lake and is a primary source of water for the Bureau of Reclamation's Klamath Basin Irrigation Project. The Project supplies water to downstream users and has been the subject of much conflict among irrigators, Native American tribes, and fishermen.¹⁶¹ According to the KBRT, the Wood River Valley "occupies only five percent of the Upper Klamath Basin, but supplies twenty-five percent of the water and thirty percent of the phosphorous flowing into the Upper Klamath Lake and supports nearly fifty percent of the cattle grazed in the Ba-

¹⁵⁸ For the purposes of this Article, I use "conservancy" to distinguish DRC's institutional structure from either a land or water trust. I also use it in reference to DRC's selfdescription: a community-based nonprofit corporation working to restore the environment through "cooperative efforts" and "broad-based decision making." DRC, *supra* note 156, at 4. ¹⁵⁹ See generally Ryan Harper, Saving the Basin's Water, KLAMATH FALLS HERALD &

¹⁵⁹ See generally Ryan Harper, Saving the Basin's Water, KLAMATH FALLS HERALD & NEWS, Apr. 3, 2002, available at http://209.41.184.21/partners/670/public/news280186. html (last visited Mar. 14, 2004); Jeff Barnard, Businessmen Hope Bank Idea Holds Water, REGISTER-GUARD, Feb. 21, 2003, available at http://www.registerguard.com/news/2003/ 02/21/a2.or.klamathwater.0221.html (last visited Feb. 27, 2004) (on file with the Harvard Environmental Law Review); Michael Milstein, Klamath Water Deal No Bargain for U.S., OREGONIAN, Mar. 16, 2003, available at http://www.citizenreviewonline.org/mar_2003/ klamath_water.htm (last visited Feb. 27, 2004) (on file with the Harvard Environmental Law Review) [hereinafter Milstein, Klamath Water Deal].

¹⁶⁰ Klamath Basin Rangeland Trust, SOLVING PROBLEMS IN THE KLAMATH BASIN: A PROPOSED SOLUTION BY THE KLAMATH BASIN RANGELAND TRUST § 2.1 (2002), available at http://www.klamathbasincrisis.org/Rangeland%20TrustProposal031703.htm (last visited Feb. 27, 2004) (on file with the Harvard Environmental Law Review) [hereinafter KBRT].

¹⁶¹ See generally Holly Doremus & A. Dan Tarlock, Fish, Farms, and the Clash of Cultures in the Klamath Basin, 30 ECOLOGY L.Q. 279 (2003); WILLIAM KITTREDGE, BAL-ANCING WATER: RESTORING THE KLAMATH BASIN 89–95 (2000); A RIVER NEVER THE SAME: A HISTORY OF WATER IN THE KLAMATH BASIN (Lawrence W. Powers ed., 1999); Rebecca Clarren, Klamath Basin II: The Saga Continues, HIGH COUNTRY NEWS, Mar. 4, 2002, available at http://www.hcn.org/servlets/hcn.Article?article_id=11047 (last visited Mar. 24, 2004).

sin."¹⁶² Thus, it represents a strategic area for reducing the contaminantloading that results from ranching (thereby improving water quality) as well as for increasing the quantity of water conserved by transitioning from flood irrigation to dry-land ranching. Many of the landowners are ranchers who reside in the valley for half the year and run cattle elsewhere in the winter.¹⁶³ According to the KBRT, "[t]he limited number of ranch owners, the small size of the valley and the non-resident nature of the landowners makes it possible to convert the Valley from a ranch-based resource use system to a nature-based resource use system."¹⁶⁴

As an institution, the KBRT combines land and water trust models in a unique way. Its choice of tools is more consistent with those of a land trust: leasing land or potentially acquiring easements, in part, to facilitate changes in land use.¹⁶⁵ The KBRT encourages a transition from flood irrigation to dry-land ranching and a decrease in the intensity of ranching through stock reductions.¹⁶⁶ The KBRT's ultimate goal is acquiring land in fee simple, but leasing is currently the primary vehicle for acquiring water rights appurtenant to the property.¹⁶⁷ Thus, leases of land have functioned primarily to procure water for downstream use. The KBRT's longterm strategy may include acquisition of conservation easements to facilitate perpetual conversion of land to dry-land ranching.¹⁶⁸

The KBRT more resembles a water trust in that it leases land primarily to secure the appurtenant water rights,169 and it converts the adjudicated water rights to short-term instream leases.¹⁷⁰ However, the KBRT's water acquisition strategy differs from the water trust "model" in at least three significant ways. First, the KBRT's strategy is broader than water acquisition for instream flow protection. In addition to water quantity, the KBRT has incorporated water quality and restoration into its mission. It engages in wetlands and instream restoration work and in riparian and wildlife corridor fencing.¹⁷¹

Second, the water rights acquired by the KBRT are leased for one or several years to the Bureau of Reclamation at the Upper Klamath Lake.¹⁷² The KBRT's instream leases increase the quantity (and quality) of water available in the tributaries above the Upper Klamath Lake, but below the

¹⁶² KBRT, *supra* note 160, § 2.2.

¹⁶³ Id. § 2.3; E-mail from Chrysten Lambert, Executive Director, Klamath Basin Rangeland Trust, to author (Feb. 9, 2004) (on file with the Harvard Environmental Law Review). ¹⁶⁴ KBRT, supra note 160, § 2.3.

¹⁶⁵ Telephone Interview with Chrysten Lambert, Executive Director, Klamath Basin Rangeland Trust (Mar. 3, 2004) (on file with the Harvard Environmental Law Review).

¹⁶⁶ KBRT, *supra* note 160, § 7.

¹⁶⁷ Interview with David Van't Hof, supra note 157.

¹⁶⁸ E-mail from Chrysten Lambert, Executive Director, Klamath Basin Rangeland Trust, to author (Mar. 4, 2004) (on file with the Harvard Environmental Law Review).

¹⁶⁹ KBRT, *supra* note 160, § 2.1.

¹⁷⁰ Telephone Interview with Chrysten Lambert, supra note 165.

¹⁷¹ Interview with David Van't Hof, supra note 157.

 $^{^{172}}$ Id.

lake, the water is not dedicated exclusively to instream use. Rather, it is made available for maintaining lake levels (pursuant to the Endangered Species Act) and for downstream use (consumptive or non-consumptive), with allocation and prioritization among uses to be determined by the Bureau of Reclamation, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the Department of the Interior (with regard to reserved water rights and tribal trust obligations).¹⁷³ Whereas water trusts have built relationships with state agencies, the KBRT has developed a closer relationship to the federal government, particularly the Bureau of Reclamation.

Third, unlike the OWT or WWT, the KBRT operates in a basin where many of the water rights are unadjudicated,¹⁷⁴ and therefore, ineligible for instream leasing.¹⁷⁵ The KBRT is working to protect these water rights from appropriation by junior users through the spatial distribution of its leases of land. The KBRT began acquiring leases at the Upper Klamath Lake and worked up the drainage area in the Wood River Valley. It has leased the properties downstream of the land with appurtenant, unadjudicated rights, and therefore, has eliminated downstream junior appropriators who could divert water before it reaches Upper Klamath Lake.¹⁷⁶ To protect the water rights from forfeiture, the KBRT is exploring the possibility of leasing water rights that are unadjudicated but have certificates.¹⁷⁷

The political climate and geography of the Klamath Basin and this partnership with the Bureau of Reclamation have been key elements in shaping the role and form of the KBRT. Various social and geographical characteristics such as land value, landowner traits, and proximity to the Upper Klamath Lake make the Wood River Valley a strategic target for land and water acquisition to increase water available to downstream users.¹⁷⁸ The demand for water is intense and has been established through a history of conflict among interests in the Klamath Basin. Collaboration between the Bureau of Reclamation and the KBRT has been another central element behind KBRT's strategy to acquire land and water rights. The Bureau of Reclamation leases water rights from the KBRT, and pays the Wood River Valley farmers and ranchers to forego irrigation.¹⁷⁹

¹⁷³ For an overview of the Endangered Species Act, water allocation, and minimum lake levels in the Klamath Basin, see generally Doremus & Tarlock, *supra* note 161.

¹⁷⁴ See OREGON WATER RESOURCES DEPARTMENT, KLAMATH BASIN ADJUDICATION, at http://www.wrd.state.or.us/programs/klamath/summary/textonly.shtml (last visited Mar. 14, 2004) (on file with the Harvard Environmental Law Review).

¹⁷⁵ The unadjudicated water rights are still leased by the KBRT and contribute to streamflow. However, without legal status as instream water rights, there is a possibility that they could be lost through forfeiture or appropriated by a junior water right holder. Telephone Interview with Chrysten Lambert, *supra* note 165.

¹⁷⁶ E-mail from Chrysten Lambert (Feb. 9, 2004), supra note 163.

¹⁷⁷ E-mail from Chrysten Lambert (Mar. 4, 2004), supra note 168.

¹⁷⁸ KBRT, *supra* note 160, § 2.3.

¹⁷⁹ The price paid by the Bureau of Reclamation is controversial because it may compensate landowners at prices higher than the average value of water in the region. Milstein,

In sum, the KBRT's organizational structure and strategy respond to demands specific to the Klamath Basin and represent a significant deviation from the water trust model. The KBRT's long-term effort to acquire easements or land for water rights provides one example in which procuring land may be more economically viable than the water trust strategy of purchasing only water rights.

B. The Deschutes Resources Conservancy

The DRC is a nonprofit organization established in 1996 by the Confederated Tribes of the Warm Springs Reservation, Environmental Defense ("ED"),¹⁸⁰ and seven local irrigation districts in Central Oregon.¹⁸¹ The organization grew out of a reserved water rights settlement¹⁸² between Native American tribes and irrigation districts in the basin with the cooperation of Environmental Defense. The DRC describes its evolution: "In late 1992, the Tribes and EDF expanded the scope of the project to include the entire Deschutes Basin. By 1994, the Tribes and EDF enlisted the local irrigation districts in the effort. Their group coalesced as the ... Deschutes Resources Conservancy."¹⁸³ Its mission is to "restore streamflow and improve water quality in the Deschutes Basin."¹⁸⁴ Although its mission is similar to that of the OWT, its scope of activities is much broader than the direct acquisition of water rights.

The DRC has three main programs through which it hopes to facilitate local efforts to improve water quality and restore streamflow: (1) federal funds and grants, (2) enterprise, and (3) community infrastructure and partnerships.¹⁸⁵ First, through the federal funds and grants program, the DRC allocates funds to projects proposed by other organizations and individuals in the basin, and facilitates their work in restoration and streamflow enhancement through financial and technical assistance. Congress appropriated \$500,000 per year to the DRC in 1999 and 2000, in-

¹⁸¹ See DRC, supra note 156, at 2; Interview with Gail Achterman, supra note 157.

Klamath Water Deal, supra note 159. However, the KBRT is also responding to the urgency of the water demand and the federal government's willingness to pay for additional sources of water during dry months.

¹⁸⁰ ED is a nonprofit advocacy group. It changed its name from Environmental Defense Fund to Environmental Defense in 2000. ENVIRONMENTAL DEFENSE, COALITION'S FOR CONSERVATION: AN INTERVIEW WITH ZACH WILLEY, *at* http://www.environmentaldefense. org/article.cfm?contentid=1277 (last visited Mar. 24, 2004) (on file with the Harvard Environmental Law Review).

¹⁸² A reserved water rights settlement is a type of arbitration to determine the quantity of water rights reserved by the federal government (and thus, neither appropriative nor riparian rights), and the allocation of existing appropriative or riparian rights within the basin. Rather than undergo a general adjudication (which occurs within state courts), parties can agree to settle. *See generally* PETER W. SLY, RESERVED WATER RIGHTS SETTLEMENT MANUAL (1998).

¹⁸³ DRC, *supra* note 156, at 2.

¹⁸⁴ Id. at 4.

¹⁸⁵ Interview with Gail Achterman, supra note 157.

creased that amount to \$1 million in 2001, and reauthorized the DRC for \$2 million per year from 2002–2006.¹⁸⁶ These funds are leveraged by matching funds from the DRC.¹⁸⁷

The DRC's unique relationship with the federal government informs its institutional structure and programming. The relationship also originated out of the reserved water right settlement. As the DRC explains, "[s]ince approximately half of the Basin's land area is managed by federal agencies, it was clear that such a private organization would need the capacity to partner projects with federal agencies to be truly ecosystem and basin-wide in scope."¹⁸⁸

The DRC maintains access to public support and funding through its congressional recognition and authorization as a federal fund and grants program. In addition, federal agencies are authorized to cost-share in ecosystem restoration projects for both federal and non-federal lands and to provide technical assistance to the DRC.¹⁸⁹ Thus, agreements between the DRC and the federal government provide additional funding sources and the added institutional role of steering the direction of projects by allocating funds to other actors within the Deschutes Basin.

In addition to current funding bases, the DRC anticipates that its enterprise programs will "generate revenue that can then be reinvested in restoration."¹⁹⁰ This second category, enterprise programs, includes the development of markets for both greenhouse gas emissions and water (The Deschutes Water Exchange Program (DWE)). DWE's objective is to "foster the development of water markets in the basin. Currently, the DWE operates programs in the following areas: water rights information and valuation, water rights brokerage, annual water leasing, and groundwater mitigation."¹⁹¹ The Annual Water Leasing Program parallels the methods for leasing water rights for instream flow practiced by the OWT; however, while the OWT has targeted primarily individual water rights holders within the Deschutes Basin, the DRC is more focused on leasing water rights from irrigation districts. Like the OWT, it also encourages dona-

¹⁸⁶ DESCHUTES RESOURCES CONSERVANCY, DRC HISTORY, *at* http://www.deschutesrc. org/about/drchrist.htm (last visited Feb. 27, 2004) (on file with the Harvard Environmental Law Review).

¹⁸⁷ Federal funds require one-to-one matching. Oregon Resource Conservation Act of 1996, Pub.L.No. 104-208, § 301(b)(3), 110 Stat. 3009 (1996) (authorizing the Bureau of Reclamation to pay "up to 50 percent" of the cost of approved projects) (reauthorized by the Deschutes Resources Conservancy Reauthorization Act of 1999, Pub.L. No. 106-270, 114 Stat. 791 (2000)). These matching sources include corporate, foundation, and individual funding, state and federal agencies, as well as the development of fee-for-service enterprises. DESCHUTES RESOURCES CONSERVANCY, ABOUT THE DESCHUTES RESOURCES CONSERVANCY, *at* http://www.deschutesrc.org/about/about.htm (last visited Mar. 24, 2004) (on file with the Harvard Environmental Law Review).

¹⁸⁸ Deschutes Resources Conservancy, *supra* note 186.

¹⁸⁹ Id.

¹⁹⁰ Interview with Gail Achterman, supra note 157.

¹⁹¹ See DRC, supra note 156, at 6.

tions of both leases and full ownership rights. DRC's former Executive Director distinguished the DRC's strategy from that of a water trust by pointing to the diversity of programs meant to encourage an active water rights market in which instream leasing is but one option.¹⁹² The DRC's enterprise programs reflect the assumptions of market environmentalism. By posting a water rights database online,¹⁹³ and functioning as a clear-inghouse for water rights information to the public, the DRC aims to foster the development of water markets to efficiently allocate water among uses and users.

Third, the DRC addresses community infrastructure and partnerships by participating in sub-basin planning processes with groups like the Northwest Power Planning Council and proactively examining institutional needs for watershed restoration.¹⁹⁴

In addition to the collaborative relationships (formed out of the settlement) between interests in the Deschutes Basin, hydrology contributes to the DRC's form and function. Conflicts within the basin appear to be less an issue of absolute quantity of water and more a result of water allocation,¹⁹⁵ and the hydrology of the basin facilitates trading and banking of water rights to a greater degree than is often possible in other locations in Oregon.¹⁹⁶ The DRC's focus within one basin may, in part, explain why the DRC has adopted a mission much broader than just the acquisition of instream water rights. The unique hydrology and evolving history of collaborative relationships facilitate and require a broad set of programs and strategies for the enhancement of streamflow and water quality.

C. The Oregon Water Trust in Comparison

A comparative analysis reveals significant differences among the KBRT, DRC, and OWT. While the OWT functions statewide, the DRC and KBRT each focus efforts within one basin, and their institutional structures mirror the attributes of the regions in which they operate.

The DRC is able to take advantage of the unique hydrology of the basin in order to stimulate water markets and enhance streamflow through a variety of programs, including the acquisition of instream flows. In addition, it builds off existing alliances and partnerships by encouraging other organizations to develop restoration projects through its federal grants program.

¹⁹⁵ Id.

¹⁹² Interview with Gail Achterman, supra note 157.

¹⁹³ See OREGON WATER RIGHTS, WATER RIGHTS DATABASE, at http://209.61.214.47/ database/wrinfo.asp (last visited Feb. 27, 2004) (on file with the Harvard Environmental Law Review).

¹⁹⁴ Interview with Gail Achterman, supra note 157.

¹⁹⁶ Interview with Janet Neuman, supra note 125.

The KBRT utilizes the unique geographic features of the Wood River Valley to secure land and water rights for the Klamath Basin and thus enhances water quantity to offset downstream scarcity. The political climate of the Klamath shapes its strategy to lease land for the appurtenant water rights. The prevalence of unadjudicated water rights adds another hurdle in acquiring and transferring rights to instream uses. Whereas the DRC and KBRT have adapted their structure and strategies to the political climates, geography, and markets of their regions of operation, the OWT operates on a much larger scale and thus has intentionally limited the scope of its programs. To this end, the OWT works to ensure that it selects methods that work across all basins and watersheds within Oregon, and that they do not tax the human and financial resources of the organization.

Furthermore, whereas federal-private partnerships are central elements of the operations of the KBRT and DRC, the OWT has focused on fostering partnerships primarily with state agencies. Although the OWT receives federal funding, it remains one source among a variety of sources and does not seem to play as key a role in determining OWT function. Both the KBRT and DRC have sculpted their institutional structures in order to meet the criteria of the federal government under their respective agreements. For the DRC, this includes establishing an application process for federal money and allocating funds to basin projects. For the KBRT, the agreement with the Bureau of Reclamation establishes strict guidelines for the amount of water to be acquired and the price at which the KBRT will be compensated (and can, in turn, compensate landowners).

VI. CONCLUSION

I have examined water trusts as institutional models within three contexts: their origin in the land trust model, their adaptation from Oregon to Washington, and their operation among other organizations enhancing streamflow.

While water trusts have held onto some components of the land trust model (incentive-based conservation and public-private partnerships), they have also departed in very significant ways. Much of the variation can be attributed to the differences between the legal systems governing land and water, resulting in, among other things, the diminished importance of tax incentives. Partly in response to these differences, water trusts no longer focus on permanent acquisitions, favoring more temporary protections such as leases. But like their predecessors in land conservation, water trusts tend toward partnerships with public agencies, which provide the state with additional financial and human resources and added flexibility to foster instream flow protection regimes.

Although many of the constraints that water trusts face (barriers to holding in state law, opposition from agricultural interests, and difficulty finding willing sellers in a new field) were not necessarily foreign to the land trust community in its youth, it is unlikely that water trusts will proliferate to the extent that land trusts have. The water trust approach is currently limited to the minority of states that recognize prior appropriation. Organization at the state level has also resulted in a few, state-wide water trusts rather than many, local, grassroots organizations. In addition to their own unique challenges, water trusts are also confronting some of the same obstacles that impede land trusts, such as the difficulty of implementing a coherent landscape preservation plan while relying on willing sellers, and the challenges of assessing the ecological benefit of their own activities.

Similarities between the WWT and OWT suggest that, as with land trusts, the water trust model is exportable to other states with prior appropriation regimes. This notion is further supported by the recent establishment of water trusts in Colorado and Montana and the modification of the water trust model for use by other organizations. While the water trust model appears to be exportable, variations in state water law have significant effects on the tools and opportunities available to the respective water trusts.

Under the current legal and political framework, which does not permit private holding and which encourages short-term leases, it may be useful for water trusts, instream flow actors, and citizens to examine the attributes of other organizations with similar goals, different strategies, and varied institutional models. Organizations like the Klamath Basin Rangeland Trust and the Deschutes Resources Conservancy, which also protect streamflow in Oregon, show how geography, hydrology, the political atmosphere of local regions and partnerships with public agencies have created divergent protective organizations that employ a variety of methods and tools.

Water trusts are both pioneering a valuable and useful model for the protection of instream flows and demonstrating the challenges of transferring institutional models across natural resources.¹⁹⁷ To function effectively, water trusts have had to rethink some of the basic assumptions underlying the land trust approach, particularly the notion that acquisition guarantees ownership. Acquisition by water trusts secures only a modicum of control,¹⁹⁸ and the degree to which instream water rights are protected from swings in state politics and priorities is unknown and untested.

Does the inability to ensure long-term or perpetual protection mean that the water trust approach is inherently flawed? Not necessarily. Water trusts help legitimate instream rights as property by assisting the state in developing rules that recognize them as such, establishing systems for

¹⁹⁷ For a useful comparison, see generally Seth Macinko & Leigh Raymond, Fish on the Range: The Perils of Crossing Conceptual Boundaries in Natural Resource Policy, 25 MARINE POL'Y 123 (2001).

¹⁹⁸ For a discussion of the relationship between ownership and control, see generally FAIRFAX, ET AL., *supra* note 115.

valuation and facilitating water markets. Water trusts may provide a persuasive case to state legislatures (and the public) that private acquisition and private holding are not threats to public values. Thus, water trusts not only facilitate the incorporation of instream water rights into the prior appropriation system, they may also provide legitimacy to private instream flow protection, as well as political support and on-the-ground skills and resources for cash-strapped state agencies and controversial state programs.

Water trusts also provide an additional level of enforcement in every transaction, which is essential not only to ensure that the water right holder refrains from appropriation, but even more importantly, to control the activities of downstream users. Under a legal system that has generally viewed non-consumptive uses as "waste," and in an era of state deficits, enforcement is likely to be a key issue. Local community respect for instream water rights as property will be of critical importance as neither the state nor the water trusts has the resources to enforce against an unreceptive community.

Water trust acquisitions ought to encourage long-term improvements in land management, such as less wasteful agricultural practices. Short-term leases that provide almost exclusive benefits to farmers—protection from relinquishment and additional income to go with it—ought not be the model for future transactions. But to their credit, water trusts are teaching the land trust community about the need to recognize and address issues of water quality and quantity through land conservation. In this respect, the fact that water trusts are modeled after land trusts may greatly aid collaboration and allow for an exchange of ideas and methods across resources.

A danger of the water trust model is that, to the extent that water trusts actually do encourage private and public instream flow protection, acquisition may displace more viable and appropriate regulatory efforts. The best, and perhaps more sustainable, use of public and private resources may be directed efforts toward establishing and maintaining instream flows through regulation, rather than small and expensive acquisitions. But in the meantime, where the state has been unwilling to legislate and where advocacy groups have been unsuccessful, the market-based, water trust approach is putting water instream.