

Land Trusts and Water

Strategies and Resources for Addressing Water in Western Land Conservation

SARAH BATES



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ADA MONTAGUE • KEIF STORRAR • BENJAMIN SUDDUTH

 Land Trust Alliance

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THE LAND TRUST ALLIANCE'S mission is to save the places people love by strengthening land conservation across America.

The Land Trust Alliance represents more than 1,700 land trusts and promotes voluntary land conservation to benefit communities through clean air and water, fresh local food, natural habitats and places to refresh our minds and bodies. For information: www.landtrustalliance.org.

The Center for Natural Resources and Environmental Policy is an applied research and education center based at the University of Montana that informs and invigorates public policy through research, education and collaborative problem solving. For information: www.cnrep.org.

The Land Use Clinic at the University of Montana School of Law engages third-year law students in projects on behalf of clients that include local governments and nonprofit organizations, providing hands-on experience in the practice of land-use law and policy. For information: www.umt.edu/law.

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Acknowledgments

In the spring of 2012, the Land Trust Alliance featured a short article in its *Saving Land* magazine on opportunities for western land trusts to work with water trusts and other conservation partners to address the link between land and water to meet landscape-scale conservation objectives. With the generous support of the Walton Family Foundation, that short piece sparked a broader dialogue that culminated in this publication, a collaborative project of the Land Trust Alliance, the Center for Natural Resources and Environmental Policy at the University of Montana and the Land Use Clinic at the University of Montana School of Law.

This project began with extensive consultation with land and water trust leaders in the western United States, including a lively roundtable discussion at the 2012 Rally: The National Land Conservation Conference and a survey that gathered information on the experiences and perspectives of land and water trusts and other conservation partners throughout the West. Follow-up conversations with individuals engaged in land and water conservation work further informed the process, providing examples of successes, frustrations and lessons learned in different parts of the region. We tested and refined the publication through consultation with land and water conservation leaders, including a roundtable discussion in Denver in June 2013.

In addition to the guidance, tools and case studies for protecting water resources through private land conservation assembled here, the authors and reviewers hope that this book will also serve as a catalyst and inspiration for creating a stronger link between land trusts and water trusts in their work with landowners. Going forward, the Land Trust Alliance hopes to build upon the relationships and outcomes generated through this project to strengthen water and land conservation efforts in the West. In particular, discussions will continue in workshops and seminars at the annual Rally: The National Land Conservation Conference and other training programs, such as webinars, as leaders look for

opportunities to engage more deeply on this issue in the upcoming years. In addition, we will publish future articles in *Saving Land* to showcase land trusts that are doing this work successfully.

We are grateful for the many partners who generously shared their time and expertise in the development of this book. Ada Montague, Keif Storrar and Benjamin Sudduth (University of Montana School of Law class of 2013) performed extensive research, conducted interviews and participated as valued colleagues throughout the course of the project. Special thanks to Professor Michelle Bryan Mudd of the University of Montana School of Law Land Use Clinic and her law student research assistant, Ross Keogh, who provided invaluable review and editing support, as well as to Peter Nichols, Tom Hicks and Bill Silberstein for their substantial review and written contributions to the text. Several organizations generously allowed us to reproduce excerpts from their written conservation instruments or publications. We appreciate their cooperation and acknowledge the sources along with all excerpts. Many thanks to Rio de la Vista, who graciously allowed us to reprint her beautiful photos of western landscapes in this book.

All conclusions and any errors contained in this publication are the responsibility of the authors. We look forward to continuing this productive collaboration in the future as we seek to respond to the late hydrologist Luna Leopold's generational challenge: "Water is the most critical resource issue of our lifetime and our children's lifetime. The health of our waters is the principal measure of how we live on the land."

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“The more people understand the importance of water and its relation to land conservation, the better. By this I mean: water comes from the land (after it falls from the sky). Conserve land = conserve water.”

“Conservation and protection of water to maintain landscapes, which also sustain streamflows, will be the challenge of the future.”

—Respondents to Survey of Land and Water Trusts, 2012

Summary

“The health of our water is the principal measure of how we live on the land.”
—Luna Leopold

Land and water are inextricably connected, and protecting one often necessitates protecting the other. Water is essential to protect natural areas, such as wetlands, riparian habitat, irrigated pastures and urban greenways—all areas of importance to western land trusts. Likewise, sound land management practices are essential to protect and enhance water quality and aquatic habitat—as evidenced by land trusts’ efforts to protect watershed health through a variety of conservation tools. This dynamic is especially apparent in the western United States where the scarcity of water means that conservationists need to look at the whole system to be successful in protecting a part.

Increasingly, land trusts are interested in addressing water in their transactions with landowners. In many cases, land trusts seek to ensure that existing irrigation practices continue in order to protect the values of productive working lands and the related habitat benefits of return flows. In other cases, land trusts seek opportunities to conserve water to augment streamflows, as well as to enhance wetlands, riparian habitat and other water-related conservation values. Some land trusts work in close partnership with water trusts, which are nonprofit organizations that engage in and facilitate transactions that involve conservation measures, physical improvements (such as structural upgrades or low flow channels) and returning water to important streams that have dried up. Western states recognize and provide protection for the public values of instream flows, although laws and programs vary considerably among states.

This book offers practical tools and resources to help land trusts address water-related conservation values in their private land conservation work. While emphasizing instream flows, many of the approaches described are applicable more generally to water-related

DEFINITION

Return flow: The part of the water withdrawn for an agricultural, industrial or domestic purpose that returns to the groundwater or surface water in the same watershed as where it was extracted. The water can potentially be withdrawn and used again.



PHOTO: RIO DE LA VISTA

DEFINITIONS

Instream flows: Water remaining in its natural course for the benefit of fisheries, recreation and aquatic and riparian habitats, as opposed to water that has been diverted artificially for other purposes; sometimes referred to as *environmental flows*.

Stream reach: A continuous part of a stream between two specified points.

conservation values, such as riparian habitat, wetlands and seasonal water bodies. This book will help readers identify the various ways water concerns arise in land trust transactions and understand different approaches to address those concerns. Chapter one provides an orientation to the ways land and water trusts address water as a conservation value, including comparison of their approaches and observations about shared goals and strategies. Chapter two goes on to present the highlights of a survey of conservation organizations working to protect land and water in the West. This chapter offers case studies of organizations doing innovative work. Lastly, the book concludes with final thoughts in the Afterword and a series of appendices that are a rich resource of information, from an overview of western water laws and instream flow programs to sample water rights language in conservation easements to sample water lease agreements. The book also contains a list of additional resources and a glossary that offers full definitions of important terms (sidebar definitions are abbreviated in some cases).

Currently, there are two distinct strategies for addressing water in relation to private land conservation:

- **Conservation easement language.** Easement language may address the risk that water rights associated with a conservation property might be transferred away from the property, to the detriment of the water-related conserva-

tion values. Easement language also seeks to accomplish a variety of different outcomes, including:

- o Prohibiting a change of water use from irrigation or other existing applications
- o Allowing a permanent or temporary change of use, as allowed by law, such as dedication for instream flow
- o Explicitly requiring a change in the water right (including timing, point of diversion or place of use) in order to achieve conservation goals

Negotiating easement language is most successful when the land trust recognizes that the landowner will want to reserve some of the water rights for other uses, including conservation measures.

• **A separate water transaction.** A public agency or facilitating organization, such as a water trust, may provide a valuable incentive (cash payment, direct subsidy or tax incentive) for a landowner to improve water infrastructure or to take other steps to make changes in land and water management on the conservation property. The landowner may redirect some of the existing water diversion to supplement streamflows or otherwise enhance the environment. These transactions include:

- o Implementing irrigation improvements that allow operations to continue with more efficient use of water
- o Applying other changes to water infrastructure, such as new headgates that divert water closer to the area of use to reduce stream depletions while still delivering the full quantity allowed
- o Changing crops to less-thirsty varieties of plants
- o Forgoing diversions during all or part of the irrigation season

These strategies are not exclusive of one another, and they need not occur simultaneously. Each landowner has unique interests with regard to water, and the tool that works to address conservation values in one state or situation might not be available, appropriate or the best option in another. In some cases, funding sources require specific language regarding water rights to be included in conservation easement documents. In other cases, a temporary arrangement is the best way to build trust and to determine how modifications

DEFINITIONS

Headgate: A control structure or gate that controls the flow of water from a stream into an irrigation ditch.

Diversion: Control or removal of water from its natural course or location by ditch, pipe or other conduit.

Point of diversion: A specific place where water is removed from a body of water, such as by irrigation ditch, pipe or other conduit.

TIPS

Each landowner has unique interests with regard to water, and the tool that works to address conservation values in one state or situation might not be available, appropriate or the best option in another.

to water use might achieve mutual goals. Converting water away from traditional uses such as irrigation may raise concerns among landowners and agricultural community members. Acknowledging this reality, this book contains some practical approaches that strike a healthy balance among multiple land and water uses and community priorities, including water supplies and needs for grazing, farming, recreation, wildlife habitat and drinking water, as well as meeting legal obligations for water resources shared across basins and between states.

Although there is no single recipe for success, effective initiatives share the following strategies:

- *Develop a shared conservation vision with the landowner that includes water as part of a larger suite of conservation values.* If the transaction aims to protect working lands under irrigation, continued application of water is an essential element of success. The same is true for agreements aimed at maintaining or restoring functioning riparian and aquatic habitats. As most water law experts conclude: “Land trusts ignore water rights at their peril.”
- *Conduct due diligence with regard to existing water rights when negotiating a private land conservation transaction that includes water-related conservation values.* When a secure water supply is needed to sustain the conservation values, negotiate this requirement as part of the conservation easement and recognize that the water rights will be an important element of the property appraisal, given the higher value of land that has reliable water. Even in cases in which it is not feasible to explicitly address the water rights in a conservation easement, a land trust should conduct water rights due diligence before completing the transaction. As part of this due diligence, planners should consider whether measures might be necessary to ensure continued access to essential water to protect the property’s conservation values. Due diligence includes evaluating the validity of the water right, its relative priority in relation to other water users’ rights on the stream and the ability to protect the water right if there is a shortage or conflict with other users. In some states, such as Colorado, conducting due diligence on encumbered water rights is a requirement for organizations to be certified to accept conservation easements that qualify for state tax exemption.

TIP

Due diligence includes evaluating the validity of the water right, its relative priority in relation to other water users’ rights on the stream and the ability to protect the water right if there is a shortage or conflict with other users.



PHOTO: RIO DE LA VISTA

- *Share information with landowners about financial incentives for land and water management practices that will benefit streamflows.* Working on the same principle of voluntary, market-driven transactions as land trusts, water trusts offer a variety of incentives for land and water management practices that will enhance streamflows and other aquatic resources on working landscapes. Land trusts are in the best position to provide this information to interested landowners, so they should become familiar with the range of opportunities available in their state or region.
- *Build and maintain cooperative relationships with organizations and individuals who have specialized knowledge of water rights and water transactions in your state.* Although few land trusts employ water lawyers or experts in the administration of water rights, many have discovered the value of developing good relations with the owners and managers of water rights—from the farmers and ranchers themselves to the water districts, water-user associations, local and state agencies that manage water, water trusts and other organizations. The value of building and

DEFINITION

Water-user association: A group of water users, such as irrigators, who pool their financial, technical, material and human resources for the operation and maintenance of a water system.

sustaining good working relationships with partner organizations cannot be overstated. Land trusts can benefit by looking for opportunities to share information, providing a range of conservation opportunities for landowners and helping achieve complementary conservation goals. There is legitimate concern among both land and water trusts about limited funds available to finance land and water conservation, which can lead to a sense of competition that may inhibit the groups' willingness to cooperate. Joint initiatives, such as the Deschutes Partnership, a collaborative effort to restore the watershed of the Deschutes River in Oregon, have created opportunities for new and additional funding, which suggests that land and water trusts benefit by collaborating on strategies to maximize conservation outcomes and simplifying the conservation process for landowners.

The stories, tools and resources in this book seek to support and strengthen efforts to protect water resources as a regular part of private land conservation work and to encourage productive partnerships with water trusts and many other partners who share long-term goals of sustainable land and water use.

Introduction

Water is vital to sustain natural communities. Rivers, streams, riparian corridors and wetlands provide access to water—essential for survival in a dry environment. The patterns and timing of streamflows can also determine whether aquatic species will thrive or become extinct. Water is just as important to human life and the communities that sustain life. For example, in rural areas of the western United States, where working landscapes depend on reliable water supplies to irrigate crops and pastures and provide drinking water to livestock, the need to manage water cooperatively fosters connections among neighbors near and far. To complicate matters, water is simultaneously a highly valued commodity linked to private property and a fundamental public resource that cannot be managed without a high degree of cooperation. Building partnerships and enhancing the cooperative management of increasingly scarce water supplies will be critical to the future of communities, economies and wildlife in the West.

Land trusts recognize the many conservation values of water in nearly every aspect of their work. The sustainability of wetlands, riparian habitat, irrigated pastures and crops, drinking water, recreation uses and urban greenways require access to dependable water of a suitable quality for its intended use. Likewise, sound land management practices are essential to protect and enhance water quality and aquatic habitat, which land trusts recognize in their efforts to protect watershed health through a variety of public and private conservation tools.

Historically, however, land trusts have not explicitly addressed water in their transactions with landowners. Early conservation easements were typically silent or vague about the water rights associated with the land and their relationship to streamflows. In short, their scope of protection effectively ended at the riverbank.

This reluctance was understandable given land trusts' many competing responsibilities, landowners' concerns about losing control over water and the complexity of state-specific laws and

TIP

Current competition over scarce water resources suggests land trusts should take a new look at the linkages between water and land conservation.

practices regarding water rights. However, today's competition for water resources from urban communities, pressures from shifting agricultural practices, depletion of groundwater and uncertainty due to drought and climate change, along with land trusts' strategic emphasis on landscape-scale conservation goals, mean land trusts are well advised to take a new look at the critical linkages between water and land conservation.

This linkage is equally urgent for people involved in water trusts—a relatively new type of conservation organization modeled in many ways on the land trust approach, but focused on measures that enhance streamflows, wetlands and riparian areas. Water trusts engage in a variety of transactions with private landowners, including changing points of diversion or irrigation timing, converting crops to less-thirsty varieties of plants and paying for improved irrigation efficiency in exchange for the saved water staying in the stream to enhance aquatic resources and recreational opportunities. In some cases—but not as many as one might expect—a landowner simultaneously enters into a conservation easement with a land trust and engages in a water conservation transaction with a water trust or an organization that facilitates such transactions with public agencies.

The goals of this book are to identify the various ways water concerns arise in land trust transactions, describe innovative approaches to address those concerns and provide resources to connect and inform land and water conservation partners. This



PHOTO: RIO DE LA VISTA

book is explicitly *not* intended to be a how-to manual for any particular approach to addressing water in private land conservation initiatives. Rather, it will inform and encourage an ongoing conversation about how and when land trusts might productively delve into the sometimes intimidating world of western water law and to address some of the issues and concerns that may accompany this journey.

Many organizations have been engaged in this work for years (in some cases decades), including regional groups such as the Western Water Project of Trout Unlimited (TU), Ducks Unlimited, The Nature Conservancy and state-specific entities, such as the Washington Water Trust, the Freshwater Trust, the Colorado Water Trust and the Arizona Land and Water Trust. Included in this book are stories that illustrate their accomplishments and links to their publications and web-based resources for further information.

This book is organized into several sections and a number of appendices with additional resources to explain the research group's findings and to provide access to additional sources of information.

Chapter one establishes context by describing the key roles and approaches of land and water trusts, highlighting common conservation values and key differences in the tools the groups use to achieve their objectives. This discussion is intended as an orientation to the organizations and the way they work, with comparative descriptions of their transactions with landowners.

Chapter two looks more specifically at the ways organizations are incorporating water into their land conservation work today. After providing illustrative stories from throughout the region, the chapter goes on to introduce readers to specific examples of options, strategies and resources that may inspire the evolution of productive conservation efforts to protect the vital convergence of land and water.

The Afterword offers some concluding observations about the opportunities and challenges for land and water partnerships, including potential next steps to support closer attention to water in private land conservation initiatives.

The book concludes with six appendices that:

- A. List the people who participated in the roundtable discussions that informed this book
- B. Summarize the methods and results of the land trust survey

- C. Describe and link to more information on western states' instream flow programs and water rights generally
- D. Provide sample language from conservation easements that have addressed water rights
- E. Provide sample language from water transactions related to streamflow enhancement
- F. Summarize key publications and organizational resources for more information on water in relation to the work of land trusts

Land and Water Conservation Strategies and Values

1

Introduction

This chapter provides an orientation to the ways land and water trusts address water as a conservation value, including comparison of their approaches and observations about shared goals and strategies. It begins by describing how land trusts may achieve conservation objectives through transactions that explicitly address a landowner's legal rights to use water. One of the important takeaway points of this initial discussion is that water rights in the western United States are normally a separate real property interest and are not necessarily included in a transaction involving a conservation property. Thus, it is important to deal with the issue of water rights when the conservation value underlying the acquisition depends on the presence of water on the land or secure access to a reliable water supply.

After providing an overview of the basic approaches to addressing water rights in a land transaction, the chapter continues with an introduction to the work of water trusts and other groups that seek to restore streamflows and enhance related environmental values through water rights transactions. Founded on the same principles as land trusts, these organizations often provide voluntary incentives for landowners interested in implementing changes in their diversion, delivery or use of water to benefit the environment. Sometimes these organizations acquire land or water rights outright and convert the water from irrigation to instream flow. Water trusts and other organizations with water rights expertise often serve as advisers, consultants and ready sources of information for land trusts seeking information on legal issues related to water in land transactions. Water trusts also serve as facilitators for organizations and water rights owners who want to use some or all of their water to benefit streamflows on a permanent or temporary basis.

TIPS

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Water-Related Conservation Purposes

The following language is from a conservation easement template developed by the Vermont River Conservancy.

Landowner and Holder acknowledge and agree that the purposes of this Easement are to allow the _____ River (the “river”) to reestablish its natural slope, meander pattern and access to natural floodplains in order to:

- a. Reduce erosion hazards
- b. Provide flood inundation and fluvial erosion hazard mitigation benefits
- c. Improve water quality through hydrologic, sediment and nutrient attenuation
- d. Conserve and enhance aquatic and riparian wildlife habitat
- e. Enhance ecological processes associated with the Protected Property now and in the future

Private Land Conservation Strategies and Water Rights

At the heart of private land conservation transactions is the statement of conservation values to be protected on a particular parcel of land. Many of these values relate to water because it is the sustaining force of living systems. Thus, for example, a land trust may be interested in protecting a stream corridor’s riparian vegetation, which provides cooling shade and security for fish, birds and wildlife. Or protection efforts may focus on securing intact wetlands, which provide safe havens for migratory birds or filter pollutants from storm runoff before it enters a stream. Some conservation initiatives aim to protect human access to waterways for recreation, spiritual renewal or scientific study. Others seek to secure water for agricultural production, preventing the transfer of water rights from agriculture to housing or industrial water needs.

In the arid western United States, protection of working agricultural lands usually depends on the continued application of water through irrigation. Thus, for example, an initiative aimed at maintaining a working ranch for all the values it offers—open space, wildlife habitat and rural heritage—relies on continued access to water to sustain the crops and livestock that are essential parts of the operation. Just as individual properties vary in their relative conservation values, so do the relative values of water rights vary, depending upon their seniority (or relative priority dates, which means when the water was first put to beneficial, human use, as explained on page 14) and other factors at play in the watershed. In short, water is never far from and is often an express part of the

TIP

Water is never far from and often is an express part of the goals of a private land conservation initiative and thus inseparable from core protection objectives.

goals of a private land conservation initiative and thus inseparable from core protection objectives.

Water Rights in Fee Land Transactions

In some cases, land trusts acquire fee title to land by purchase or donation, which they may choose to hold and manage for the long term, transfer to public ownership as a public park or open space or sell to a private party, subject to a conservation easement. Sometimes these land parcels come with associated water rights specifically restricted to the uses for which prior landowners managed the land, such as irrigation. In the western states following the prior appropriation rule of water allocation (see page 14 for a full definition of this rule), the transfer of land does not necessarily include the transfer of water rights. Thus, a land trust acquiring fee title to land should negotiate explicitly for the right to continue using water necessary to protect the enumerated conservation values or to ensure that the water is transferred (through the appropriate legal vehicle) to some other use compatible with the conservation values of the property, such as enhancing streamflows. In such cases, the land trust will need to be mindful of the relative priority of the water right and its ability to utilize the rights as a protected instream flow, which varies in different states, as illustrated by the provisions featured in Appendix C.

Water Rights in Conservation Easement Transactions

In many cases, land trusts acquire less than fee title of the land they wish to protect, negotiating for permanent conservation easements that leave the underlying land ownership intact, but ensure that highly valued landscapes are conserved. A landowner entering into an easement agrees to restrict future activities on the land to protect its conservation values, tailored to meet the particular objectives of the parties engaged in the transaction. In exchange, the landowner may be eligible to receive tax benefits for a charitable donation of easement value and/or receive direct payment for the full or partial value of the easement, as well as the satisfaction of protecting the conservation values of the property for future generations. The process of negotiating and recording a conservation easement is familiar to readers working with land trusts and is beyond the scope of this book. For those wishing to learn about the nuts and bolts of conservation easements, the Land Trust Alliance (www.landtrustalliance.org) offers a variety of publications and educational resources.

DEFINITION

Prior appropriation rule of water allocation: A system of allocating water rights from a water source generally used in the western United States, with rights based on when the use originated rather than land ownership; sometimes referred to in shorthand as “first in time, first in right” (see “Western Water Law 101” on page 14).

TIP

A land trust acquiring fee title to land should negotiate explicitly for water rights.

Western Water Law 101

Distinct rules govern water use in the eastern and western states. For the purposes of this discussion, western states include Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming*. Eastern states adopted the riparian rights approach, a rule based on shared use of streamflows by owners of adjacent lands. Alaska generally follows the western model, but its specific situation is not addressed here. Hawaii has its own special blend of water rights, including some traditional use rights that are also not described here. In the drier western states—where valuable uses of water often require moving water far from its home stream—a rule based on the principle of “first in time, first in right” developed into what is now known as the *prior appropriation doctrine*, which established allocation of scarce water supplies by priority.

Prior appropriation allowed the earliest water users to claim as much water as they could put to productive, beneficial use and gave first priority to these senior water rights holders, providing them with the ability to satisfy their water claims first in times of shortage. Farmers and ranchers with irrigation rights established in the 1800s hold the majority of senior water rights in many parts of the West today.

Historically, this system provided important security for those who constructed ditches and other infrastructure to move water to where it was needed, ensuring that they would not lose access to reliable water to interference from later arriving and sometimes upstream settlers. Subsequent claimants could identify sources of water not yet committed to legally protected beneficial uses and develop these sources to meet new demands, understanding the risk of their junior rights being cut off in times of shortage. Because many if not most streams in the West are today overappropriated (more water rights authorized than the amount of water typically available), the most senior rights are generally the most valuable, both for commodity production, as well as for ecological restoration. Junior rights that are rarely deliverable are sometimes referred to as *paper rights* and typically have little value, unless more senior rights are abandoned.

The prior appropriation doctrine treats water rights as separate from land ownership and allows

water rights holders to lease or sell their rights for other uses and/or at other locations—subject to a review process that ensures no harm to other water rights on the stream. And, although a water right is a property right like land ownership, it can be lost by nonuse—a rule sometimes referred to as *abandonment, forfeiture* or simply *use it or lose it*. (This is not true for federal reserved water rights, a special category not addressed in this short discussion.)

The detailed rules that govern water use and management vary a great deal between states and even among local water supply organizations. Many landowners receive their water from ditch companies, irrigation districts and other cooperative organizations, which exist to acquire water rights, develop storage and deliver surface water to their members for irrigation and other purposes. Their water rights are described as *shares* in the rights held by the organization, with an added layer of rules and agreements to negotiate when engaging in a water transaction.

The rules for groundwater use are even more diverse. In some heavily used groundwater basins, new water rights claims are prohibited, whereas other areas have virtually no restrictions on new wells. Some water transactions described in this book rely upon switching from stream diversions to groundwater sources in order to enhance streamflows. Obviously, this approach is only feasible where the applicable laws and regulations allow tapping into an aquifer or subsurface flows to supplant surface water sources.

All western states recognize that water is a public resource subject to private use rights, and all now provide some recognition of the value of environmental or instream flows. Thus, in various ways, state agencies and private organizations may claim a new, albeit junior, appropriation for instream flow rights or acquire senior water rights for these uses through purchase, donation or lease. See Appendix C for a summary of western states’ water laws and instream flow programs and resources for more information specific to each state, and consult an expert before taking action that affects or relies upon the legal security of particular water rights.

* Texas water law does not apply prior appropriation doctrine common to other states.

If, as in many cases, water is essential to protecting the conservation values of the property, land trusts should consider the necessity of including language in the deed or conservation easement that addresses the existing water rights. Because laws and administrative regimes vary a great deal among states, this language requires an understanding of the applicable state conservation easement law. For example, in 2003 the Colorado legislature amended that state's conservation easement statute, Colo. Rev. Stat. 38-30.5-102. That law clarified that water rights could be encumbered in a conservation easement on land where the water is used beneficially "appropriate to the retaining or maintaining of such land, water, airspace, or water rights . . . predominantly in a natural, scenic, or open condition, or for wildlife habitat, or for agricultural, horticultural, wetlands, recreational, forest, or other use or condition consistent with the protection of open land, environmental quality or life-sustaining ecological diversity." (See Appendix D for examples of conservation easement language drafted to comply with this authority.)

There are a range of approaches to addressing water rights through language in private land conservation transactions, ranging from those aimed at "tying water to the land" for agricultural and ecological benefits to those providing for enhanced streamflows or other ecological functions. In negotiating such provisions, it is vital to examine the source of the water and the seniority of the water right and to determine if the water is adequate and secure enough to sustain those conservation values into the future, while accounting for the natural fluctuation of weather and climate. For example, if the conservation values are dependent upon water that is stored in a reservoir or groundwater that is pumped for agricultural or wildlife benefits, it is critical to know how sustainable that water supply is and to provide for that in the deed language. For example, in southern Colorado's San Luis Valley, some conservation easements include language allowing a change in irrigation practices in the event that irrigation wells are shut down to protect the aquifer.

Conservation easement language regarding water rights may seek to accomplish any or a combination of three different objectives:

1. Prohibit a change of the water right from irrigation or other existing applications
2. Allow a change of the right, within defined parameters

DEFINITION

Groundwater: Water located beneath the earth's surface in spaces between soil particles and in the fractures of rock formations, generally referred to as aquifers. States vary tremendously in their regulation of groundwater use.

3. Explicitly require a change in order to achieve conservation goals

Each of these objectives is described briefly below, and sample conservation easement language concerning water appears in Appendix D.

Prohibit a Change of the Water Right

When the core concern of a conservation transaction is to preserve productive agricultural lands, maintaining sufficient water for irrigation is an essential component. For example, a land trust might enter into an easement with a rancher who has historically irrigated pastureland with senior surface water rights on the property. If the easement does not explicitly address the water rights, the rancher would be able to sell all or part of them, drying up the pasture and thus compromising the conservation values associated with the property. Similarly, if the easement does not require that irrigation continue, the landowner may simply stop applying water and risk losing the underlying water right under state water law abandonment or forfeiture provisions. Again, the conservation values protected by the easement may be compromised in this scenario.

An additional motivation for prohibiting a sale of water away from the conservation property might be a broader, community-wide concern about pressure to transfer water to meet the demands of distant urban or industrial users. In this case, provisions encumbering water rights aim at protecting the tradition of agricultural land use and the social connections of people who share a common water source. For example, in the 1990s, farmers involved in western Colorado's Gunnison Ranchland Conservation Legacy program agreed to such restrictions in conservation easements to "keep water local by tying it to the land," according to rancher Bill Trampe. Similar concerns motivated creation of the Rio Grande Headwaters Land Trust, described on page 42.

Easement language may go beyond transfers of water away from the conservation property. As illustrated by the easement language excerpts in Appendix D, the provisions may prohibit the landowner from constructing new water diversion structures, developing new water rights from the existing source or failing to maintain the application of water, which might result in loss of the water right through the doctrine of abandonment or forfeiture. Such provisions underscore the importance of inspecting water delivery and use as part of a land trust's annual easement monitor-



PHOTO: RIO DE LA VISTA

ing program and the challenge of compelling an actual beneficial use of the water.

Importantly, easement restrictions on water rights do not necessarily need to encumber *all* the rights associated with the property. Colorado water lawyer David Kueter notes a temptation to include as much water as possible, “but the best approach is to encumber only those water rights that are necessary to protect the conservation values.” The Colorado Water Trust’s *Water Rights Handbook for Colorado Conservation Professionals* (referenced in Appendix F on page 132) provides specific language that may be employed when a conservation organization concludes that only a portion of a landowner’s water rights is necessary to maintain the conserva-

TIP

The best approach is to encumber only those water rights that are necessary to protect the conservation values.

tion values; although this discussion is specific to Colorado, the general principles it outlines are relevant in all western states.

Easement restrictions that encumber water rights raise several concerns for land trusts, especially regarding changing conditions in the future. As summarized by one land trust representative: “If it’s no longer economically viable for the rancher to maintain the infrastructure and irrigate the land, what is the role of the land trust then? If the water rights are at risk of abandonment, can the land trust intervene and directly irrigate the land? How can we work proactively with the landowner to avoid this situation entirely? How can we work with them to enhance the effectiveness of the water they do apply to the land? Are there incentives, cost-share programs and so on that we can help connect them to in order to optimize the situation?” Some of these concerns can be addressed by easement language that anticipates such changes, as described below, while others require a commitment to monitoring and stewardship in partnership with the landowner. Online resources include detailed checklists for water-use stewardship, including the Arizona Land and Water Trust’s publication, *Benefiting Landowners and Desert Rivers: A Water Rights Handbook for Conservation Agreements in Arizona*, referenced on page 128.

Provide for a Possible Change of the Water Right

Even when prohibiting the transfer of water away from the conservation property, an agreement concerning water may include a provision for a change in use within certain parameters. For example, it has become standard practice to provide that irrigation is the primary permitted use of water under an agricultural conservation easement, but that other uses are permitted if the historical application rate is no longer necessary to fulfill irrigation needs. In such a situation, the landowner may plant more water-efficient crops or install a new headgate closer to the place of use that requires a smaller diversion to receive the decreed water quantity. These other allowable uses may include directing the water to enhance wildlife habitat, wetlands, recreational or other uses consistent with the conservation values of the property, taking into account the need for compliance with all applicable legal requirements for changing the water use.

This conditional language may articulate allowable alternative uses if some of the water originally included in the easement is later deemed not necessary for achieving the stated conservation goals. For example, the Rocky Mountain Elk Foundation speci-



PHOTO: RIO DE LA VISTA

fies in its agricultural easements that a “grantor may not sever any water rights from the property except to legally designate those water-use rights for instream flows.” As described in Appendix C, state instream flow laws vary tremendously, so that provision would take on different meaning in each western state and should be tailored accordingly. For example, some states allow private organizations to hold instream flow rights; in others, only a state agency may do so. States also vary in their recognition of valid purposes for instream flow protection and in the seniority afforded water rights transferred from other uses to instream flow.

In some cases, the provision for changed conditions may allow a transfer of some water away from the conservation property. For example, easements funded by the Natural Resources Conservation Service’s Farm and Ranch Lands Protection Program (FRPP has been succeeded by a new Agricultural Land Easements program established in the 2014 Farm Bill) must include maintenance of “sufficient water for irrigation” on the property. This provision allows for the transfer or sale of some water in the future if measures are taken to improve irrigation efficiency, so long as sufficient water remains with the property. The drafters of the Colorado Water Trust’s *Water Rights Handbook for Colorado Conservation Professionals* caution: “Although it is desirable to

allow flexibility with respect to the future use of the water rights encumbered by an easement, it is equally important to ensure that any new use of a water right will be consistent with the conservation purposes of the easement and will not jeopardize the water right itself.”

Require a Change of the Water Right

In some cases, the conservation value of a property focuses more directly on the environmental functions of water, such as recovering a vulnerable fishery, restoring degraded wetlands or mitigating for impacts of off-site development. In this case, a land trust may include easement language requiring the water right holder to convert existing uses of water from irrigation to instream flow or other uses that enhance the environment, pursuant to all necessary legal processes to approve such a change. This change of use can be spelled out in the legal documents related to the property transaction or it may be accomplished through a separate agreement with a water trust or similar conservation partner if within the parameters of the underlying conservation agreement. Any permanent transfer for instream flow should be preceded by a management plan, ensuring that this water is not necessary for active habitat restoration on the property, such as planting native cover vegetation.



PHOTO: RIO DE LA VISTA

In some arid parts of the West, where water availability is the limiting factor for recovery of threatened and endangered species, land trusts sometimes acquire working agricultural lands with the explicit purpose of converting irrigation water to restoring streamflows and associated riparian habitat. In Arizona, this “sever and transfer” process results in the water right ownership changing from private hands to a state agency for instream flow for fish and wildlife use. Details on this type of transaction are spelled out in the Arizona Land and Water Trust’s *Benefiting Landowners and Desert Rivers: A Water Rights Handbook for Conservation Agreements in Arizona*.

This strategy may be accomplished through an easement provision, as well. In 2010, The Nature Conservancy included language in an easement it entered into with the California Department of Fish and Wildlife stipulating that the state agency will take full control of the water rights associated with a ranch owned by the conservation group with the goal of converting some of the water to instream flow to benefit salmon during critical times of the year. Importantly, this “permissive dedication of water rights” maintains the original beneficial use of irrigation, but adds an additional use of restoring a high-priority fishery through flexible changes in water use timed to match the needs of salmon.

Additional strategies include a change in the point of diversion to keep water instream through a critical stream reach, improvements to irrigation delivery facilities with a commitment to leave saved water instream, as well as a switching from using surface water to using a well. Each of these strategies has advantages and disadvantages, which will dictate their applicability.

As with all transactions involving instream flows, *state laws vary tremendously*, so the details of a particular transaction will be different in each western state. The greatest variable is who is entitled to own the water right when it is used for instream flows. Appendix C outlines the key points of state instream flow programs, noting the few examples in which private groups such as land trusts may hold instream flow rights. More commonly, a conservation organization must make a provision for such rights to change to public ownership.

Transactions that reduce or eliminate irrigation in order to enhance streamflows or other environmental uses of water may engender considerable concern among neighboring landowners. Although these transactions are voluntary and may offer substantial benefits for landowners who choose to participate, this change may feel threatening to others who fear a loss of agricultural heritage

or an uncomfortable emphasis of “fish over farms.” This is by no means a universal reaction, but the potential for misunderstanding and consternation is worth considering in the early stages of such a transaction. As one person remarked in response to a survey on this subject, “Land trusts need to better understand the mind-sets and concerns within [the agricultural community and] find ways to collaborate for effective partnerships that sustain our food production along with environmental health.” It is, therefore, critical for land trusts to conduct proper outreach with landowners and the community at large to understand these concerns and ensure mutual understanding about the land trust’s objectives, the implications of the conservation easement and/or water right changes and how the project will affect the community.

Land trusts can look to the experience of water trusts for valuable lessons on transactions involving changes in water use to enhance environmental conservation values. As one representative of a water conservation organization described it: “We have many examples of balancing water use so that farming continues more efficiently and the environment benefits from the savings.” It is clear that these transactions offer a wide variety of win-win solutions.

Water Trusts as Conservation Partners

While land trusts have operated in the United States for many decades, water trusts are relatively new players in the conservation arena, emerging after western states began recognizing and providing legal protection for the public values of instream flows and lake levels in the last several decades. As illustrated in Appendix C, every western state today has some provision for protecting and enhancing instream flows, and accordingly, water trusts are active in most of the region to facilitate these transactions.

Most water trusts operate statewide, but some work only in a particular river basin (for example, the Deschutes River Conservancy and the Clark Fork Coalition). Several national conservation groups engage in water transactions and are included in the category of *water trusts* for that area of their work, including Trout Unlimited’s Western Water Project, The Nature Conservancy, Ducks Unlimited and the Trust for Public Land. Other organizations, such as American Rivers and the Environmental Defense Fund, have been important in establishing and supporting water

TIP

It is critical for land trusts to conduct proper outreach with landowners and the community at large on their plans for water.



PHOTO: RIO DE LA VISTA

trusts and remain valuable allies by supporting laws and policies that enable their work.

Water trusts articulate conservation values and approaches that complement those of land trusts. For example:

- The **Washington Water Trust** is a neutral, nonregulatory nonprofit dedicated to improving and protecting streamflows and water quality throughout Washington state. It uses voluntary, market-based transactions and cooperative partnerships to create balanced solutions, so that fish, agriculture, business and wildlife—upon which everyone depends—can thrive.
- The **Freshwater Trust** (formerly the Oregon Water Trust) restores stream flows by working collaboratively with willing landowners. It uses a variety of cooperative solutions, including financial compensation, technical assistance and expert advice, to keep more water in streams and rivers because water quality starts with water quantity.



PHOTO: RIO DE LA VISTA

- The **Colorado Water Trust** was formed to restore and protect streamflows through water acquisitions, physical solutions and other creative approaches. The Trust is the only nonprofit organization working statewide to transact water deals for conservation benefits. It works closely with the Colorado Water Conservation Board, the only entity in Colorado that can hold water rights for instream flow purposes. The Trust's projects are all voluntary and market based. It works with the agricultural community and other water users, governmental entities, land trusts, watershed groups and others to address a statewide chal-

lenge: preserving Colorado’s way of life while restoring and protecting its watersheds.

The descriptions of water trusts likely sound familiar to readers involved with land trusts. The founders of the Oregon Water Trust (the first in the country) stated that their vision “was to take the tools of the land trust movement . . . and apply the same approach to the acquisition of water.” This made sense for a variety of reasons, including the similar nature of land and water as private property and land trusts’ strong record of engaging landowners in mutually beneficial conservation agreements. Both land and water trusts:

- Rely on voluntary transactions, typically involving financial incentives for the landowners’ participation
- Often interact with public agencies to obtain financing or otherwise implement conservation goals
- Engage in long-term stewardship and monitoring to ensure ongoing achievement of conservation goals

Water Rights Transactions

Despite their similarities, there are some important differences between the ways water trusts and land trusts achieve their goals. First, water trusts often engage in temporary agreements, which can extend over long periods but do not seek to change water rights in perpetuity (with some important exceptions, as noted in the stories on pages 41–68). Second, in contrast with most conservation easement transactions, changes in water rights usually require formal state approval, which can add a great deal of time, uncertainty and expense to the transaction. Finally, compared with conservation easements, there is also less certainty about the federal tax consequences of an instream flow donation (see discussion in the box on page 28), and valuation of water rights remains challenging in regions where transactions are less frequent.

See the figures on page 26 for a comparison of a typical conservation easement with a typical water trust transaction in the Columbia River Basin.

Water trusts operate within the specific parameters of their state water laws, which provide for different means of acquiring water rights for streamflow restoration. Several state-specific guides referenced in Appendix F, including the Colorado Water Trust’s *Water Rights Handbook for Colorado Conservation Professionals* and similar overviews of programs in Arizona, California, Montana

Comparing Processes: Conservation Easement versus Instream Flow Lease



Figure 1-1: Land Trust Conservation Easement Process (typically completed in four months to one year)

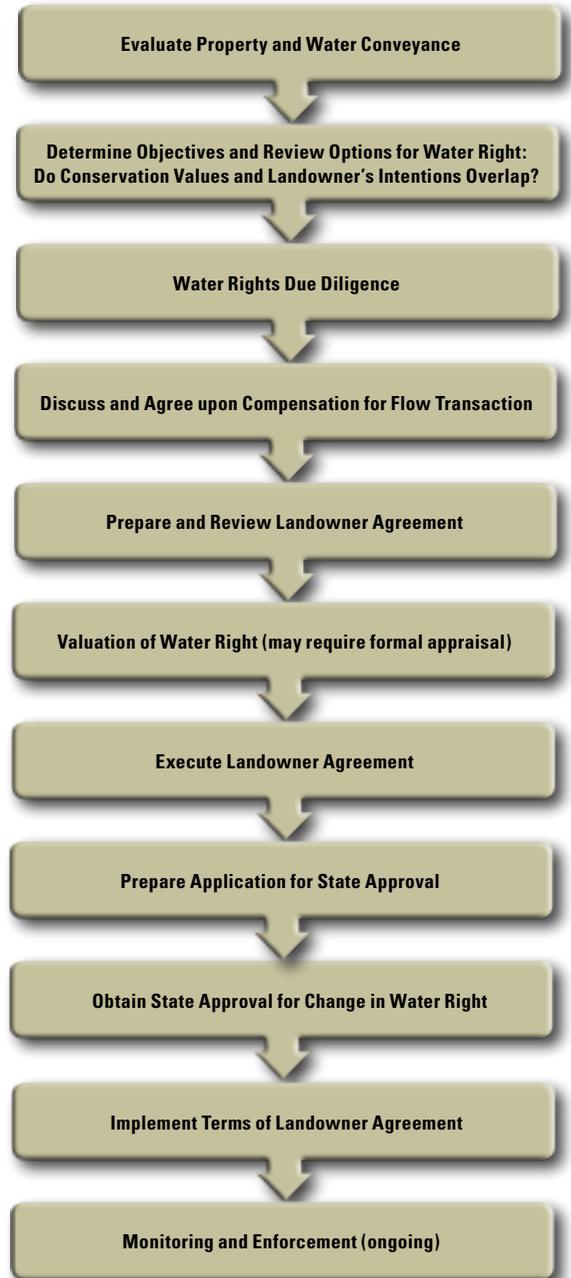


Figure 1-2: Water Trust Instream Flow Transaction Process in the Columbia River Basin (typically takes one to four years to complete)



PHOTO: RIO DE LA VISTA

and Washington, are essential resources for land trusts wishing an orientation to the particular programs and incentives they can incorporate into their conservation work.

With all those caveats, it is challenging to speak broadly about water transactions. But, keeping in mind the overarching principles of western water law outlined on page 14, a few generalizations underscore the conservation value of water transactions.

First, the seniority of a water right that is successfully converted permanently or temporarily to instream flow usually remains the same as the original appropriation (that is, the date the water right was originally allocated), which is quite valuable in the case of irrigation rights established long ago. If this weren't the case, instream water rights would be very junior in priority and thus of limited value in dry periods.

Second, most state programs provide that a temporary change to instream use protects the individual's water right from loss under state abandonment laws. This is an attractive incentive to land-owners who worry about security of their water rights and provides

Are Instream Flow Donations Tax Deductible?

The answer is yes, according to several water rights attorneys and tax experts. However, as of this writing, the Internal Revenue Service has not confirmed this.

In October 2012, the Resource Renewal Institute, the Colorado Water Trust and Trout Unlimited, on behalf of the western regional Instream Water Transfers Coalition, submitted a Revenue Ruling Request to the IRS and U.S. Treasury seeking clarification of the federal tax deductibility of entire and partial interest donations of appropriative water rights.

Specifically, the coalition requested that the IRS issue public guidance on the deductibility of both: (1) an entire interest of an appropriative water right; and (2) an “undivided portion of the taxpayer’s entire interest” in an appropriative water right under the Internal Revenue Code §170(f)(3)(B)(ii). The request seeks affirmation of the federal tax deductibility of a gift of an appropriative water right. The Coalition was awaiting a Revenue Ruling as this book went to press.

The clarification of this issue by the IRS will bring federal tax consideration to outright donations and bargain sale water right transactions across the West, which, like many conservation easement transactions, typically combine both cash and donative components. According to a lead advocate, attorney Tom Hicks: “Regional land and water trusts will benefit from this clarity when working

with landowners. In essence, a water right is a property right that can be donated like a bike gets donated to the Salvation Army or a car is donated to a local charity. It can be valued at the time of the gift, and the donor receives a tax deduction. These gifts of water rights can be used by the donee for continued diversion or for instream conservation purposes according to state law.”

In a 2012 Western States Water Council report on water transfers in the West, western water managers and policy leaders described the advantages of such clarification: “Certainty that such donations are tax deductible under state and federal law could provide a greater incentive to supplement instream flows.”

Tom Hicks concludes: “The lack of a Revenue Ruling has created unnecessary tax ambiguity and uncertainty, which has inhibited the potential of water right donations. IRS affirmation of the deductibility of water rights will help incentivize private and voluntary stewardship behavior through outright donations or bargain sales that might not otherwise occur but for the added federal tax consideration.”

For more information about the status of the IRS Revenue Ruling Request or the tax status of water right donations, contact Tom Hicks, Of Counsel, Trout Unlimited’s Instream Tax Incentives Project, at tdh@tomhickslaw.com.

reassurance that their property rights remain intact and possibly more secure than when exercised sporadically. It also allows landowners to suspend irrigation temporarily to make infrastructure improvements without worrying that the lost season will count against them in the abandonment context.

Third, any change in the use of a water right, including conversion to instream flow, must comply with state law and may not negatively impact other water rights. Enforcement of the “no-harm” or “no-injury” rule reassures other water users on the stream who might be concerned that a change to instream flow will compromise their ability to exercise water rights in the future.

If a landowner explicitly relinquishes a water right for instream flow, the water trust or public agency entitled to hold that right under state law will dedicate it to permanent instream flow protection (a recognized, beneficial use of water), ensuring that the water may not be claimed for subsequent diversion.

States vary in their approaches to evaluating changes in water rights. They may, for example, conduct an administrative proceeding, a court hearing or some combination of the two. Whatever the format, this step adds to the time it takes to complete a water transaction and is likely to be one forum in which opponents can be heard and may influence the terms of the final transaction. It adds an element of uncertainty to any attempt to effect a change in use.

Just as land trusts achieve their conservation goals through a variety of approaches, ranging from donated or purchased conservation easements to fee acquisitions, water trusts shape their transactions around landowners' needs and environmental goals within the parameters of controlling state law and other constraints. Thus, a water trust may work with a landowner to install a different diversion structure, move a diversion downstream to allow water to flow through a critical stretch or change the source of water from surface to groundwater or from a tributary stream to a mainstem river. Note that irrigation efficiency improvements may impact return flows and thus are subject to a formal review by water officials as a change in use. As one water trust representative summed up, "Our organization would commit political suicide if we just bought all the water and [dried up the land, leaving] behind weed management problems. So, instead, we work with the agriculturists to be creative and think about their water management with any eye on the 21st-century technology." Water trusts, therefore, typically seek options for keeping agricultural lands in operation, but using less water so that more is available for conservation purposes.

Water transactions may be temporary or long term, with variations within those categories. Each of these types of transactions is described below.

Temporary Transactions

Temporary transactions provide security for a landowner who retains ownership of the underlying rights and has the option of returning the water to its original use in the future. There are two main forms of temporary transactions:

DEFINITION

Mainstem river: The primary downstream segment of a river, as contrasted with its tributaries.

- *Leases* are allowed in several states, under widely varying specific provisions. A conservation group or public agency may enter into a formal lease agreement with an irrigator to allow a change in water use to benefit instream flow during all or part of the irrigation season. State law governs the maximum lease term, but the parties may agree to a variety of terms to suit the landowner's needs. There is a great variation in leases:
 - o Short-term leases may run for just a year or two, allowing the partners to build trust and see how the arrangement works for all parties.
 - o Long-term leases of three years or more offer a greater assurance of certainty and allow the landowner to capitalize any improvements necessary to comply with the agreement.
 - o Split-season leases allow water to flow in the stream during a critical period for conservation purposes, but also allow irrigation during the remainder of the season.
 - o Dry-year options, also known as *forbearance agreements*, take effect only in years with inadequate rainfall or streamflow to support aquatic resources. If water is abundant, then irrigation continues as before. According to state law, instream flow leases held by the Colorado Water Conservation Board may only be exercised for three years out of any 10-year period, emphasizing the state's preference for leasing to be used as a tool to deal with variable conditions while maintaining the underlying agricultural operations.
- *Water banks* are mechanisms designed to facilitate the temporary transfer of water-use entitlements from one location to another. Each is unique, but a water bank typically offers irrigators an opportunity to receive payment for not diverting water during agreed-upon periods, during which time others may pay into the bank to apply the water for purposes ranging from instream flows to meeting urban or other needs. In some cases, water banks are only authorized for particular water bodies or water delivery systems.

DEFINITION

Forbearance agreement: A special agreement to postpone, reduce or suspend the use of a water right for a limited and specific time period.



PHOTOS: ANDY FISCHER

Racetrack Creek, a tributary stream supplying important spawning and rearing habitat for native trout, is listed as a top-tier priority for restoration on Montana’s Clark Fork River and has gone dry nearly every summer for the past century. In 2011, thanks to a rancher’s decision to install a more efficient sprinkler irrigation system at his operation, the Clark Fork Coalition was able to purchase a portion of the water right and return flows to the creek. This is the first deal of its kind on Racetrack Creek and breaks new ground for conservation-related water transactions on the Clark Fork and in the state of Montana.

Permanent Transactions

Permanent transactions are attractive to organizations seeking long-term protection of streamflows. Some states allow individual landowners to convert a diversion right to an instream flow water right, so long as there is no negative impact on other water users, such as a depletion of water availability when they would normally receive it. In other states, an instream flow water right may only be held by the state, so the landowner would have to transfer ownership of the right as part of the conservation transaction. This is as close to “in perpetuity” as a water transaction can be and, for some landowners, is an attractive means of ensuring the most lasting protection of land and water. See, for example, the story of Montana’s Nevada Spring Creek on page 48 where conservation ranch partners decided a permanent dedication of water to instream flows was “a critical part of the conservation picture.”

Strategic Water Trust Projects

Similar to the evolution of land trust conservation approaches, water trusts are moving from reactionary or opportunistic transactions toward more strategic conservation initiatives—focusing, for example, on stream segments identified as critical habitat or link-

Water Transactions: Added Value for Landowners with Water Rights

There are many incentives and options available to landowners for managing water that can both improve streamflows and a landowner's bottom line. Although the range of options varies depending on state law, water trusts engage in the following transactions in the western United States:

- Irrigation efficiency improvements: Ditch lining, piping or switching from flood irrigation to center pivots can reduce the amount of water needed to meet irrigation demands. Where allowed by state law, the saved water can be leased or sold to an instream use to help pay for costs associated with efficiency upgrades.
- Water leasing: Leasing is the temporary transfer of a water right to instream flows and is recognized as a beneficial use of a water right in some states, such as Montana. All or part of a water right can be leased. Landowners may be compensated based on number of acres leased, the period of time and fishery benefit.
- Point of diversion and source changes: Relocating a headgate closer to irrigated acres, switching water sources from a tributary stream to a mainstem river and adding a supplemental water source may provide benefits to streams.
- Water purchases or donations for instream flow: A water transaction may involve a conversion of use that results in the permanent management of a water right for instream use. These transactions are appealing when

landowners are changing the traditional use of a piece of irrigated ground and no longer need to irrigate that particular area. For example, an ambitious restoration effort in Montana's Nevada Spring Creek included conversion of water rights previously used to flood-irrigate fields to instream flow, which resulted in cleaner, colder water flowing more abundantly for fish. (For the full story, see page 48.)

These transactions directly benefit landowners by:

- Providing financial incentives for returning water to the river and improving the viability of agricultural operations
- Reducing labor and maintenance costs of managing an aging irrigation system
- Pressurizing water systems to reduce or eliminate the need for pumps
- Eliminating liabilities and safety hazards associated with open ditch systems
- Improving water reliability, management and measurement

This list is modified by materials developed by the Clark Fork Coalition and is used by permission. For examples of mutually beneficial transactions, see:

- Clark Fork Coalition, "Working With Water" video, available at www.youtube.com/watch?feature=player_embedded&v=SCo1p9wBWnw.
- Columbia Basin Water Transactions Program, "Stories from the Field," including links to videos, at www.cbwtp.org/jsp/cbwtp/stories/stories.jsp.

DEFINITION

Dewatering: The removal or draining of groundwater or surface water from a riverbed by pumping or evaporation.

age for endangered fish, vulnerable to dewatering during late-season irrigation or highly valuable for public recreation or scientific study. (See, for example, the Clark Fork Coalition's integrated land and water restoration strategy for the Upper Clark Fork River in western Montana at www.clarkfork.org/stream-renewal-initiative/healing-streams-on-the-ground-restoration.html.) Strategic considerations may drive water trusts to develop business models specializing in specific types of transactions or water right holders. For example, the Deschutes River Conser-

vancy has tended to specialize in large-scale irrigation efficiency projects with irrigation districts, whereas the Oregon Water Trust initially focused on working with individual landowners.

And, just as landowners often receive financial compensation as part of their agreements to enter into conservation easements, most water trusts' transactions include a financial incentive—ranging from direct payment for the appraised value of the water rights to paying for efficiency improvements, such as converting from flood irrigation to a sprinkler system or moving the location of a head-gate to reduce losses between the stream and the field. Unlike the case with conservation easements, the appraisal process for water rights lacks clear standards and accepted best practices. Thus—except in areas with a robust local water market, such as Nevada's Truckee River, eastern Washington, central Oregon or northeastern Colorado—this step in the transaction can add a good deal of time and expense compared with the process for negotiating a conservation easement. This is a rapidly evolving field, and new information will be emerging quickly from the various transactions that are being implemented for water purposes.

Other Services Provided by Water Trusts

In addition to direct work on water rights transactions, water trusts may provide important expertise to land trusts and landowners wondering about the role of water rights in a conservation transaction. Even when there is no interest in or need for converting water rights to instream flows, land trusts can consult regularly with water trusts to sort through the details of their state water laws and to better understand how to perform due diligence review of water rights associated with a conservation property. For example, the Washington Water Trust regularly provides advice and assistance to the North Olympic Land Trust and other land trusts entering into conservation transactions involving water rights. For its part, the Colorado Water Trust runs a technical assistance program that includes—among other resources—workshops, model conservation easement language and water rights assessments for land trusts.

Funding Sources

Some region-specific funding sources provide major support for acquisition of water rights to enhance flows in priority stream segments, including the Columbia Basin Water Transactions Program, which operates in Oregon, Washington, Idaho and

Montana, and the Colorado Water Conservation Board. Other funding sources, such as Great Outdoors Colorado, have provided financial support on a limited basis and are currently exploring ways to expand efforts. In other cases, financial support is available to acquire water rights to restore particular aquatic systems as a result of mitigation funding mechanisms included in legislation or legal settlements. For example, in Utah, Nevada and Arizona, Great Basin Land and Water (described on page 52) pays for land and water rights acquisitions from a fund established by the 1996 Truckee River Water Quality Settlement Agreement. And in Montana's Upper Clark Fork River Basin, a portion of the state's natural resource damage litigation settlement fund has been designated for grants to water trusts to acquire water rights to restore and reconnect critical tributaries to the river in areas damaged by mining contamination and other impacts.

Thus, in some cases, independent sources of funding may complement existing land conservation strategies, supporting a water transaction in addition to a conservation easement. In this case, bringing a water trust to the conversation to explore options may be mutually beneficial for all involved and may increase the value of the overall transaction for the landowner. As one water trust representative remarks: "Our role is as an intermediary, working to develop win-win situations and incentives for improving the irrigation system."

TIP

Bringing a water trust to the conversation to explore options may be mutually beneficial for all involved and may increase the value of the overall transaction for the landowner.

Addressing Land and Water Together: Challenges and Opportunities

Introduction

This chapter describes the innovative ways western land trusts protect land and water in their service areas, ranging from broadening their mission to include protection of water resources to cooperating with water trusts and other partners. Drawing upon a survey of western land trusts and more detailed stories of particular partnerships, this chapter concludes by presenting practical strategies and resources land trusts can use to protect vital land and water resources.

Taking the Pulse: A Survey of Land and Water Trusts

This section highlights the key findings of the survey. See page 83 for a complete list of survey methods, questions and responses.

In 2013, land trusts, water trusts and their conservation partners in the western United States were surveyed on:

- The current level of awareness and concern about water
- The variety of approaches currently employed by groups addressing water in relation to land conservation
- Concerns and questions that deserve attention as land trusts increasingly move to include water in their conservation planning

The survey reached out to members of the Land Trust Alliance, water trusts and other conservation organizations working in the western states. The purpose of the survey was to ensure that this book would provide the most useful information and address key concerns of western land and water trusts, as well as to solicit stories and examples of partnerships currently underway.



Land trusts express a strong and consistent concern about water in relation to their conservation values.

Consistently, land trusts name water-dependent ecosystems and habitats as their highest priorities. For example, respondents to the Alliance’s survey listed riparian habitat as their highest primary focus area, followed by natural areas and watersheds. Land trusts also specifically referenced water-dependent land types, including riparian estuaries and wetlands, ephemeral desert streams, critical fisheries and working agricultural lands (in the West these lands require irrigation for most crop and pasture production).

Land conservationists consider the significance of water to good land stewardship to be a familiar concept and part of their existing language. Land trusts and the landowners with whom they work are well aware of the importance of reliable, high-quality water to sustain the conservation values of a land transaction. Far less common is an explicit land trust mission to protect or enhance those water sources to ensure continued flow and quality.

DEFINITION

Ephemeral desert streams:

A channel of an ephemeral stream always lies above the water table and only has water flowing through it as a direct response to recent and local precipitation.

Many land trusts are addressing the use of water on working landscapes through language in conservation instruments.

More than half of the survey respondents reported using conservation deed language that restricts the transfer or sale of water rights associated with conservation values—typically irrigation of working agricultural lands. Some, such as the Rocky Mountain Elk Foundation, include this language routinely in conservation easements involving irrigated lands (see sample language in Appendix D); others report using it only when required as a condition of receiving financial support from federal or state agencies. Though uncommon, some land trusts report that their attorneys have advised them against including such a provision in an easement. At the far end of this spectrum, one land trust noted that its attorney advised that a prohibition on water transfers would be illegal under state law. However, there is no evidence that the restrictions included in the sample conservation easement language in Appendix D would be unlawful in any western state. To the contrary, such language is becoming increasingly common and is supported by top legal counselors as vital to protecting the conservation values in an easement.

Although a number of useful sources provide guidance for deed language restricting water transfers or sales (see annotated list of sources in Appendix F), there is a wide variation in approaches. As one land trust representative remarked: “I haven’t found the best template yet. I’m still trying to figure out the best way to keep the water tied to the land.” She expressed concern about the enforceability of this provision in the event a landowner simply stopped irrigating the lands under easement but did not make an attempt to transfer the water elsewhere: “How can we monitor irrigation? How can we force a landowner to continue irrigating?” She acknowledged the value of a contingency in the easement that would allow the unused irrigation water to be converted to instream flows, but questioned whether this approach would ensure protection of the underlying conservation value in irrigated agriculture. There may be cases where the land trust itself would have to undertake irrigation to protect a water right and prevent its abandonment. At the very least, land trusts need to give serious thought as to how to effectively monitor the status of the water right and what regulatory mechanisms may be available to provide advance notice of a change in status.

TIP

Land trusts need to give serious thought as to how to effectively monitor the status of the water right and what regulatory mechanisms may be available to provide advance notice of a change in status.

In a few instances, organizations are working to ensure long-term protection for irrigation water while also providing for municipalities to temporarily access (lease) water through an option agreement that is incorporated into the conservation easement. Colorado appears to be in the vanguard of this movement, with several organizations reporting flexible water-sharing projects under discussion.

Land trusts are engaging in a variety of partnerships aimed at protecting water-related conservation values with or without employing specific deed language.

In addition to the considerable number of land trusts that are addressing the use of water on working landscapes through language in conservation instruments that ties water to the land, there are also organizations that address water through other means, such as:

- Actively participating in local and regional water resource planning to ensure consistency with land conservation objectives
- Promoting public policies, such as zoning and land stewardship incentives, which sustain water-dependent activities and resources
- Facilitating information sharing and access to resources from government agencies wishing to promote practices such as water conservation and aquatic or riparian habitat restoration
- Cooperating with watershed councils and other community-based organizations to promote water conservation and water-quality protection
- Working with water trusts and other partners to access grants and other financial incentives for water- and cost-saving irrigation efficiency measures

Land trusts express a number of concerns about engaging in transactions involving water rights.

Land trusts have repeatedly expressed concerns both about the wisdom of entering into transactions involving water rights and



PHOTO: RIO DE LA VISTA

the consequences of *not* entering into such transactions. Careful practices or contingent provisions, such as those described in the examples on pages 41–68, have alleviated many concerns, but an overall sense of caution when approaching water emerged as a theme among survey respondents.

Some respondents assumed that measures taken to enhance instream flows will necessarily dry up productive agricultural lands. For example, one respondent stated: “Adequate water must be available for land and should not be severed. Permanent water transfers from the land to instream uses would render the agricultural land nearly worthless.” This is a widely held concern, although many of the actual transactions involved measures to change practices to ensure continued irrigation and enhanced streamflows.

Others expressed concerns about efforts to require continued application of water for irrigation through perpetual deed restrictions. As one respondent cautioned: “If there is climate change, for example, linking irrigation water rights to land in perpetuity . . . is likely to be counterproductive to other conservation goals as these goals and the mix of important conservation resources change over time.” Again, this concern appears to be addressed by easement provisions recognizing the possibility that irrigation will change over time and allowing for conversion of water not used for irrigation to other purposes related to the conservation values.



Others worry that land trusts' efforts to restrict the transfer of water rights will frighten landowners and make it harder to achieve conservation goals. One land trust staffer noted that it is difficult to introduce the idea of a conservation easement to a landowner: "We'd really lose [the landowner] if we started talking about tying up his water." Another person noted: "Landowners/water right owners are reluctant to tie up their most valuable asset (water) because they may want to sell it." However, there are examples of land and water trusts working cooperatively to achieve complementary goals with willing landowners, especially where funds available for water conservation are linked with conserving agricultural productivity; a critical mass of agriculture or projects that achieve streamflow restoration may add crucial encouragement or incentives for landowner participation. At the same time, conservation funders (particularly agency programs) have their own objectives related to land and water that can at times be challenging to reconcile. For example, the requirements

of the National Resource Conservation Service (NRCS) for the Farm and Ranch Lands Protection program (now the Agricultural Land Easements program) may well be at odds with program requirements for a state agency focused on securing water or habitat for fish, which can complicate the efforts of a land trust trying to cobble together project funding from multiple sources.

Some survey respondents simply expressed a sense that water rights are too complex or too fraught with potential controversy for land trusts to take on as part of their conservation work. Some mentioned lack of capacity on land trust staffs, high transaction costs associated with water rights due diligence, confusing and “byzantine” state water law regimes and political challenges faced by organizations that engage in water issues. This perspective is counterbalanced by the experience of many land trusts that regularly incorporate water provisions in their easement language and are comfortable with navigating the provisions of their states’ water and conservation easement statutes.

Importantly, a land trust may choose to stay out of the detailed work of water rights and still engage productively with partners to achieve water conservation goals. One land trust leader described an early experience with a conservation easement that included a provision to convert some irrigation water to instream flows, which convinced him that such transactions are more appropriately handled by the experts that work at water trusts: “The skill set is so unique . . . it makes sense for us to focus on our core expertise.” He went on to describe several situations in which landowners got into conflict with the water trust but stayed on good terms with the land trust and vice versa. He urged a coordinated conservation approach and concluded with the recommendation that land trusts should “understand water transactions, but find partners who can complement your skill set.”

Stories of Land and Water

As illustrated by the diverse responses to the survey, there are many different ways to incorporate water into private land conservation initiatives. This section includes a sample of stories from different places in the West, illustrating the variety of ways in which land trusts and their partners have addressed water use for agriculture and environmental benefits or streamflow restoration as part of their conservation strategies.

San Luis Valley, Colorado: *Achieving Conservation of Land and Water through Cooperation and Collaboration*

Working with a variety of partners, the Rio Grande Headwaters Land Trust (RiGHT) launched the Rio Grande Initiative in 2007 to protect critical private lands and associated water rights along a 175-mile reach of the Rio Grande, at its headwaters in the mountains above the San Luis Valley of south central Colorado. RiGHT's conservation easements include provisions that tie the surface water rights to the land and require a long-term commitment to continuing historic irrigation patterns that sustain the agricultural productivity of the land and the associated riparian wetlands. The agreements also provide vital return flows to sustain rivers, replenish aquifers and help meet interstate and international compact obligations of water deliveries to the downstream states of New Mexico and Texas and to Mexico.

After two major efforts to export San Luis Valley groundwater were defeated, rancher Cathy McNeil and environmentalist Christine Canaly, along with a cadre of local collaborators, formed RiGHT in 1999. The organization was created to provide a new tool for protecting the senior water associated with irrigated lands from the ever-evolving schemes to pump and export water out of the valley. They also sought to address the sustainability of agriculture and prevent the fragmentation of working lands into ranchettes, which have undermined agricultural communities in other areas of Colorado and the West. In other words, concerns about water and water rights were woven into the fabric of this land trust from the outset.

Rio de la Vista, who coordinates RiGHT's Rio Grande Initiative along with Executive Director Nancy Butler, credits much of the organization's success to its ability to carefully navigate political issues and to provide positive solutions that benefit landowners, the community and the natural environment. "In the San Luis Valley," she says, "threats to our water have generally united the community. We have to work together to protect our water or we could all lose the things we care about." By working closely with local soil and water districts, the local wetland committee, water-user associations, the state Division of Water Resources, Colorado Parks and Wildlife, the U.S. Forest Service, the NRCS, the state-initiated Rio Grande Basin Roundtable and many more entities, RiGHT and partners, such as The Nature Conservancy, Ducks Unlimited, Colorado Cattle-

TIP

Concerns about water and water rights were woven into the fabric of RiGHT from the outset.



PHOTO: RIO DE LA VISTA

Working with landowners and diverse public and private partners, the Rio Grande Headwaters Land Trust seeks to protect working agricultural lands and river corridor habitat in south-central Colorado.

men's Agricultural Land Trust and others, have conserved more than 22,000 acres of river corridor and associated water rights, worth approximately \$40 million, with more conservation projects in the works.

RiGHT's Rio Grande Initiative gained important financial support in 2008 from Great Outdoors Colorado (GOCO), the lottery-financed conservation trust fund established by a constitutional amendment in 1992, with a \$7.4 million Legacy Grant. In recent strategic planning, GOCO underscored the high priority it affords to protection of agricultural land and associated senior water rights. In addition, RiGHT received the first-ever grant for land and water conservation from the state's Colorado Water Conservation Board (CWCB), which directs its expenditures toward many other programs related to water on a statewide level, including acquisition of water rights for instream flows. In this



case, de la Vista says, thanks to strong local support and a strong case for this work, the CWCB recognized that “protecting the river corridor ranches and securing their senior water rights is a key component to our efforts to achieve water sustainability in the Rio Grande Basin.”

RiGHT’s key strategies include:

- Developing and funding conservation easements with landowners along the Rio Grande and tributary river corridors that protect the land, securing their senior surface water rights to the land to be used in historic irrigation patterns and protecting wetlands and riparian habitat. In the occasional cases where irrigation depends upon groundwater wells, RiGHT is careful to provide contingencies for the future uncertainty whereby wells may be shut down to restore the San Luis Valley’s aquifers.
- Following through with meaningful stewardship. Once land is conserved, RiGHT’s Stewardship Circle program works to connect landowners with resources, strategies

and funding for further enhancing the land's agricultural productivity, as well as conserving wetlands, wildlife habitat and overall land health.

- Participating in the state-initiated Rio Grande Basin Roundtable and other water-related meetings and planning processes in the community to address the current water supply and projections for future demands for water for the river basin. This analysis is conducted in relation to statewide demands, as well as river restoration, reservoir rehabilitation and management, irrigation system improvements, habitat enhancement and many other proactive efforts. Across Colorado, the basin roundtables have led to intrastate water compacts aimed at resolving conflicts and creating collaborative opportunities around water use, storage, transfers and environmental and community benefits and impacts.
- Cooperating with diverse partners to strategize key conservation priority areas and projects, both through private conservation initiatives and through public processes, such as the U.S. Department of the Interior's designation of the Rio Grande Natural Area and the U.S. Fish and Wildlife Service's conservation planning for the region.

For more information see:

- de la Vista, Rio. "Keeping the 'Wet' in Wetlands: A Colorado Community's Strategy for Securing Water for Wetlands and Agriculture." *National Wetlands Newsletter*, January–February 2012. www.wetlandsnewsletter.org/pdf/34.01/34.1.pdf.
- Rio Grande Headwaters Land Trust, www.riograndelandtrust.org.

Upper Gila River, Arizona: *Short-Term Water Lease Agreement Avoids Water Rights Change Procedures*

After nearly three decades working on land conservation to protect the Sonoran Desert in southern Arizona, the Arizona Open Land Trust began to explore the use of water agreements to address both land and water conservation. After researching and adapting tools used in the Pacific Northwest for two years, the Trust changed its

name to the Arizona Land and Water Trust (ALWT) and began to address water “on the ground.”

According to ALWT executive director Liz Petterson, this methodical process of including water conservation is simply the logical way to proceed. While “any discussion of water in the Southwest is a touchy subject,” she remarks, “we had to start the discussion somewhere.” In this case, the starting point for taking the conversation about water to the Trust’s landowner partners was through a working relationship with the University of Arizona–based Cooperative Extension Service. In 2007, the Trust began cohosting a series of “Ranching into the Future” workshops to share practical information with farmers, ranchers and other landowners. Speakers vary from CPAs to marketing experts and range management professionals, allowing ALWT to engage landowners directly and to learn about their concerns and needs.

At one workshop, a rancher on the Upper Gila River approached ALWT to discuss how he might work with the land trust to conserve

Upper Gila River, Arizona.



PHOTO: ARIZONA LAND AND WATER TRUST

water by temporarily shutting off a well and fallowing a 100-acre alfalfa field. In 2012, the parties crafted a three-year water rights lease agreement under which ALWT pays the farmer not to pump approximately 600 acre-feet of water per year, which is intended to boost flows in the Upper Gila River—one of Arizona’s major desert waterways and the target of numerous conservation initiatives. ALWT has engaged university and government scientists to monitor whether reduced pumping actually increases the river’s flow because such hydrological connections are difficult to predict.

Unlike the water conservation and lease transactions common in the Columbia River Basin, this transaction does not require approval by state officials because the temporary agreement does not constitute a change in the use of the underlying water right. Extending such nonuse for many years might risk loss of the water right under state law abandonment principles, so the parties entered into an agreement that does not exceed the state’s five-year abandonment standard. ALWT has been in contact with state water officials, who have not raised any objection to this transaction, so additional deals are likely in the near future. (See Appendix E, page 120, for the template of this agreement.)

In the meantime, the rancher is pleased with the outcome and has recommended the same deal to his neighbors. At this point, ALWT is moving slowly and has not sought to negotiate a conservation easement with this landowner. If the monitoring shows that this project succeeded as hoped, ALWT hopes to arrange for additional temporary water lease agreements in the Upper Gila River, aiming to benefit the river while rewarding landowners for using less irrigation water.

ALWT key strategies include:

- Building trust through partnership with the extension service, which is local, land based and has a lot of credibility. Above all, Petterson remarks: “Listening is the number-one priority—asking what we can do to help the landowner sustain the [ranch] operation.”
- Offering resources to help landowners benefit from conservation. The workshops added value through expert consultation, and ALWT published a practical guide to water rights in the state (referenced in Appendix F).
- Exploring options for rewarding conservation that don’t require formal state review to minimize time and expense,

TIP

Listening is the number-one priority—ask what you can do to help the landowner sustain the ranch operation.

but at the same time consulting with legal experts to make sure underlying water rights are protected.

For more information see:

- Arizona Land and Water Trust, www.alwt.org.
- University of Arizona Cooperative Extension Service, <http://extension.arizona.edu>.

Nevada Spring Creek, Montana: *Ranchland Restoration includes Instream Flows*

Montana's famed Blackfoot River sometimes surprises visitors by its hard-used appearance. Those who expect the pristine fishing paradise portrayed in *A River Runs Through It* instead see a watershed scarred by a century of logging, mining and livestock grazing. Beginning in the late 1980s, local landowners teamed up with public resource managers and conservationists to form the now well-known Blackfoot Challenge, an ambitious collaborative that has resulted in substantial improvements to the land, water and well-being of the valley.

Mending the Blackfoot River is a long-term work in progress, with many moving parts. The recent restoration of Nevada Spring Creek, an important tributary of the Upper Blackfoot, represents



PHOTO: FRED DANFORTH

Before restoration, Nevada Spring Creek held no salmonids. This brown trout demonstrates a dramatic improvement in native fish habitat due to restoration work and streamflow enhancement.



PHOTO: FRED DANFORTH

The restored Nevada Spring Creek provides valuable cold, clean water to the Blackfoot River in western Montana. After initially entering into a conservation easement and engaging in an ambitious restoration plan, the landowner found added incentive to transfer irrigation water rights to enhance instream flows, working in partnership with the Montana Water Project of Trout Unlimited. This photo shows the old, over-widened stream channel on the right and a restored channel on the left.

a productive partnership between a landowner, neighbors, several conservation groups, public agencies and cutting-edge market forces aimed at providing incentives for environmental restoration.

Fred Danforth purchased what was known locally as the Potts Ranch from The Nature Conservancy in 2001, having committed in advance to entering into both a restoration plan and a conservation easement on the land. Together with several local operating partners, Danforth saw this as an “extraordinary opportunity to get involved in the conservation story of the Blackfoot—on a property with a crying need for conservation and restoration.” Most urgently needing attention was the spring-fed creek flowing for four miles across the ranch. Although the water emerges at its source at a bracing 46 degrees, decades of heavy livestock grazing had substantially widened the stream channel to nearly 100 feet in places. The water was warm and polluted with nutrients by the



PHOTO: MARY BURKE

time it reached the Blackfoot, “literally beyond description as far as being a mess,” recalls Danforth.

In 2002, Danforth and his partners signed on to a conservation and restoration plan that included stream channel reconstruction, wetland restoration, riparian grazing modifications and native plantings. They connected the restoration work to the development and entitlement of Montana’s first mitigation bank, the Upper Clark Fork Wetland and Stream Mitigation Bank. And, through sale of mitigation credits to developers elsewhere in the state, it has generated the financial resources to help pay for the restoration. This approach to providing high-quality offsets with long-term ecological integrity to compensate for development impacts elsewhere in the watershed is sometimes referred to as “payment for ecosystem services.”

Once the land and stream restoration work was launched, it became obvious that the continued flows in Nevada Spring Creek offered significant value to the Blackfoot River fishery. The initial

conservation agreement anticipated a leasing arrangement to enhance streamflows, but the ranch partners became interested in a permanent arrangement, more in line with the terms of their conservation easement. Over the course of five years (“It was a long slog,” recalls Danforth), they worked with the Montana Water Project of Trout Unlimited (TU) and Montana Fish, Wildlife and Parks to appraise the ranch’s irrigation water right and obtain funding through the Columbia Basin Water Transactions Program (the Blackfoot River is a highly valued tributary of the Columbia River) to compensate them for converting the irrigation use to instream flows.

In the end, the ranch partners received compensation for three-quarters of the appraised value of their water right. They are currently seeking recognition from the IRS for the value of the remaining portion as a charitable gift to TU. For its part, TU is working with Montana Fish, Wildlife and Parks to convert the water right to state ownership, which is the only way in which the water right may be permanently dedicated for instream flows under Montana law. TU’s Stan Bradshaw notes: “This will be the first permanent change of an appropriation to an instream use” in Montana under a legislative provision enacted in 2007.

The land that was irrigated with this water right will remain pasture. Danforth acknowledged that some neighbors are uncomfortable with the changed water right: “They see land effectively taken out of agricultural production forever, and forever is a long time.” But he concludes that restoring the stream was consistent with the conservation of this ranch, and that harnessing market forces to restore the environment will help “build the constituencies necessary for getting things done.”

Key strategies in this project include:

- Incorporating streamflows as part of a comprehensive restoration strategy for the conservation property.
- Financing restoration work through a combination of mitigation payments and tax deductions (note that the tax deductibility of instream flow donations remains somewhat uncertain; see discussion on page 28).
- Converting an irrigation water right to instream flow through donation to the state agency entitled to hold permanent instream flow rights.

For more information see:

- Ecosystem Investment Partners, www.ecosystempartners.com.
- Trout Unlimited, Western Water Project, www.tu.org/tu-programs/western-water.
- Upper Clark Fork Wetland and Stream Mitigation Bank, www.ucfmb.com.

Great Basin, Nevada: *Enhancing Aquatic Resources While Accommodating Growth*

The Great Basin, encompassing more than 100,000 square miles of high desert from the eastern slope of the Sierra Nevada Mountain Range to the Great Salt Lake, is a breathtakingly dry place. Its rivers never reach the ocean but instead terminate in salty lakes or dried-up lakebeds. Poet William Fox wrote of the confounded expectations a newcomer faces here: “Traditional wisdom about being lost in the wilderness—follow water downstream until you reach civilization—does not often work here. Follow convention and you are likely to end up stranded in the middle of an alkali flat.”

Likewise, conventional wisdom about land and water conservation strategies does not necessarily apply to this landscape. Starting more than a century ago, ambitious irrigation and urban supply projects altered the flows of the Truckee River, resulting in a wide range of impacts to water quality, wetlands and fisheries. After decades of litigation, settlement and legislation, a public-private funding partnership now works to acquire water to restore aquatic ecosystems, fulfill federal Indian trust obligations and accommodate projected growth in the Reno-Sparks metropolitan area.

Great Basin Land and Water (GBLW) acquires water for this partnership. Established as part of the 1996 Truckee River Water Quality Settlement, this nonprofit organization launched with the litigation settlement funds (\$24 million from Washoe County, the cities of Reno and Sparks and the U.S. Congress) and subsequently received additional congressional appropriations and federal grants. GBLW is not a conventional land trust because it does not negotiate conservation easements or engage in conservation land stewardship. Instead, the organization buys water rights and, in some cases, buys land associated with water rights. GBLW does not hold this land, but resells it without water rights on the open market. GBLW converts acquired water



PHOTO: RIO DE LA VISTA

rights to instream flow rights held by members of the partnership. Lands acquired within or contiguous to the Pyramid Lake Paiute Reservation are transferred to tribal ownership to be held for conservation purposes.

Unlike conventional water trusts, which spend a good deal of time on the ground nurturing relationships that lead to cooperative agreements, GBLW generally doesn't solicit transactions. "We've been stomping around Nevada so long," remarks Executive Director Aaron Peskin, "people come to us." In fact, working from its headquarters in San Francisco, GBLW has completed more than 100 voluntary, market-based water rights transactions in the Great Basin in the past 15 years, ranging from fractions of water rights to transactions involving more than 1,000 acre-feet of water rights on a permanent basis. Because there is a very robust water market in the Truckee River, valuation of water rights is not as much of an obstacle to transactions here as it is in other parts of the West.

Thus, one transaction at a time, GBLW is helping to reassemble the aquatic ecosystems of the Great Basin, working with unconventional partners to achieve ambitious conservation goals in this unconventional landscape.

Key strategies GBLW employs include:

- Using dedicated sources of funding (litigation settlement monies, congressional appropriations and federal grants) to seek maximum conservation impact in areas targeted for restoration.
- Retaining an expert water lawyer to perform due diligence, which includes tracking the chain of title to the original appropriator. As a rule, GBLW will not buy a water right subject to any encumbrance, such as a debt or mortgage.

For more information see:

- Great Basin Land and Water, www.greatbasinlandandwater.org.

Spring at ranch in
Goshute Valley, Nevada.



PHOTO: BLM/NEVADA

Edwards Aquifer, Texas: *Conservation Easements Protect Critical Recharge Zones*

Although Texas does not administer water rights through the prior appropriation doctrine, a public-private partnership based in San Antonio demonstrates how conservation easements can directly address the quality and quantity of critical underground drinking water supplies.

The Edwards Aquifer provides water for agricultural, industrial, recreational and domestic needs, serving nearly two million people in south central Texas. For nearly two centuries, the city of San Antonio was able to grow without developing any surface water supplies, simply by tapping this vast underground reservoir. (Historic photos show water gushing from artesian wells, which required no pumping.) But in recent decades, drought, combined with high levels of pumping from the active upper layers of the aquifer, reduced water flowing from springs, imperiling a number of endangered species and worrying water managers about their ability to meet projected demands.

In 2000, voters in San Antonio agreed to fund an initiative to protect undeveloped lands in the recharge and contributing zones of the Edwards Aquifer (voters easily renewed funding twice since the original ballot initiative). To date, the program has invested \$135 million in one-eighth-cent sales tax revenues to protect nearly 100,000 acres. The original program set out to acquire fee title, but the emphasis now is on conservation easements. In announcing a 2008 acquisition, San Antonio mayor Phil Hardberger noted the advantages of this approach: “By purchasing conservation easements rather than outright land purchases, Proposition 1 has enabled the city to protect valuable recharge lands for an average of less than \$1,000 an acre.”

Although the city ultimately holds the easements or fee title to acquired property, The Nature Conservancy and the Green Space Alliance of South Texas (formerly the Bexar Land Trust) provide landowner outreach and due diligence. The selection process prioritizes properties with the highest recharge value, based on location, geology and other factors. Although they are not acquiring water rights, the conservation easements ensure that critical recharge areas remain active by prohibiting development or paving that would block water from infiltrating from the surface to the aquifer. Private land trusts also help negotiate easements in cooperation with the city program.

A story in the online *Lone Star Green* described the experience of developer Bobby Moore, who purchased a 584-acre ranch in Medina County that turned out to be “incredibly rich in aquifer recharge features.” Describing why he put this land under a conservation easement, he states: “In my mind as a person and in my conscience, I decided this was the way to do it.” The easement limits road and well construction, forbids the use of toxic chemicals and allows just one subdivision for two home sites. Summing up his opinion of the restrictions, Moore says: “That’s kind of like requiring you to do what 98 percent of people do anyway.”

Key strategies employed include:

- Raising public funds for private land conservation through a sales tax approved by voter initiative.
- Directing expenditures to acquire critical recharge areas, supported by land trust expert partners who provide landowner outreach and due diligence.
- Drafting terms of conservation easements to restrict development in order to protect water quality and quantity.

For more information see:

- Edwards Aquifer Authority, www.edwardsaquifer.org.
- Galbraith, Kate. “San Antonio Takes Lead in Land Conservation.” *New York Times*, March 17, 2011. www.nytimes.com/2011/03/18/us/18ttconservation.html?_r=0.
- Harmon, Greg. “Lone Star Green: Fate of Natural Texas Rests on Landowners and Smart Conservation.” *Current*, March, 29, 2012. <http://m.sacurrent.com/news/fate-of-natural-texas-rests-on-landowners-and-smart-conservation-1.1291512>.
- San Antonio Edwards Aquifer Protection Program, www.sanantonio.gov/EdwardsAquifer.

Virgin River, Utah: *Restoring Streamflows at a Critical Confluence*

In southwest Utah, dozens of golf courses have supplanted some irrigated agricultural fields adjacent to the Virgin River—a vital water source and riparian corridor in this desert landscape. Concerns about imperiled fish species and projected demands for urban growth led a coalition of community partners to protect lands targeted for a golf course development at the confluence of

the Virgin River and La Verkin Creek. The land is now a county park and nature reserve (with a conservation easement held by the state), and some of the water rights previously used for irrigation are held by the state for instream flows. The deal would not have happened without the active facilitation of the local land trust, the Virgin River Land Preservation Association (VRLPA).

Lori Rose, executive director of VRLPA, notes that the Virgin River Valley has experienced rapid urban growth in recent decades, most of which has taken place on former farmlands. The land trust partners with local officials and national organizations to protect critical natural areas, with a focus on the river corridor. She says that addressing water rights as part of any conservation transaction is a natural part of the process and has not been controversial. One of VRLPA's most important partners has been the politi-



PHOTO: SARAH BATES

The Virgin River Land Preservation Association worked with a variety of partners, including the Washington County Water Conservancy District and the state of Utah, to convert agricultural lands targeted for development into a 350-acre county park and nature reserve. A portion of the water rights previously used for irrigation is now used to improve streamflows at the confluence of the Virgin River and La Verkin Creek. Among other benefits, the supplemental flows help dilute and cool the Virgin River downstream from the highly mineral Pah Tempe Hot Springs, improving the chances of survival for several at-risk fish species.



PHOTO: SARAH BATES

cally powerful Washington County Water Conservancy District, which faces potential regulatory constraints if several Virgin River fish species are listed under the Endangered Species Act and so is motivated to find opportunities to restore flows and maintain water quality in critical stretches of the river.

The Confluence Nature Park project involved three properties encompassing 350 acres, along with irrigated fields, ponds and water rights in both the Virgin River and its tributaries. This particular location was appealing for streamflow restoration because it is immediately downstream from a major water diversion and the discharge from a mineral hot springs. VRLPA initiated the project in conversations with all three landowners; after one agreed to proceed with the deal, the other two followed. Funding (\$5 million) came from a variety of sources, including the state, private donors, the federal government, the Washington County Water Conservancy District and The Conservation Fund (which provided loans to VRLPA pending local fundraising). The Trust for Public Land helped negotiate and close the initial deal.

While this is their largest transaction involving simultaneous conservation of land and water, VRLPA has engaged in other transactions involving water, including conservation easements that maintain irrigation and restrict water transfers away from farms protected by easements. Rose credits her organization's comfort with water transactions in part to having a board member who is a prominent local water lawyer, as well as a track record of "working to find common solutions" with all community members, including water managers. "Water is just really valuable in a place like this," she concludes, adding that it is an integral part of land conservation in a desert environment.

VRLPA's key strategies include:

- In areas targeted for development, facilitating transactions that convert riparian agricultural lands with high conservation value to natural areas, with transfer of some irrigation water rights to instream flows as allowed by state law. In this case, the legal status of a portion of the irrigation water rights (irrigation company shares) prevented their transfer for instream flow, but they remain valuable ecologically; after application to the land, the water percolates into the ground and flows to the river.
- In areas targeted for preservation of agricultural operations, negotiating conservation easements with landown-



PHOTO: SARAH BATES

ers that require continued irrigation and land practices that protect and enhance wetlands and riparian habitat.

- Cultivating and maintaining productive relationships with local water leaders by partnering with water managers seeking opportunities to mitigate for impacts of urban growth and inviting individuals with water transaction expertise to serve on the land trust board of directors.

For more information see:

- Virgin River Land Preservation Association, www.virginriverland.org.

Methow Valley, Washington: *Partnership Addresses Land and Water in Salmon Country*

Nestled amid the Cascade Mountains in north central Washington, the Methow Valley boasts stunning scenery and productive irrigated agricultural lands, as well as habitat for salmon and steel-

The Virgin River Land Preservation Association is working to protect and restore La Verkin Creek, an important tributary to the Virgin River in southern Utah.

The Methow Conservancy holds a conservation easement that protects the agricultural values of this property. The landowner received financial incentives from Trout Unlimited to improve irrigation efficiency, allowing saved water to enhance streamflows for salmon and other aquatic conservation values.

head trout in the Methow River and its tributaries. After decades of relative quiet, the area has in recent years seen rapid growth and land speculation, as urban escapees from Seattle and Nordic ski enthusiasts from everywhere have discovered the valley and its abundance of recreational opportunities and wintertime sun. By the mid-2000s, property values were skyrocketing at double-digit annual rates, and the pressure to develop agricultural lands was intense. At the same time, state and federal officials continued to focus significant attention and resources on the critical role of ensuring recovery of salmon and steelhead trout in the Methow Valley, which Trout Unlimited’s Lisa Pelly describes as important “salmon country.”

This is an active community, with numerous citizen-based conservation groups. (Starting in the late 1960s and continuing for more than 30 years, a local group fought all the way to the U.S. Supreme Court to prevent a major downhill ski area development, based in part on concerns about impacts to local water supplies.) In the early 1990s, in an effort to share information and “avoid stepping on each other’s toes,” a handful of conservation leaders



PHOTO: TERI PIPER

began meeting informally once a month, often with refreshments. As Methow Conservancy’s Jason Paulsen recalls: “Those who were a part of that initial effort describe it as five to seven players, three hours and a box of doughnuts.” The collaboration grew into today’s Methow Restoration Council and ultimately drew interest from state salmon recovery officials, who vested it with formal authority to help plan and coordinate restoration efforts for the threatened and endangered fish species in the Methow watershed.

In the meantime, the benefits of building trust paid off in a variety of collaborative efforts among the participants, including the land trust and its water partner. When the Methow Conservancy needs help with due diligence on water rights while negotiating a conservation easement, it turns to the Washington Water Project of Trout Unlimited. The Methow Conservancy’s standard conservation easement language ties the water to the land on agricultural properties, ensuring the continued operation of a working landscape. In some cases, TU helps secure additional funds to pay for irrigation efficiency improvements that free up part of the water to enhance streamflows and benefit the fishery. TU’s Pelly



PHOTO: TERI PIPER

Headgates control the amount of water diverted from a stream to an irrigation ditch or pipe. Improvements in diversion structures can benefit streamflows and fisheries without impacting irrigation practices.



PHOTO: TERI PIPER

Improved irrigation efficiency can reduce labor for farmers and provide water to enhance streamflows.

describes the mutual relationship this way: “I’m always thinking about them, and they’re always thinking about us.” For his part, Paulsen observes that the labor-saving irrigation efficiency improvements are a blessing to aging landowners and that the collaborative work with TU has proven that multiple beneficial objectives can be achieved through such a relationship: “What’s good for salmon recovery can also be good for agricultural landowners when everyone is committed to a win-win outcome.”

Like all land trusts, the Methow Conservancy’s success depends on the relationships it has built in this community. The Conservancy has been able to facilitate communications between locals and outside interests, including federal officials seeking opportunities to upgrade water infrastructure in order to aid fish recovery. Such conversations can be very difficult to initiate. Paulsen says: “In this part of the country, water issues are often more political than those pertaining to land use.”

The Methow Conservancy’s focus on water was “fairly self-evident and natural,” according to Paulsen, who notes that “it is

a critical element of our agricultural economy in our community. How are we truly protecting irrigated agricultural conservation values if we aren't considering the water as part of these projects?" For her part, Pelly notes that "many land trusts seem intimidated to even touch the water side of the issue," which is why her organization published a *Landowner's Guide to Washington Water Rights* (cited on page 103) and offers regular consultation on water rights for land trusts throughout the state (with strategies modeled after those in the Methow Conservancy's highly successful *Good Neighbor Handbook*) on living and building in the Methow Valley.

The Methow Conservancy's key strategies include:

- Recognizing water as an integral part of private land conservation and reaching out to experts in other organizations as necessary to address the legal issues related to water in a conservation transaction.
- Seeking partners with access to financial resources that help "sweeten the pot" for landowners. Incentives could include payments for irrigation efficiency improvements or changes in headgate locations to minimize impacts on fish and other aquatic resources.
- Making the effort to meet regularly and informally to share information and discover common interests. The land trust's relationships with landowners facilitate larger conversations with other conservation organizations and interested parties that can lead to long-term conservation benefits.
- Partnering and communicating early, even when a project is just a glimmer of an idea. Understanding the limitations or goals of various funding sources can help steer a project to a successful outcome.
- Utilizing the strengths of various organizations. In this case, TU knows water and water rights, and the Methow Conservancy knows the complexities of land deals, conservation easements and habitat enhancement projects.

For more information see:

- Methow Conservancy, www.methowconservancy.org.
- Methow Restoration Council, www.methowrestorationcouncil.org.
- Trout Unlimited, Western Water Project, www.tu.org/tu-programs/western-water.

TIP

How are we truly protecting irrigated agricultural conservation values if we aren't considering the water as part of these projects?

Deschutes River, Oregon: *Restoration Partnership Allows Outsourcing of Key Skills*

The high desert landscape of Oregon's 6.8-million-acre Deschutes River Basin has long been shaped by volcanic activity, glaciation and water. Streams rising on the west side of the basin (from the Cascade Mountains) tend to be spring fed and relatively stable in flow, while streams originating on the east side of the basin (the Ochoco Mountains) are flashy and driven by snowpack and rainfall. Settlement came late to this arid basin, and most of the land remains in federal or tribal ownership, with private lands concentrated along riparian corridors and former rangeland served by unlined irrigation canals. The Deschutes' historic steelhead trout runs are severely depleted, suffering from a variety of pressures over the years, including hydroelectric-generating dams that block fish migration, irrigation diversions in late summer that dry up key tributaries and the conversion of farm-, ranch- and forestland for residential and resort development. To address the fishery's decline, conservationists realized that they had to tackle the health of the entire river basin, from restoring streamflows and riparian ecosystems to upland watershed lands. Success was beyond the capacity of any single organization, so after years of work to build relationships, in 2005, the Deschutes Partnership was formed to engage the expertise and leverage the resources of member water

Several organizations worked together to establish the Camp Polk Preserve in the Deschutes River Basin. The Deschutes Land Trust acquired the land, the Deschutes River Conservancy restored streamflows in Wychus Creek to the minimum level set by the Oregon Department of Fish & Wildlife.



and land conservation groups to achieve an integrated restoration vision in the Deschutes River Basin.

One of the member organizations, the Deschutes Land Trust (DLT), focuses on protecting and restoring healthy streams, floodplains and their adjacent uplands, which includes eliminating or putting screens on irrigation diversions to avoid fish losses. Generally, DLT prefers to own land in fee to facilitate large-scale, long-term habitat restoration and, in the process, converts and transfers the irrigation rights it acquires back into instream rights to enhance streamflows. Conservation easements are used when the needs of the landowner/community dictate that the land stay in production and are generally written to keep water rights tied to the land, but allow the landowner the option to transfer water for instream flow. While initially partnering with the Oregon Water Trust, the land trust did, on occasion, engage in water transactions, but quickly concluded that it was far more efficient to work with a locally based water conservancy and partnered with the Deschutes River Conservancy (DRC). DRC is a nonprofit regional water trust formed in 1996 through a joint initiative of the Environmental Defense Fund, the Confederated Tribes of the Warm Springs Reservation and the Central Oregon Irrigation District. DRC works collaboratively with landowners and irrigation districts to achieve its mission “to restore streamflow and improve water quality in the Deschutes River Basin.” DRC has always focused on

The Upper Deschutes Watershed Council designed and implemented a major habitat restoration project on the property—moving the creek back into one of its historic meandering channels and reestablishing a wet meadow and vastly improved fish habitat.



PHOTO: MARISA HOSSICK



PHOTO: RIO DE LA VISTA

finding efficiencies in irrigation usage that would leave more water instream and, in the process, secure the water supply held by irrigators. Given the heavy demands of existing uses, the Deschutes Basin is now closed to new water right appropriations, unless there is a qualified mitigation. For instance, a new subsurface right requires retirement of a comparable water right or placement of a surface right back instream. This mitigation requirement for new surface uses has encouraged an active market in water rights, which facilitates DRC's work because it makes water available for conversion to instream flow.

The Deschutes Partnership, which involves both DLT and DRC and two local watershed councils, emerged from an opportunity to obtain funding from the Pelton Fund and the Oregon Watershed Enhancement Board, along with support from the Bonneville Environmental Foundation's Model Watershed Program. Once established, according to DRC executive director Tod Heisler, "The Deschutes Partnership became the place where we refined our roles." DRC became the water specialist; DLT focused on land conservation, restoration and long-term stewardship; and the watershed councils engaged in habitat restoration, fish passage and the monitoring activities essential for long-term success. Working together, Heisler says, "The partnership became a self-reinforcing mechanism that expanded the pie and quadrupled the resources, skills and funding available within five years."

For his part, DLT executive director Brad Chalfant says that this "pretty amazing partnership" provides a sounding board and

on occasion mediates for members. His land trust will call on DRC to handle water transactions associated with land acquisitions or conservation easements, essentially “outsourcing the water transaction” to those with specialized expertise. Even when there is no change to a water right or no provision in an easement concerning water, DRC’s Heisler observes that the partners find it useful to talk through the implications for water and the larger community: “What’s important is that land and water are considered together, regardless of the resulting legal agreement.” Chalfant agrees, noting that the two organizations regularly compare notes and, to some degree, jointly develop their respective strategies. Chalfant says that for the land trust, the availability of senior, protectable water rights is frequently a factor in project selection.

Beyond individual land transactions, members of the Deschutes Partnership benefit from access to additional financial resources for working collaboratively to achieve shared restoration goals. The partners agree that the hard work in assembling and maintaining a formal partnership is well worth it. “Partnership is *the* way to achieve conservation goals,” concludes Heisler, who notes that “the collaborative mood and process have been infectious.” Chalfant adds that the collaboration is also appealing to funders, public officials and landowners, which has contributed to broad community support.

Key strategies the Deschutes Partnership employs include:

- Focusing on the respective strengths of each member organization; outsourcing activities that require special expertise to partner organizations.
- Fostering cooperation over competition by using third-party facilitators to help articulate a shared vision and overcome the idea that partners are competing for financial resources; seeking to “enlarge the pie” through joint funding proposals for more comprehensive restoration projects; and being realistic and investing enough time to build trust among the partners, including the sharing of success.
- Building community support by providing added value to landowners and by cooperating with community-based groups to allow local ownership of results.
- Sharing information between partners as freely as possible to ensure efficient use of limited resources, to prioritize

TIPS

What’s important is that land and water are considered together, regardless of the resulting legal agreement.

Use third-party facilitators to help articulate a shared vision and overcome the idea that partners are competing for financial resources.

Be realistic and invest enough time to build trust among the partners, including the sharing of success.

the highest conservation values, to avoid mixed messages to the landowner community and to build trust among the partners.

For more information see:

- Deschutes Land Trust, www.deschuteslandtrust.org.
- Deschutes River Conservancy, www.deschutesriver.org.
- Model Watershed Program. “Upper Deschutes Watershed Council.” <http://watersheds.b-e-f.org/partners/upper-deschutes-watershed-council>.
- Oregon Watershed Enhancement Board, “Deschutes SIP,” www.oregon.gov/OWEB/pages/sip_deschutes.aspx.

Strategies for Success

Practical experience, supported by research, suggests that there is no single how-to list of prescribed steps for land trusts to address water as part of their land conservation work. Translating a particular approach from one state to another might not be possible due to diverse state water laws, different sources of funding for water transactions or the absence of water trusts or similar conservation partners to provide financial incentives for water conservation. And, if they have not already been involved in water-related conservation, land trusts are understandably concerned about their capacity for taking on new responsibilities or areas of expertise, especially in an area as complex and potentially contentious as water rights.

Nonetheless, there are several broad strategies for successfully incorporating water into land trust work. There is great value in land trusts developing their skills and capacity in this vital area and, where possible, leveraging limited resources by collaborating with water trusts and other organizations with special knowledge and skills necessary to engage in water transactions.

1. Develop a conservation vision with the landowner, including water as part of a larger suite of conservation values.

Water is clearly an essential part of many high-priority conservation values, including riparian habitat, wetlands, watersheds,

recreation and working agricultural lands that rely upon irrigation. It is hard to imagine many land conservation values that don't relate to or depend on water.

Simply recognizing and articulating the role that water plays in a land or easement transaction is important in assessing the necessary steps for achieving conservation goals. In some cases, the role of water is obvious, and the initial conservation instruments address the status of water rights. In other cases, easement language is silent as to water rights, but conservation partners return subsequently to address them, whether by encumbering water rights to ensure continued irrigation or by entering into a water transaction to enhance streamflows and other aquatic resources.

In a broader sense, land trusts may acknowledge the role of water in their mission statements and in communications about the breadth of their work. In describing conservation efforts linked to wildlife habitat, it makes sense to describe the vital role of rivers, wetlands and groundwater in supporting and sustaining a vibrant ecosystem. Educational campaigns aimed at improving land practices may remind residents of their common connection to shared waterways. "Thinking like a watershed" is a good frame of mind for approaching nearly every conservation campaign and matches well with the emphasis of public resource agencies on large-landscape conservation.

2. Conduct due diligence with respect to water rights when negotiating a land or easement transaction that includes water-related conservation values.

When protecting water-related conservation values, it is essential that land trusts consider the sources of water necessary to sustain those values and assess whether and how the legal rights to that water need to be addressed in the conservation instrument. Because a water right is a separate real property interest in the West, a landowner may be able to transfer it away from the property unless he or she agrees not to (this agreement must conform to state law). These laws and regulations are usually nuanced, complex and strictly applied so that close enough is not good enough.

The particular steps involved in water rights due diligence will depend on the particular state law and may include communication with state officials, as well as the local water supply organization (e.g., a ditch company or irrigation district) or others involved in

Water Rights Due Diligence Checklist

Peter Nichols developed this checklist for the Colorado Water Trust's *Water Rights Handbook for Colorado Conservation Professionals*, modified and reproduced here with permission. It sets forth the key steps in completing a water rights due diligence review in Colorado and provides a framework that is applicable in other western states.

Note: This checklist provides an overview of steps a land trust should take to investigate water rights ownership issues prior to closing. It does not cover everything an organization should do to encumber water rights. Some details will vary in applications outside Colorado.

1. Determine what water rights are used on the land

- Obtain list of water sources and water rights used and discuss with landowner/water user
- Review deeds of property with current owner to see what water rights are specifically mentioned
- Review current Water Rights Tabulation (see <http://water.state.co.us/DWRDocs/Reports/Pages/WRTabulation.aspx> for more information) for geographic location of point of diversion, place of use and structure (water right) name
- Interview water commissioner concerning water and water rights used on the land
- Obtain copies of decrees/well permits from state engineer
- Walk property and identify existing ditches, ponds, wells and so forth

2. Confirm ownership of water rights

- Obtain and review recent deeds to property and develop chain of title to water rights
- Interview water commissioner about actual use of water right
- If right is represented by shares:
 - Review stock certificate
 - Call ditch company involved to determine what corporate records show as to ownership and status of assessment payments to the ditch company (for use of facilities, maintenance and so forth)
- Notify ditch company of intent to create conservation easement

- If warranted, engage water attorney to prepare water title report

3. Determine extent of actual historical use

- Mark location of ditches, wells, reservoirs and other structures on USGS Quad or aerial photo
- Interview landowners to determine historical use of water rights
- Mark location, including boundaries, of irrigated lands on USGS map or aerial photo; note crops historically irrigated and irrigated pasture
- Compare decreed location of structures and places of use against actual locations
- Obtain recent diversion records from water commissioner or state engineer
- Compare actual rates of diversion to decreed rate
- Obtain current abandonment list from state engineer; determine if subject rights are listed
- For any storage reservoirs, check state engineer's dam safety inspection reports
- Include information in baseline documentation inventory or separate report

4. Determine physical and legal reliability of rights

- Review diversion records to determine extent of actual use
- Interview water commissioner to determine physical availability of water at point of diversion
- Interview water commissioner to determine relative priority and frequency of the subject right being "called out"
- If warranted by importance of water rights, engage a water engineer or other professional to analyze water right

5. Reconcile information

- Review water rights ownership
- Review decreed and actual points of water diversion and/or storage
- Review decreed and actual beneficial uses of water
- Review decreed and actual places of water use
- Review decreed amount(s) and historical use of water

water delivery. It is good practice to consult with a water trust or a water lawyer to ensure protection of the water necessary to achieve conservation objectives, whether this means keeping the irrigation water flowing to the fields, preventing the transfer of water away from the conservation property or enumerating water-use changes to enhance conservation values. It is also good practice to work with a knowledgeable and trusted appraiser who is familiar with valuing water, with the river basin and with the types of water uses at issue in the transaction. After the appraisal is completed, legal counsel should review all of these elements closely for accuracy.

It is important to limit the burden on the landowner's water rights to the quantity of water necessary to preserve and support the conservation values of the property. This may be only a portion of the water rights that are currently in use on the property. Your attorney may need to check other registries in addition to the land records, such as those of ditch companies or other entities (varies by state).

If water rights are included in a conservation easement, then the land trust's stewardship and monitoring obligations will include checking to make sure that the water use continues as promised and that any obligations, such as submitting required records to the appropriate state agency or paying ditch assessment fees, also continue as promised. This requirement should be specified in the language of the conservation easement, and the landowner's records should be reviewed annually during the land trust's monitoring visits. Records also help avoid abandonment, and paying assessments avoids having the shares sold by the ditch company to another water user and voiding the agreements made with the land trust. These steps are necessary to protect the underlying water rights from loss by abandonment under the provisions of state law, thereby keeping the water on the land. Your land trust may wish to include conditional language in the easement that provides for alternative uses of the water if irrigation or other existing uses become infeasible, always ensuring protection of the underlying conservation values. Your land trust and your partners (which may include water trusts, water-user organizations or state or federal agencies) *must* understand how to monitor and have the capacity and capability to sustain this level of monitoring, which may include providing equipment and experts.

In some cases, land trusts choose not to address water rights in a conservation easement, opting instead to allow landowners

DEFINITIONS

Decree: A ruling by a water court defining the point of diversion, priority date, adjudication date, diversion amount, type of use and place of use of a water right.

Call for water: In areas where water supplies do not meet all of the demands, water users may "call" for their water, based on the priority system of "first in time, first in right." A call generally shuts off diversions by some junior water rights to ensure that senior water rights are fulfilled.

River basin: The land area that is drained by a river and its tributaries.



PHOTO: RIO DE LA VISTA

to choose whether to engage separately in agreements concerning their water. Some land trust leaders are concerned about limiting a landowner’s options or assuming that conditions on the ground requiring water usage would remain the same indefinitely. Some land trusts only include restrictive language when required to do so as a condition of the funding source. On the other hand, there is strong support from experts who advise land and water trusts to include adequate water security in conservation easements because the conservation values often depend entirely upon the water, which needs to be adequately protected. See Appendix D for sample language and Appendix F for other resources.

TIP

Land trusts and their partners *must* understand how to monitor and have the capacity and capability to sustain this level of monitoring, which may include providing equipment and experts.

3. Share information with landowners about financial incentives for land and water management practices that will benefit streamflows.

Modeled on the voluntary transactions that land trusts have pursued for decades, many western water trusts and similar organizations offer financial incentives for landowners who improve their land and water management practices to benefit streamflows

and aquatic resources. Sometimes these changes are coupled with a temporary or permanent change of water rights. There are a number of ways landowners benefit from these incentives, including the cost savings after installing more efficient irrigation equipment and direct cash payment for suspending diversions for all or part of an irrigation season.

While land irrigated with senior water rights will clearly be more valuable in any conservation transaction, it may also be possible to “sweeten the pot” in a project by connecting a landowner with an organization or state program that provides financial incentives or direct payments for water conservation. The two transactions need not proceed simultaneously. Although water is an extremely sensitive subject, some landowners are indeed amenable to this conversation, and that one transaction might open the door for the other at a later date.

Land trusts are in the best position to provide information to interested landowners when they are familiar with the range of opportunities available in their state or region and have relationships with the organizations that facilitate water transactions.

4. Build and maintain relationships with organizations and individuals who have specialized knowledge of water rights and water transactions in your state.

The importance of cooperation among organizations to leverage expertise and maximize opportunities cannot be overstated. Water is a boundary-crossing resource, and management of this variable resource requires ongoing negotiations among diverse parties. Similarly, conservation work addressing water is most effective when it transcends the usual boundary lines that divide organizations, which can mean “thinking like a watershed.”

In some cases, land-water partnerships have opened the door to funding sources that would not otherwise be available for one organization working alone. Articulating shared goals, often expressed around the recovery of a fishery or a valued river or around sustaining agricultural economies and local food supplies, is valuable because doing so defines the specific objectives of participating organizations and facilitates more ambitious landscape-level conservation strategies.

Some land trusts are comfortable and experienced working with water rights as a regular part of their conservation transac-

TIP

Water is a boundary-crossing resource, and management of this variable resource requires ongoing negotiations among diverse parties.

tions. Others have found that the best strategy to deal with the complexity of water rights is to outsource that part of their work to an organization, such as a water trust, or to a private water lawyer. This consultation may be ad hoc and informal or may be memorialized through a retainer agreement for ongoing service. Some land trusts recruit prominent local water lawyers and water conservation district general managers to sit on their boards, so that issues related to water rights can more easily be considered in the course of organizational planning, as well as in particular conservation transactions.

For their part, representatives from water trusts and similar water-focused conservation groups report that affiliating with established land trusts helps them do their work far more effectively than going it alone. Land trusts can introduce these groups to the community, smoothing their way because of the goodwill they have already established with landowners from successful land conservation work. As illustrated by the story of the Methow Valley (page 59), occasionally one organization can mitigate misunderstandings involving the work that the other is doing.

Cooperation may extend beyond the circle of conservation groups, including participation in regional water-planning discussions and direct engagement of local water districts, agencies, managers and associations in strategies for land and water conservation. Increasingly, water resource professionals in the western United States recognize that their decisions about water supply directly influence land-use patterns and quality of life. As exemplified by the story of the Confluence Nature Park in southern Utah on page 57–59, water supply organizations may be in a position to help finance and provide political support for a conservation initiative that involves both land and water.

Partnerships can be formal and named (such as the Deschutes Partnership) or informal and dynamic (for example, monthly after-work gatherings at the local brewpub). Cooperation may consist of an occasional invitation to come walk the land of a rancher contemplating a conservation transaction and discuss how water relates to the conservation values of the property. Partnerships may include joining forces to pursue grant opportunities or speaking with a unified voice on a policy proposal that would impact land and water conservation.

Building such cooperative relationships is a lot of work, but the effort is worthwhile because partners receive great value from shared information and capacity and enhanced opportunities for



PHOTO: RIO DE LA VISTA

successful conservation. In at least one case, the participating organizations used an outside facilitator to overcome an initial sense of competition and to flesh out common goals they might achieve by working together. Sustaining the relationship became a matter of spending time together on the land, sharing refreshments after work and committing to open communications. There is a great need for capacity building aimed at encouraging partnerships among land and water organizations.

Collaboration Adds Value to Land and Water Conservation

One message emerges consistently from stories of successful land and water partnerships: *Groups that collaborate to achieve mutual goals achieve more than they might by working individually.* This observation is especially true with respect to water, which connects many different parts of a landscape.

The advantages of working collaboratively include:

- Access to funding sources aimed at aquatic restoration that might not otherwise be available to the land trust working alone
- Financial incentives and technical assistance for landowners to improve land and water management practices, making a conservation transaction more attractive
- Consultation with water law experts who can spot potential legal issues that should be addressed in a conservation deed

The stories featured in this book illustrate the many advantages of land trusts partnering with water trusts or other water organizations. The best outcomes result from deliberate efforts to establish and maintain good working relationships *before* engaging in particular conservation transactions. In some cases, assistance from outside facilitators helped the organizations discuss mutual goals and explore the ways in which they might pursue those goals cooperatively.

For more information on best practices in collaborative conservation, see the following resources:

Books

- Brick, Philip, Donald Snow, and Sarah (Bates) Van de Wetering. *Across the Great Divide: Explorations in Collaborative Conservation and the American West.* Washington, D.C.: Island Press, 2001.
- McKinney, Matthew J., and Shawn Johnson. *Working Across Boundaries: People, Nature, and Regions.* Cambridge, MA: Lincoln Institute of Land Policy, 2009.
- Wondolleck, Julia M., and Steven L. Yaffee. *Making Collaboration Work: Lessons from Innovation in Natural Resource Management.* Washington, D.C.: Island Press, 2000.

Online Resources

- National Forest Foundation, Conservation Connect, www.nationalforests.org/conservation-connect.
- Red Lodge Clearinghouse. *The Collaboration Handbook.* April 6, 2010. <http://rlch.org/content/collaboration-handbook>.
- U.S. Institute for Environmental Conflict Resolution, Udall Foundation, www.ecr.gov.

Afterword

There are diverse opinions about the best way to approach water in private land conservation work, but interest in this topic is unfailingly enthusiastic and intense. The stories and examples featured in this book illustrate the wide variety of ways in which land trusts and their partners may address water in private land conservation initiatives. Although there is no single approach, the overall message in this book is that water is an important component of land conservation and ought not be ignored. Moving forward, several areas deserve attention by land trusts and their partners.

First, the broad topic of land trusts and water includes several distinct subtopics, which are addressed in this book by focusing separately on conservation easement language (typically aimed at preserving existing water uses such as irrigation) and transactions that benefit streamflows (which may seek to change existing water rights). The point is not to urge land trusts to choose between these, but to recognize that there are many different options for incorporating water into private land conservation and that some options require cooperation with other organizations, such as water trusts. The stories of land and water partnerships in different parts of the West illustrate diverse approaches and a few common strategies.

Second, the survey of land and water trusts and subsequent follow-ups in the field reinforce the observation that the most advanced land and water conservation partnerships aimed at protecting and enhancing instream flows have developed where financial resources are the greatest: in the Pacific Northwest, particularly in Oregon and Washington. Organizations in the Columbia River Basin have access to grants for streamflow enhancement from the Columbia Basin Water Transactions Program, capacity building and financial support for watershed restoration from the Bonneville Environmental Foundation and additional encouragement from state agencies that manage trust water programs and foster watershed-based organizing. In short, *money matters*, and the investment this region has directed toward restoring rivers and

recovering endangered fisheries has nourished a diverse array of innovative land and water partnerships. Although no such focused and sustained funding source exists elsewhere in the West, several of Colorado's leading public entities (Great Outdoors Colorado and the Colorado Water Conservation Board) provide or hope to provide important funding for water transactions linked to private land conservation. In addition, working with this support, the Colorado Water Trust offers a unique outreach program to land trusts in that state, along with resources for landowners interested in financial incentives for water conservation projects.

Although there are a number of ways in which water trusts have followed the model of land trusts in their structure and approach, it is worth noting that these organizations are still young and evolving. In the past several years, water trusts in many states have merged with other conservation organizations or shifted their focus from statewide to particular river basins. There is no national support organization for water trusts analogous to the Land Trust Alliance, although some multistate organizations (for example, Trout Unlimited's Western Water Project, the Instream Flow Council and River Network, which convenes an annual River Rally, and The Nature Conservancy's Colorado River Project) offer valuable opportunities to coordinate and share information with one another.

In addition to the guidance, tools and case studies for protecting water resources through private land conservation work provided here, the authors and reviewers hope that this book will also serve as a catalyst and inspiration for creating a stronger link between land trusts and water trusts in their work with landowners. Going forward, the Land Trust Alliance hopes to build upon the relationships and outcomes generated through this project to strengthen water and land conservation efforts in the West.

Roundtable Participants

This project benefited tremendously from the advice of leaders from western land trusts, water trusts and other organizations who participated in discussions at the beginning and near the completion of our research, as well as others who did not attend these meetings but responded to the survey and provided feedback on draft versions of the book. All the people listed below (affiliations current as of the date of the meeting) contributed ideas and opinions that informed this work, but the conclusions set forth in this book are those of the authors and do not necessarily reflect these individuals' perspectives or the positions of the organizations with which they are affiliated.

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Survey Methods and Summary of Results

In the fall of 2012, the Land Trust Alliance distributed an electronic survey to 491 individuals, representing 444 member land trusts in the western United States, as well as 42 water trusts and other conservation professionals identified as working on issues related to water and private land conservation. In several instances, more than one individual was invited to participate from the same organization. By early December of 2012, the Alliance had received a total of 98 responses, representing the experience of diverse individuals and organizations in all of the western states. The responses included a great deal of information that proved useful in the preparation of this book. Here is a summary of this information.

Who Participated in the Survey

The majority of people responding to the survey (78 respondents) identified their organizations as land trusts, which the Alliance defined as “a nonprofit organization that, as all or part of its mission, actively works to conserve land by undertaking or assisting in land or conservation easement acquisitions, or by its stewardship of land or easements.”

Sixteen respondents identified their organizations as water trusts, which the Alliance defined as “a nonprofit organization that, as all or part of its mission, actively works to protect and restore streamflows by engaging in transactions that involve conservation measures and/or dedication of existing water rights to instream flows under temporary or permanent arrangements.”

Several of the participating land trusts made a point of emphasizing the importance of water to their missions, resisting the distinction between land and water conservation organization labels.

The Alliance also received responses from individuals working for foundations that support land and water conservation work,

attorneys who advise conservation organizations and a few people working for public entities that engage in land and water conservation activities. The focus of the survey was on private land trust initiatives, which necessarily excluded many agency professionals who work at the intersection of land and water and have valuable insights about these strategies and opportunities.

The largest number of responses came from California (24) and Colorado (20), followed by Washington (9), Texas (7), Montana (6), Arizona (3), Idaho (3), Nevada (3), Oregon (3), Utah (3), New Mexico (2) and Wyoming (2). The Alliance also heard from organizations that work nationally (4) and throughout the western United States (4). Several individuals responding to the survey provide legal or other expertise to land and/or water trust clients in two or more states.

Relation of Water to Land Conservation Values

Water appears to be highly correlated to the conservation values of the organizations from which we heard. As indicated in Table B-1, the three highest priority (“primary focus”) land areas identified from the choices provided were riparian habitat, natural areas and watersheds. Many respondents also listed wetlands and productive agricultural land (which, in the West, is usually irrigated) as primary focus areas.

Consistent with these land area priorities, the organizations responding to the survey reported engaging in a number of water-related activities to support their conservation values. As Table B-2 illustrates, respondents highlighted the highest level of activity in sustaining/expanding riparian habitat and enhancing/protecting wetlands. About one-third of responding organizations listed wetlands mitigation or wetlands restoration as likely activities in the future. In individual comments, the Alliance heard from organizations whose activities include restoring wetlands previously drained for agriculture, protecting ephemeral streams in the desert, reoperating reservoirs for enhanced environmental benefits and protecting water quality.

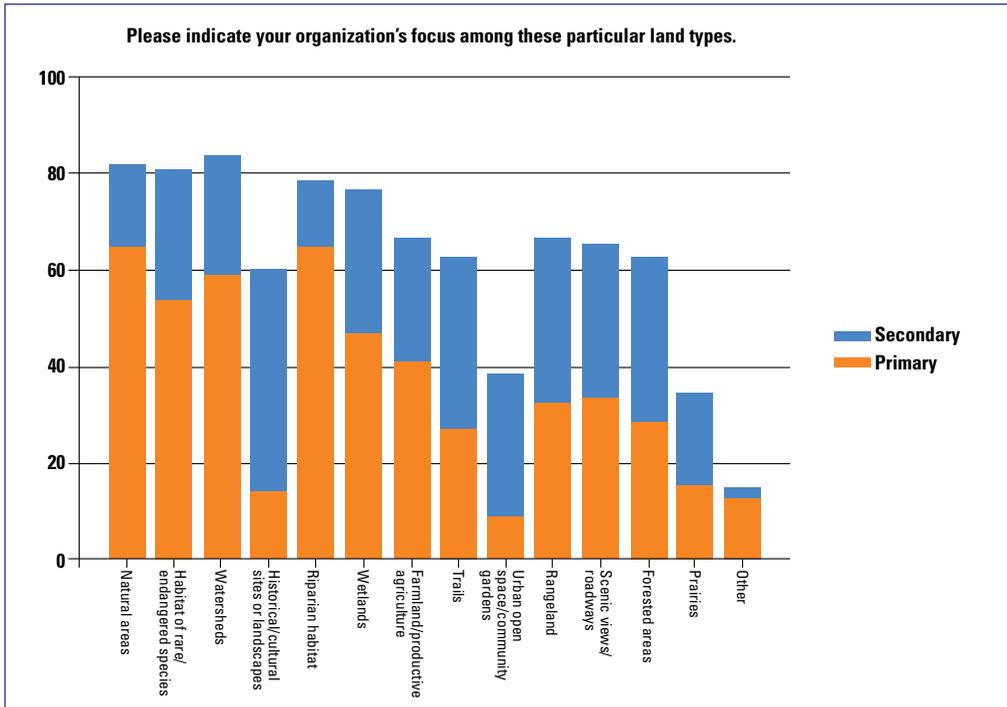


Table B-1: Organizational Focus

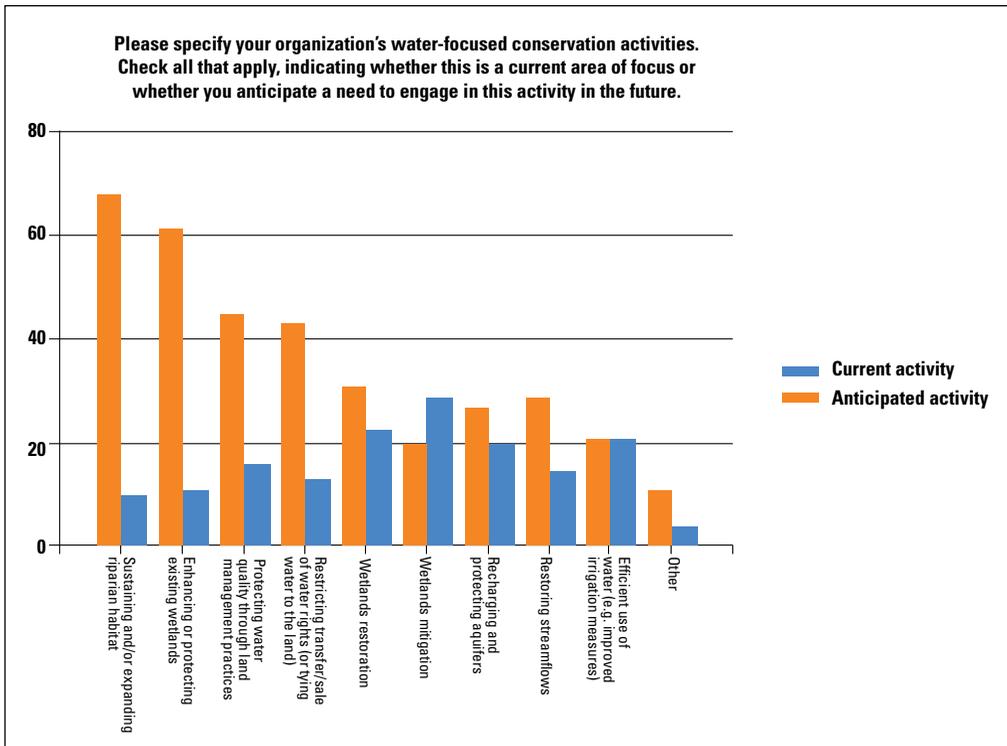


Table B-2: Water-Focused Conservation Activities

Current Activity Regarding Water Rights and Conservation

The survey asked about the ways in which organizations work with landowners and other organizations to address water in relation to their conservation values. As illustrated in Table B-3, more than half the responding organizations engage in efforts to address water to land through easement language. Some do this as a standard practice to ensure the continued application of water to irrigated lands; others only include such language when required by federal conservation funding programs. Among the responses in the “other” category were a variety of arrangements to enhance streamflows, sustain wetlands and protect critical watershed or aquifer recharge lands. Several respondents from land trusts mentioned that they are exploring options to partner with water trusts or other conservation organizations that engage in water transactions, but have not yet formalized any such arrangements.

In response to a question about the factors that have encouraged organizations to engage in water partnerships, the Alliance heard that the greatest motivation has been mutual concerns about threats to water resources, followed by landowner interest in addressing land and water issues. See Table B-4 for the distribution of these responses. In their individual comments, respondents mentioned specific concerns motivating such cooperation, including protection of drinking water supplies and water quality and achieving reliable water supplies for urban users, while maintaining sustainable agricultural irrigation through flexible sharing arrangements.

When asked what obstacles prevented attention to water issues, the most commonly mentioned obstacle (see Table B-5) was lack of information about water law. In their individual comments, many respondents mentioned the sensitivity and legal complexity of addressing water rights in addition to other conservation measures in working with landowners. One respondent mentioned the political sensitivity of water as a barrier to land trust engagement on issues of regional water management.

Many respondents provided examples of land trusts addressing water in their conservation strategies that informed the analysis in this publication. It is important to note that land trusts address water issues in a wide variety of ways beyond attention to water rights in easements. Several respondents mentioned active engagement with water-planning agencies and other organizations to

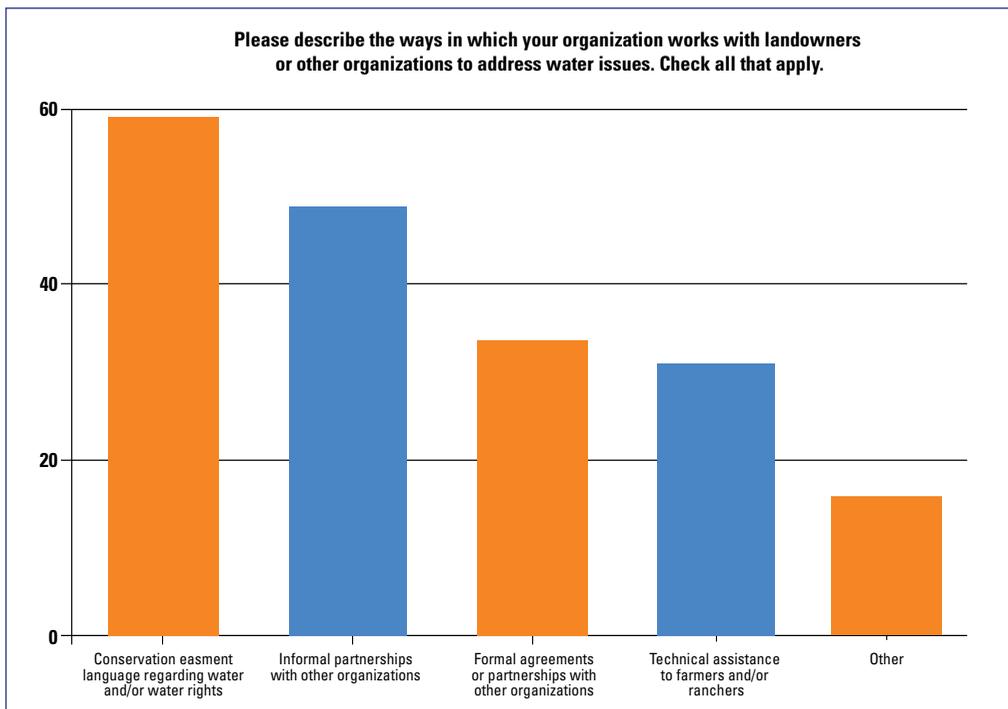


Table B-3: Methods for Working with Landowners on Water Issues

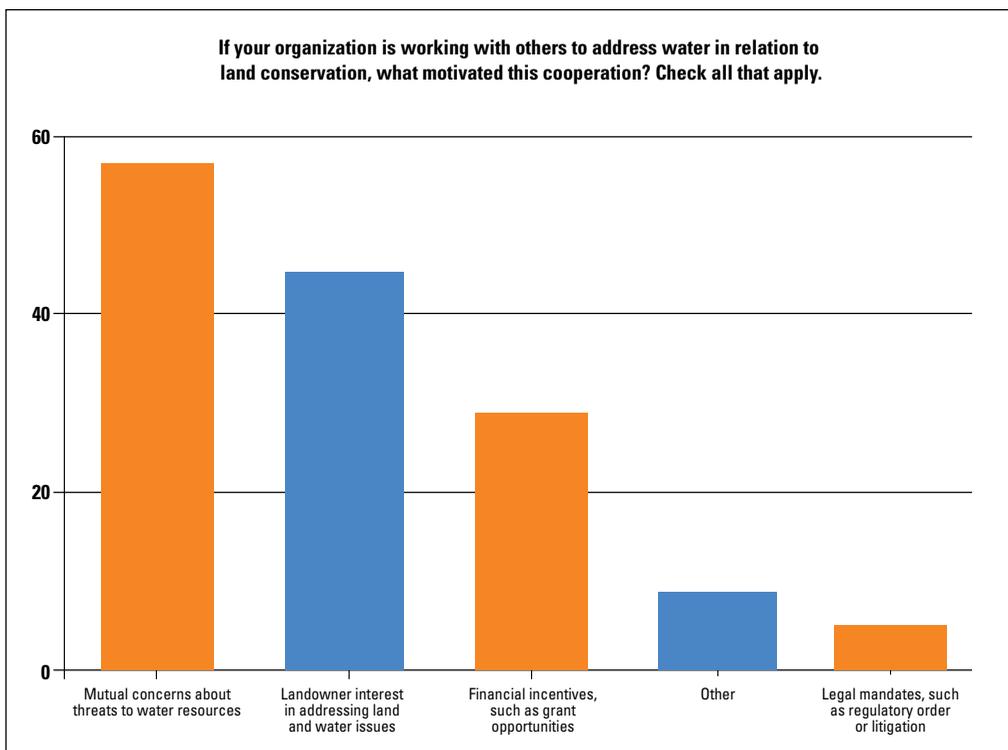


Table B-4: Motivations for Addressing Water in Land Conservation Work

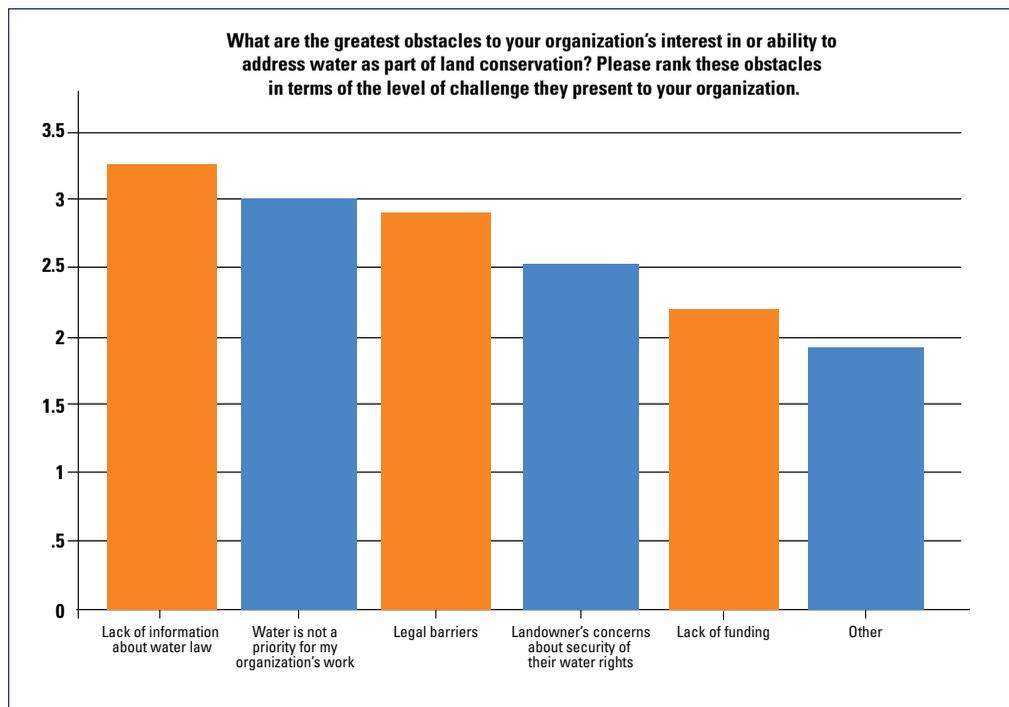


Table B-5: Obstacles to Addressing Water in Land Conservation

address water issues in relation to land use. Others emphasized the importance of acquiring and protecting sensitive watershed lands and encouraging and/or practicing good land management techniques for protecting water flows and quality.

Information and Resource Needs

The organizations responding to this survey reacted favorably to all the information and resources the Alliance proposed to include in this book, which helped shape subsequent work and the information gathered. Respondents also provided helpful suggestions for information and resources in addition to what was originally planned; the authors attempted to include all the high-priority items in this book. The authors took note of several respondents' observations that state-specific guidebooks and direct services already exist and should be referenced instead of replicating others' good work.

Western States' Water Laws and Instream Flow Programs

Appendix C provides summary information about western states' water laws only and is not presented for the purposes of providing legal advice. Land trusts and water trusts should seek independent legal counsel for further clarification, interpretation or application of state water laws to planned or existing projects.

This appendix provides a brief summary of the resources available on the water laws of western states that manage water resources under the prior appropriation doctrine: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming (the Pacific Coast states employ various combinations of prior appropriation and riparian water law). For each state there is a summary of the laws dealing with instream flows, information on the water rights process, organizations involved in instream flow protection and state-specific additional resources. This information came from state-specific resources and the general sources listed on pages 127–136.

A brief note about the evolution of instream (also called environmental) flow protection: Historically, western states' prior appropriation water rights systems did not recognize instream uses of water as beneficial. To the contrary, state law required proof of a diversion out of the stream as one component of a valid water right. Beginning in the 1970s, changes in state laws allowed state agencies and nongovernmental organizations to appropriate unclaimed water to prevent future diversions in stream segments with important fisheries or other recreational or environmental values. These new appropriations were very junior in seniority and, in some cases, did not offer a great deal of protection during times of drought or high demand by senior water users. Thus, recent attention has turned to restoring flows in some dewatered stream segments, often together with additional stream restoration efforts. Water trusts and other conservation organizations engage in streamflow restoration work

with existing water diversions in a variety of ways. For example, sometimes they help water users install efficiency measures to allow diversion of less water. In other cases, they modify the manner of their diversions or retire those diversions altogether. State laws vary a good deal in terms of who may claim or hold an instream flow water right. In most cases, nongovernmental organizations may facilitate an instream flow transaction but may not hold an instream flow right. For example, in Montana a group such as a water trust may hold a temporary instream flow lease, but any permanent transfer of existing water rights to instream flow must include a transfer of the water right to a state agency.

Please be aware that the following state-specific information is intended as a starting point, not a definitive reference on applicable water law. Legislation on this subject changes frequently, and agency policies and procedures are similarly likely to change over time. We encourage land trusts wishing to learn more about the water laws and instream flow programs that might apply to their private land conservation work to consult directly with experienced lawyers and other experts working in their states.

Arizona

Arizona law allows appropriation of water for instream flows. Instream flow rights follow the same process as any other appropriation and can be filed by anyone (including the federal government), under the auspices of the Arizona Department of Water Resources. Certain transactions do not require a change in the water right (see “Upper Gila River, Arizona: Short-Term Water Lease Agreement Avoids Water Rights Change Procedures” on page 45 and agreement language in Appendix E on page 120). Private parties may protect instream flows by acquiring existing surface or groundwater rights through purchase or lease, but the water right will lose its original priority date in the process. The state, on the other hand, may sever a water right from the land on which it has historically been used and transfer the right to a new use to benefit wildlife or recreation without losing the original priority date. Financial support for the acquisition of Central Arizona Project water and effluent water is available through the Arizona Water Protection Fund.

Who Can Appropriate Instream Flows	Who Can Transfer Existing Water Rights to Instream Flows
Anyone	Anyone (but instream flow transfers by individuals lose their original priority date; state transfers keep the original priority date)

Who Administers	Statutory Authority
Arizona Department of Water Resources, Arizona Game and Fish Department	Ariz. Rev. Stat. Ann. §45-152.01 (2012)

Table C-1: Arizona Instream Flow Authority and Administration

Process Guidance

- Arizona Department of Water Resources. “Application Review Process: Application for Permit to Appropriate Public Water of the State of Arizona for Instream Flow Purposes.” Revised August 2012. www.azwater.gov/azdwr/SurfaceWater/SurfaceWaterRights/documents/RevisedISFApplication.pdf.

Organizations Active in Instream Flow Enhancement

- Arizona Land and Water Trust, www.alwt.org.
- The Nature Conservancy, www.nature.org/ourinitiatives/regions/northamerica/unitedstates/arizona/index.htm.

Additional Resources

- Citron, Aaron, and Dustin Garrick. *Benefiting Landowners and Desert Rivers: A Water Rights Handbook for Conservation Agreements in Arizona*. Tucson: Arizona Land and Water Trust, 2010. www.aolt.org/images/pdf/ALWTWaterHandbookPart1.pdf.
- Megdal, Sharon B., Kelly Mott Lacroix, and Andrew Schwarz. *Projects to Enhance Arizona’s Environment: An Examination of Their Functions, Water Requirements and Public Benefits*. Tucson: Water Resources Research Center, University of Arizona, May 2006. <https://wrrc.arizona.edu/sites/wrrc.arizona.edu/files/ProjectsToEnhanceAZ’sEnvironment2.pdf>.
- Young, Yvonne Resendez. *Enhancing the Understanding and Importance of Granting Instream Flow Water Rights in Arizona*. Tucson: University of Arizona School of Natural Resources, College of Agriculture, 2005. <http://wsp.arizona.edu/sites/wsp.arizona.edu/files/YYoung.pdf>.

California

The California Water Code authorizes any person with an appropriate water right to petition to change its purpose to preserve or enhance wetlands habitat, fish and wildlife resources or recreation in or on the water. Any petition must be approved by the California State Water Resources Control Board. There is no provision in California state law allowing appropriation of new instream flow rights.

Process Guidance

- California Department of Fish and Wildlife. “Instream Flow.” www.dfg.ca.gov/water/instream_flow.html.
- California Environmental Protection Agency, State Water Resources Control Board. “Instream Flows Policy: Policy for Maintaining Instream Flows in Northern California Coastal Streams.” www.waterboards.ca.gov/waterrights/water_issues/programs/instream_flows.

Organizations Active in Instream Flow Enhancement

- California Trout, <http://caltrout.org>.
- Trout Unlimited, California Program, www.tu.org/tu-programs/california.
- Resource Renewal Institute, www.rri.org/freshwater-and-fish.php.

Additional Resources

- Dunning, Harrison C. “California Instream Flow Protection Law: Then and Now.” *McGeorge Law Review* 36 (2005): 363.
- Grantham, T. E., et al. “Evaluating Tradeoffs between Environmental Flow Protections and Agricultural Water Security.” *River Research and Application*, January 2013.
- Mooney, Donald B., and Marsha A. Burch. *The Water Acquisition Handbook: How to Acquire Water for the Environment in California*. With contributions from Elise Holland. San Francisco: Trust for Public Land, 2005. www.tpl.org/publications/books-reports/california-water-acquisition.html.

Who Can Appropriate Instream Flows	Who Can Transfer Existing Water Rights to Instream Flows
There is no provision allowing appropriation of new instream flow water rights	Anyone may petition to transfer existing water right to instream flows, pursuant to state criteria

Who Administers	Statutory Authority
California State Water Resources Control Board, California Department of Fish and Game	Cal. Water Code 1707

Table C-2: California Instream Flow Authority and Administration

Colorado

Colorado takes a conservative approach to appropriating water for environmental purposes, focusing mainly on maintaining essential fish habitat and requiring close scrutiny of all instream flows for environmental purposes. Only the state can hold instream flow and lake level water rights, but nonprofit organizations work to facilitate transactions with water rights holders. The state created an instream flow program in 1973 and initially focused on protecting coldwater fisheries in headwater lakes and streams. There is increasing pressure on the state to restore flows in critical dewatered rivers throughout the state, due to increasing pressures on water from urban population growth, changing public values for environmental protection, growing economic importance of water-based recreation and the listing of species under the Endangered Species Act. The Colorado Water Conservation Board (CWCB) may obtain instream flow water rights by purchase, donation, bequest, lease or contract; the CWCB may only lease water in connection with an existing decreed instream flow right.

Process Guidance

- Colorado Water Conservation Board. “Instream Flow Program.” Process for modifying instream flow water rights. <http://cwcb.state.co.us/environment/instream-flow-program/Pages/main.aspx>.

Organizations Active in Instream Flow Enhancement

- Colorado Water Conservation Board, www.cwcb.state.co.us.
- Colorado Water Trust, www.coloradowatertrust.org.
- Trout Unlimited, Western Water Project, www.tu.org/tu-programs/western-water.

Who Can Appropriate Instream Flows	Who Can Transfer Existing Water Rights to Instream Flows
Colorado Water Conservation Board; local governments can hold instream flow rights and Recreational In-Channel Diversion rights	Any water right owner, including government entities or organizations, can transfer rights to the CWCB for conversion to instream flows with original priority date of the appropriate water right, subject to the statutory requirements for instream flow rights
Who Administers	Statutory Authority
Colorado Water Conservation Board holds instream flow rights; the State Engineer’s Office administers the water and makes sure it gets where needed in appropriate amounts	Instream flow and natural lake level program: Colo. Rev. Stat. §37-92-102 (3) Instream flow acquisitions: Colo. Rev. Stat. §37-60-123.7 Temporary loans of water for instream flows: Colo. Rev. Stat. §37-83-105(2)

Table C-3: Colorado Instream Flow Authority and Administration

Additional Resources

- Colorado Water Trust’s Water on the Land Program, www.coloradowatertrust.org/our-work/water-on-the-land.
- Nichols, Peter D, et al., *Water Rights Handbook for Colorado Conservation Professionals*. Rev. ed. Denver: Colorado Water Trust and Bradford Publishing Co., 2011.
- The Water Information Program, www.waterinfo.org.

Idaho

Idaho recognizes instream flows as a beneficial use for unappropriated water for both environmental purposes and for protecting water from export to other states. The Idaho Minimum Stream Flow Program preserves streamflows and lake elevations at the minimum level of water necessary to preserve fish and wildlife. Only the Idaho Water Resource Board (IWRB) holds instream water rights, but anyone can request that the board apply for streamflow on any water body in the state. Unappropriated water must be available (that is, existing claims must not exceed the full flow of the stream), the appropriation amount can only be the minimum amount necessary to meet the goals of the application, and it must be supported by historical data showing that the minimum streamflow can actually be maintained. Other water rights cannot be transferred to meet

Who Can Appropriate Instream Flows	Who Can Transfer Existing Water Rights to Instream Flows
Idaho Department of Water Resources	The state; once changed, the water right's priority date becomes the date it was converted to instream flow

Who Administers	Statutory Authority
Idaho Water Resource Board	Minimum streamflows required for the protection of fish and wildlife habitat, aquatic life, recreation Idaho Code Ann. §42-1501 to 1508

Table C-4: Idaho Instream Flow Authority and Administration

this minimum. Instead, water transactions are voluntary agreements to change existing water rights to instream flow by reducing diversions in critical streams. Once changed, the water right's priority date becomes the date it was converted to instream flow. In addition, the Idaho legislature must approve any instream flow appropriation. Special legislation authorizes the IWRB to lease flows to protect instream water on the Lemhi, Wood and Snake rivers. Certain protected rivers identified by the IWRB preclude new development entirely. In addition, the IWRB has established protected rivers and minimum flows on some federally managed lands through a memorandum of understanding with the U.S. Forest Service and Bureau of Land Management. In recent years, interest in instream flows has waned, but where endangered fish are at issue, the state is still willing to develop a tailored legislative response.

Process Guidance

- Idaho Department of Water Resources. "Idaho Minimum Stream Flow Program." January 2013. www.idwr.idaho.gov/waterboard/WaterPlanning/Minimum%20Stream%20Flow/PDFs/MSF_Brochure.pdf.

Organizations Active in Instream Flow Enhancement

- Idaho Conservation League, www.idahoconservation.org/issues/water/keeping-water-in-the-rivers.
- Idaho Rivers United, www.idahorivers.org.
- Trout Unlimited, "Western Water Project," www.tu.org/tu-programs/western-water.

Additional Resources

- U.S. Geological Service's Idaho Water Science Center, <http://id.water.usgs.gov>.

Montana

Instream flows are recognized for recreation purposes and for the protection of wildlife and fishery resources in Montana. Flows can be reserved and held by the state and local governments, leased from one individual to another, supplemented by storage water and protected from further depletion through basin closure and drought management plans. Montana began permitting instream flow leasing by government agencies in 1989 and expanded it to private and nonprofit entities in 1995. Today, private parties are also permitted to convert existing diversionary rights on a temporary basis or, in some cases, permanently. In order to provide an instream flow lease or conversion, a water right holder must undergo a change of use process with the Montana Department of Natural Resources and Conservation. Applicants seeking to change the use of water to instream flow purposes must present the amount of water needed, along with the purpose for the reservation and a statement of benefit to the fishery. Leases to nongovernmental groups are limited to 10-year terms, but may be renewed. The change process traditionally prevented some from participating due to its complexity. The Montana legislature made changes to the review process in recent years to facilitate instream flow leasing.

Who Can Appropriate Instream Flows	Who Can Transfer Existing Water Rights to Instream Flows
The federal government, the state and any of its political subdivisions	Any public or private entity, with no change to the priority of the water right
Who Administers	Statutory Authority
Montana Department of Natural Resources and Conservation	Temporary instream water rights: Mont. Code Ann. §85-2-408 Changes in appropriative rights: Mont. Code Ann. §85-2-402 Montana Fish, Wildlife and Parks held instream flows: Mont. Code Ann. §85-2-436 Federally held instream flows: Mont. Code Ann. §85-2-320

Table C-5: Montana Instream Flow Authority and Administration

Process Guidance

- Department of Natural Resources and Conservation. “Water Rights Forms.” Forms for the change of an appropriative right. http://dnrc.mt.gov/wrd/water_rts/wr_general_info/wrforms/wr_forms.asp.

- Montana Department of Natural Resources and Conservation, Legislative Environmental Quality Council, and Montana University System Water Center. *Water Rights in Montana*. Helena, MT: April 2012. <http://leg.mt.gov/content/publications/environmental/2012-water-rights-handbook.pdf>.

Organizations Active in Instream Flow Enhancement

- Clark Fork Coalition (Clark Fork River Basin), www.clarkfork.org.
- Montana Fish, Wildlife and Parks, <http://fwp.mt.gov/fishAndWildlife/habitat/fish/waterManagement/instreamFlows.html>.
- Trout Unlimited, Western Water Project, www.tu.org/tu-programs/western-water.

Additional Resources

- Bradshaw, Stan. *A Buyer's Guide to Montana Water Rights*. Arlington, VA: Trout Unlimited, 2007. www.tu.org.
- Clark Fork Coalition. "Tools for Landowners." www.clarkfork.org/images/stories/publications/vitalrivers/cfc_flow_2011-final.pdf.
- Trout Unlimited. *Private Water Leasing: A Montana Approach; A report on the 10-year history of a unique Montana program*. Arlington, VA: Trout Unlimited, 2004. http://leg.mt.gov/content/Committees/Interim/2007_2008/water_policy/staffmemos/waterleasetu.pdf.
- Ziemer, Laura, et al. "Changing Changes: A Road Map for Montana's Water Management." *University of Denver Water Law Review* 14 (2010): 47.

Nevada

Nevada does not have a state program addressing the protection of instream flows, but does allow anyone to appropriate water for recreation and wildlife purposes. Irrigation water can be temporarily converted to improve streamflow or to protect wildlife. Over the last 10 years, federal, state and local governments, tribes, private individuals and nonprofits have increasingly worked to protect instream flows by outright acquisition. The bulk of environmental water transactions in Nevada are related to the Bureau

Who Can Appropriate Instream Flows	Who Can Transfer Existing Water Rights to Instream Flows
Any public or private entity	Any public or private entity, with original priority

Who Administers	Statutory Authority
Nevada Division of Water Resources	Nev. Rev. Stat. Ann. §533

Table C-6: Nevada Instream Flow Authority and Administration

of Reclamation’s Newlands Project, where agricultural water is converted to instream and wetland use to protect endangered fish species. In addition, the Nevada Department of Wildlife acquires water and land throughout the state.

Process Guidance

- State of Nevada Division of Water Resources. “Water Rights Home.” Statutes and individual water right information. <http://water.nv.gov/waterrights>.

Organizations Active in Instream Flow Enhancement

- Great Basin Land and Water, www.greatbasinlandandwater.org.

Additional Resources

- Bingham, James L., and George A. Gould. *Opportunities to Protect Instream Flows and Wetland Uses of Water in Nevada*. Washington, D.C.: U.S. Dept. of the Interior, Fish and Wildlife Service, 1992. www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA322618.
- Nevada Division of Water Resources, Water Planning Program. “B. Water for Wildlife and Environmental Purposes,” <http://water.nv.gov/programs/planning/stateplan/documents/pt3-3b.pdf>.

New Mexico

New Mexico does not have legislation specifically authorizing legal protection of instream flows. Instream flows are recognized as a protected use in principle, but have not been affirmed by any court decree, statute or rule. While the state legislature has not recognized instream flows as a beneficial use of water, an Attorney General opinion interprets the state’s laws as allowing instream flows under certain conditions, so water acquisitions to improve streamflows

Who Can Appropriate Instream Flows	Who Can Transfer Existing Water Rights to Instream Flows
Not allowed	Unclear

Who Administers	Statutory Authority
New Mexico Environment Department	Unclear; recognized only by opinion of Attorney General Tom Udall, Opinion No. 98-01 (March 27, 1998) http://lawschool.unm.edu/instream/powerpoints/Opinion98-01.pdf Related legislation: Strategic Water Reserve, N.M. Stat. Ann. §72-14-3.3

Table C-7: New Mexico Instream Flow Authority and Administration

for fish and wildlife do occur. In 2005, the New Mexico legislature passed and funded a Strategic Water Reserve, a collection of publicly held water rights leased or acquired by the New Mexico Interstate Stream Commission and used to keep rivers flowing for endangered species purposes or for meeting out-of-state delivery obligations.

Process Guidance

- New Mexico Environment Department. “River Ecosystem Restoration Initiative: Surface Water Quality Bureau.” State funding for water leases or purchases. www.nmenv.state.nm.us/swqb/RERI/index.html.

Organizations Active in Instream Flow Enhancement

- Audubon New Mexico, <http://nm.audubon.org/rivers-and-water>.

Additional Resources

- Audubon New Mexico. “River Ecosystem Restoration Initiative: Community Partnerships Restoring New Mexico Rivers.” Santa Fe: Audubon New Mexico, undated. http://nmconservation.org/dl/RERI_16pg_web_LO.pdf.
- Berrens, Robert P., Philip Ganderton, and Carol L. Silva. “Valuing the Protection of Minimum Instream Flows in New Mexico.” *Journal of Agricultural and Resource Economics* 21, no. 2 (1996): 294–309. <http://ageconsearch.umn.edu/bitstream/31022/1/21020294.pdf>.
- Fort, Denise D. “Instream Flows in New Mexico.” *Rivers* 7, no. 2 (2000): 155–63.

Oregon

Oregon is well known for its comprehensive and long-established instream flow protection program. Instream flows are recognized in Oregon to protect fish, to minimize the effects of pollution and to maintain recreational uses. Instream flow rights are typically limited to the Oregon Department of Fish and Wildlife, the Department of Environmental Quality and the Oregon Parks and Recreation Department. However, with most streams already overappropriated, agency-held “fish” flows are typically junior in priority and fail to keep overappropriated streams flowing year-round. Nongovernmental organizations have obtained instream flow rights through litigation and water transfers. Furthermore, unappropriated water may be dedicated to instream flow. Instream flow rights, in part or in whole, can also be leased, purchased or given, but cannot be owned by individuals. Instead, they are held in trust by the state. Flows dedicated for instream purposes may be subordinated to storage projects, municipal uses and hydrologic projects.

Process Guidance

- Oregon Water Resources Department. “Oregon’s Flow Restoration Toolbox.” www.oregon.gov/owrd/pages/mgmt_instream_tools.aspx.

Organizations Active in Instream Flow Enhancement

- Deschutes River Conservancy, www.deschutesriver.org.
- The Freshwater Trust, www.thefreshwatertrust.org.
- WaterWatch, <http://waterwatch.org>.

Who Can Appropriate Instream Flows	Who Can Transfer Existing Water Rights to Instream Flows
Oregon Department of Fish and Wildlife, Department of Environmental Quality, Oregon Parks and Recreation Department; held in trust by Oregon Water Resources Department	Any public or private entity can purchase, lease or receive instream flows as a gift; held in trust by Oregon Water Resources Department
Who Administers	Statutory Authority
Oregon Water Resources Department	OR. Rev. Stat. §537.348 (provisions concerning water leases were amended in 2013)

Table C-8: Oregon Instream Flow Authority and Administration

Additional Resources

- Oregon Water Resources Department (OWRD). *Water Rights in Oregon: An Introduction to Oregon’s Water Laws*. Salem, OR: OWRD, September 2009. www.oregon.gov/owrd/pubs/docs/centennial_aquabook.pdf.

Utah

Currently, Utah has no state program allowing the appropriation of water for instream flows, but state law does allow existing water rights to be changed for instream flow purposes. The instream flows are recognized to support healthy fisheries and public recreation and to preserve the natural stream environment. The Utah Division of Water Resources or the Utah State Parks and Recreation may change a donated water right to instream flows and may purchase rights with earmarked funding specifically for the purpose of instream flow protection. Legislation passed in 2008 authorizes fishing groups to file for a change in use to accommodate instream flows for up to 10 years for the purpose of protecting native fish species. These temporary changes will sunset in 2018 and are limited to areas with active protection of native cutthroat trout.

Process Guidance

- Utah State Engineer, waterrights.utah.gov/contact.asp.

Organizations Active in Instream Flow Enhancement

- Trout Unlimited, Western Water Project, www.tu.org/tu-programs/western-water.
- Utah Water Users Association, www.utahwaterusers.com.

Who Can Appropriate Instream Flows	Who Can Transfer Existing Water Rights to Instream Flows
Not allowed	Utah Division of Wildlife Resources, Utah State Parks and Recreation or fishing groups, with original priority date remaining intact
Who Administers	Statutory Authority
Utah Division of Water Rights, Utah State Parks and Recreation (transfers only)	Utah Code 73-3-30 (amended in 2013)

Table C-9: Utah Instream Flow Authority and Administration

Washington

Washington instream flows can be used to protect fish, game, birds or other wildlife resources and recreational and aesthetic values. Flows can be protected through the acquisition of either unappropriated water or existing water rights through purchase, gift or any lawful means other than eminent domain. Leases can be short term, long term or permanent, provided the water transferred is used in an acceptable public manner. Transferred water rights maintain their original priority date. Once acquired, an instream flow right is considered a trust water right and is held by the state in the public’s interest. Because such instream flow rights are considered a beneficial use, water rights protected in this manner are also protected from abandonment or forfeiture. The state sets minimum base flows for many rivers in Washington, and those rivers can be closed to conventional appropriation if minimum streamflow levels are not met.

Process Guidance

- Washington State Department of Ecology. “Instream Flows.” www.ecy.wa.gov/programs/wr/instream-flows/isfhtm.html.

Organizations Active in Instream Flow Enhancement

- Trout Unlimited, Western Water Project, www.tu.org/tu-programs/western-water.
- Washington State Recreation and Conservation Office. “Salmon Recovery Funding Board.” www.rco.wa.gov/boards/srfb.shtml.
- Washington Water Trust, www.washingtonwatertrust.org.

Who Can Appropriate Instream Flows	Who Can Transfer Existing Water Rights to Instream Flows
Department of Ecology	Any public or private entity can donate water rights to the state; transferred water rights maintain their original priority date
Who Administers	Statutory Authority
Washington State Department of Ecology, Washington Department of Fish and Wildlife, groups associated with the Water Resource Inventory Area	Wash. Rev. Code Ann. §90.03

Table C-10: Washington Instream Flow Authority and Administration

Additional Resources

- American Rivers and the Washington Environmental Council (WEC). *Instream Flow Toolkit: Advocacy Guide to Healthy River and Stream Flows in Washington*. Seattle, WA: American Rivers and WEC, 2003. <http://wecprotects.org/issues-campaigns/water-for-washington/streamtoolkit.pdf>.
- Washington Rivers Conservancy. *Landowner's Guide to Washington Water Rights*. Wenatchee, WA: Washington Rivers Conservancy (now Trout Unlimited–Washington Water Project), 2009. www.ecy.wa.gov/programs/wr/rights/Images/pdf/landownerguide_2009-2ndEd.pdf.
- Washington State Department of Ecology and Washington Department of Fish and Wildlife (WDFW). *Washington Water Acquisition Program: Finding Water to Restore Streams*. Pub. No. 03-11-005 Olympia, WA: Department of Ecology and WDFW, March 2003. <http://www.whatcomcounty.us/pds/pc/pdf/20131212-ex9.pdf>.
- Washington Water Resource Inventory Area (WRIA) Maps, www.ecy.wa.gov/services/gis/maps/wria/wria.htm.

Wyoming

Wyoming recognizes the dedication of water for instream flows for the purpose of improving and maintaining fisheries. Any water right owner can store water for fishery purposes in reservoirs or give a water right to the state for instream flow purposes, but only the state may hold or obtain an instream flow water right. The transfer must be approved by the Wyoming Board of Control and the state engineer. If not given to the state or stored by an individual, a new water appropriation for instream flow must come from otherwise unappropriated water. The Wyoming Game and Fish Department works to identify the streams and fishery resources of greatest need.

Process Guidance

- Wyoming Water Development Commission Instream. “Instream Flow Filings.” http://wwdc.state.wy.us/instream_flows/instream_flows.html.

Who Can Appropriate Instream Flows	Who Can Transfer Existing Water Rights to Instream Flows
Wyoming (initiated by the Game and Fish Department; the Water Development Commission applies to the State Engineer's Office)	Any water right holder may give water rights to the state, with priority dates remaining intact; only the state is able to transfer and hold instream flows
Who Administers	Statutory Authority
Wyoming Water Development Commission, State Engineer's Office and the Board of Control	Wyo. Stat. Ann. §41-3-1001-1014

Table C-11: Wyoming Instream Flow Authority and Administration

Organizations Active in Instream Flow Enhancement

- Trout Unlimited, Western Water Project, <http://www.tu.org/tu-programs/western-water>.
- Wyoming Game and Fish Department, <http://wgfd.wyo.gov/web2011/fishing-1000693.aspx>.
- Wyoming Game and Fish Department, X-Stream Angler Program, <http://wgfd.wyo.gov/web2011/fishing-1000838.aspx>.

Additional Resources

- Robertson, Michael S., and Thomas C. Annear. "Water Management Unit Plan and Stream Prioritization." Wyoming Game and Fish Department, Fish Division, Administrative Report, 2011. http://wgfd.wyo.gov/web2011/Departments/Fishing/pdfs/ISF_WATER-MGMTPLAN0003230.pdf.

Sample Conservation Easement Provisions Regarding Water

These excerpts represent sample conservation easement provisions only and should not be used without review by qualified legal counsel in the state wherein the property lies.

Permitted Uses

Rocky Mountain Elk Foundation

Water Resources: In accordance with applicable laws and regulations, the Grantor may maintain, enhance and develop any new or existing water resources on the Property for permitted agricultural and ranching activities, domestic needs, fish and wildlife uses [and private recreational uses or activities]. Such activities may include stream bank stabilization, improvement to the quality and quantity of water available and development of watering facilities and ponds, provided such activities are conducted in a manner consistent with state and federal laws and regulations and do not conflict with the intent of this Easement. The Grantor may maintain, replace and repair existing stream crossings, culverts and bridges on the property, according to all applicable, local, county, state and federal laws and regulations. The Grantor may not sever any water rights from the Property, except to legally designate those water-use rights for instream flows.

North Olympic Land Trust

Water Rights: The Parties agree that Water Rights (see attached Exhibit or Appendix) must be maintained on the Protected Property to ensure the protection of the Agricultural Conservation Values. Grantor may exercise the Water Rights by putting them to any beneficial use that is not inconsistent with the Purpose and terms of this Easement and that is not prohibited herein. Grantor may maintain, repair and, if destroyed, reconstruct any existing facilities relating to the Water Rights (such as ditches, wells and

reservoirs) with notice to Grantees as provided for in [relevant notice section], provided that such activities are carried out in compliance with the Purpose and terms of this Easement.

Prohibited Uses

North Olympic Land Trust

Water Rights.

1. In furtherance of the Purpose of this Easement, Grantor shall cooperate with Grantee to help assure the maintenance of the Water Rights.
2. Except as expressly provided in this Section, Grantor shall not transfer, encumber, sell, lease or otherwise separate the Water Rights from the Protected Property.
3. Grantor shall not abandon, relinquish or otherwise lose or forfeit, by action or inaction, any of the Water Rights.
4. Grantor shall take affirmative actions to avoid such abandonment, relinquishment, loss or forfeiture, including but not limited to the following: (i) exercising the Water Rights by putting them to beneficial use in accordance with [relevant state law or regulation]; (ii) seeking to place or enroll the Water Rights in [state trust] water rights program on a temporary basis, provided that any acquisition of the Water Rights by the State shall be expressly conditioned to limit its use to instream purposes and its duration to a term no longer than 10 years; or (iii) seeking to lease the Water Rights for use on land other than the Protected Property for a term no longer than 10 years, with prior written notice to and consent of the Grantees, after obtaining approval in accordance with [relevant state laws and regulations] for a temporary transfer or change of the Water Rights; provided, however, that any such lease shall require the lessee to make beneficial use of the Water Rights in accordance with [relevant state laws or regulations] and for Agricultural Activities only.

5. Any relinquishment, loss or forfeiture of the Water Rights shall not be deemed or construed to be a waiver of Grantees' rights under this Easement or to defeat the Purpose of this Easement and shall not otherwise impair the validity of this Easement or limit its enforceability in any way.

Conveyance and Consideration

North Olympic Land Trust

Water Rights: Grantors are not conveying to Grantee any Water Rights held by Grantors; however, Grantors hereby agree not to transfer, sell, lease or otherwise separate any Water Rights from the Property without the prior written consent of the Grantee upon a determination that such transfer, sale or lease is consistent with maintenance of the Conservation Values on the Property. Grantors shall not abandon or allow the abandonment of any of the water rights. If any Water Rights are under threat of abandonment, Grantors will cooperate with Grantee to help assure the continued use of any Water Rights for beneficial conservation purposes. Any relinquishment, loss or forfeiture of any water rights shall not be deemed or construed to be a waiver of the Grantee's rights under this Easement or to defeat the Purpose of this Easement and shall not otherwise impair the validity of this Easement or limit its enforceability in any way.

General Template for Water Rights Language in Conservation Easements in Western States

The following template is provided as a reference for land trusts operating in western states in which water rights are allocated under the prior appropriation doctrine. This template is adapted from Peter D. Nichols, Michael F. Browning, Kenneth R. Wright, Patricia K. Flood and Mark S. Weston, Water Rights Handbook for Colorado Conservation Professionals (Denver, CO: Colorado Water Trust, 2011) and is used here with the permission of the Colorado Water Trust.

Water Rights.

- a) Water Rights Encumbered. The parties have determined that certain water rights are necessary to conserve and maintain forever the Conservation Values [*to be defined previously in Conservation Easement*] of the Property [*to be defined previously in Conservation Easement*] to effectuate the intent of the parties. The parties accordingly agree that it is appropriate to include certain water rights beneficially used on the Property in this Conservation Easement (the “Water Rights”). The “Water Rights” include all of the Grantor’s right, title and interests in and to the water and water rights described on Exhibit ___, together with all associated canals, ditches, laterals, headgates, springs, wells, ponds, reservoirs, water shares and stock certificates, water allotments, contracts, units, permits, easements and rights-of-way and irrigation equipment.
- b) Water Rights Appurtenant. All of the Water Rights are a perpetual appurtenance to the Property and to this Conservation Easement and shall at all times pass with and remain in the same ownership as the Property and shall at all times remain subject to the terms of this Conservation Easement. This Conservation Easement and its encumbrance of the Property and all of the Water Rights is the dominant estate; the Property and the Water Rights, subject to the terms of this Conservation Easement, constitute the servient estate.
- c) Permitted Water Uses. The parties agree that the Water Rights are hereby dedicated and restricted exclusively for conservation purposes, including, but not limited to, the Conservation Values of the Property, agricultural, wildlife habitat, horticultural, wetlands, recreational, forest or other uses consistent with the protection of open land, environmental quality or life-sustaining ecological diversity (the “Permitted Water Uses”). The preferred Permitted Water Uses are the continued irrigation or other historical use of the Water Rights by the Grantor, and the Grantor shall have the paramount right to use and enjoy the Water Rights on the Property consistent with recent historical practices. In the event that the Grantor can no longer use the Water Rights for their historical purposes, the Water Rights shall be used for

other Permitted Water Uses. The Grantor shall have the right to maintain, repair and, if destroyed, reconstruct or replace any existing facilities, structures or equipment related to the Water Rights (such as ditches, wells, reservoirs and irrigation equipment), unless the Conservation Values of the Property would be irreversibly damaged thereby, as determined by the Grantee in its reasonable judgment. The Grantor shall annually report to the Grantee the nature and extent of use of the Water Rights during the prior year, which report need not be in writing, but shall include copies of any reports submitted to the State or Division Engineer or Water Commissioner by the Grantor.

- d) **Restrictions on Water Rights.** The parties agree that the Grantor may not (i) permanently change the Water Rights to or use the Water Rights for municipal, industrial, commercial or any other new uses, (ii) permanently change the Water Rights for use other than on the Property, (iii) sell or lease the Water Rights or encumber them separately from the Property or otherwise legally separate them from the Property or (iv) change the points of diversion or the type or the place of use within or without the Property, except after Grantor's receipt of a written determination by the Grantee that such changes are not inconsistent with the Permitted Water Uses and will not impair the Conservation Values of the Property. Grantor shall not construct or permit others to construct any new diversion, storage or other water structures upon the Property, shall not develop any additional water rights for use on the Property and shall not otherwise undertake any new development of water resources for use on the Property without the prior written approval of the Grantee, which approval shall not be unreasonably withheld.
- e) **Change of Conditions.** Grantor expressly waives any claim to use, change or transfer all or any part of the Water Rights other than as provided in this Conservation Easement, regardless of any future change in circumstances, change in values or other reasons, based on any theory of reasonable accommodation or other theory that would release any or all of the Water Rights from the provisions of this Conservation Easement, without the

Grantee's express written consent, which can be granted, withheld or conditioned in Grantee's sole discretion.

- f) Protection of Water Rights. In order to preserve and protect the Conservation Values of the Property, the Grantor shall continue the recent historical use of the Water Rights on the Property consistent with the Conservation Values and shall not abandon, forfeit or allow the abandonment or forfeiture of any of the Water Rights by action or inaction. The Grantor shall provide the Grantee a copy of any written notice received by the Grantor concerning the assessment, use or possible abandonment or forfeiture of the Water Rights.
 - i) Assessments. In the event such Water Rights are represented by water shares, stock certificates, water allotments, contracts, units or interests in a joint ditch, ditch and/or reservoir company, water users association or similar entity, the Grantor shall promptly pay all assessments and shall not allow the Water Rights or shares to be forfeited, sold or otherwise impaired as a result of nonpayment. If the Grantor shall fail to pay any assessment of any joint ditch, ditch and/or reservoir company, water user association or other similar entity and the Water Rights become subject to forfeiture, sale or other impairment as a result of such delinquency, the Grantee shall, in addition to any other remedies available to the Grantee under this Conservation Easement or law, have the right to pay such assessment. In such event, the Grantor shall reimburse the Grantee for all its expenses incurred in paying such assessment and preventing the forfeiture, sale or impairment of the Water Rights, including, but not limited to, reasonable attorneys' fees. The Grantee shall thereafter have a lien upon the Water Rights that are the subject matter of this Conservation Easement for such expenses and shall have the right to foreclose upon that lien if not reimbursed within six months.
 - ii) Abandonment and Forfeiture. If the Water Rights become subject to any abandonment or forfeiture proceeding or the Grantee determines that the Water Rights are otherwise subject to a threat of abandonment or forfeiture, the Grantee shall give the Grantor written notice of such threat of abandonment or forfeiture and consult with the Grantor to discuss the matter. If, and only if, Grantor fails

to cure the threat of abandonment or forfeiture within six months of receiving such notice from the Grantee, the Grantee shall, in addition to any other remedies available to the Grantee under this Conservation Easement or law, have the right to (i) enter upon the Property and undertake any and all actions reasonably necessary to continue the historical use of the Water Rights, if desired by the Grantee; and (ii) defend the Water Rights in any abandonment or forfeiture proceeding. If the Water Rights remain subject to abandonment or forfeiture, the Grantee may, after consultation with the Grantor, seek to change the Water Rights to another Permitted Water Use, including, but not limited to, use for instream flows and/or maintenance of water levels in lakes and reservoirs. The Grantor agrees to cooperate in any manner necessary to accomplish the Grantee's election and authorizes and appoints the Grantee as its agent and attorney-in-fact to file for and obtain any administrative or judicial approvals required to effectuate such changes.

- g) Temporary Instream Flow Use of Water Rights. The parties recognize that adverse environmental conditions, such as drought, occur from time-to-time and that such conditions may pose a more significant threat to the natural environment and life-sustaining ecological diversity of streams, rivers, lakes and reservoirs than to the Conservation Values of the Property. Therefore, the parties agree that the Grantor may enter into legally enforceable water leases, contracts, emergency water loans or similar agreements for conservation purposes to temporarily increase instream flows and/or water levels in streams, rivers, lakes and/or reservoirs to preserve the natural environment of such water body(s), provided that (i) the Grantee has given its prior written consent to such arrangements, and (ii) the Water Rights shall not be used for such uses more than three out of every ten years without a written determination by the Grantee that such use would not jeopardize the long-term Conservation Values of the Property.
- h) Temporary Municipal Use of Water Rights. The parties recognize that the long-term economic viability of any agricultural activity on the Property is necessary to accomplish the purposes of this Conservation Ease-

ment and that enhancing such economic viability will foster the purposes of this Conservation Easement. The parties also recognize that adverse environmental conditions, such as drought, occur from time-to-time and that such conditions may prevent effective irrigation of the Property. Such conditions may also pose serious water supply problems for municipal, commercial and industrial water users, which users may need to acquire the temporary use of alternate water supplies to meet their needs. Therefore, the parties specifically anticipate and intend that the Grantor (after 30 days' notice to the Grantee) may enter into legally enforceable interruptible supply contracts, water leases, fallowing programs, emergency water loans or other similar agreements to allow the temporary municipal, commercial or industrial use of the Water Rights. No more than thirty-three percent (33%) of the Water Rights shall be used for such purposes without a written determination by the Grantee that such use would not jeopardize the long-term Conservation Values of the Property. The Grantor may request temporary leases for more than thirty-three percent (33%) of said water rights; however, such leases will require the further written consent of the Grantee. The parties agree that the provisions of this paragraph constitute an independent contract enforceable under law, in addition to any other remedies available under this Conservation Easement.

- i) Recording Encumbrance on Stock Certificates. If the Water Rights include any shares in ditch or reservoir companies, the Grantor shall promptly submit the related stock certificate(s) to the appropriate ditch and reservoir company for inclusion of the following notation thereon: "These shares are subject to the terms and restrictions set forth in the Conservation Easement from

_____ to _____
recorded in the Real Property Records of _____
County _____ on _____, 201____
at Reception No. _____." A copy of the re-issued stock certificate(s) shall be promptly provided by the Grantor to the Grantee.

Sample Water Lease Agreements

Water transactions vary a great deal depending on state law and other factors. The following examples illustrate approaches used successfully in Montana and Arizona. The sample language should not be used without review by qualified legal counsel in the state wherein the property lies.

Water Right Lease Agreement Requiring State Approval for Change of Water Right

The following language was developed by the Clark Fork Coalition and is reproduced here with permission. For more information, contact Barbara Hall, legal director, Barbara@clarkfork.org.

This Water Right Lease Agreement (this “Agreement”) is made this ____ day of _____, _____, between WATER RIGHT HOLDER and the Clark Fork Coalition, a Montana nonprofit corporation (the “Coalition”). WATER RIGHT HOLDER and the Coalition are sometimes referred to herein individually as the “Party” and collectively as the “Parties.”

RECITALS

- A. WATER RIGHT HOLDER is the owner of Water Right Statement of Claim No. _____, the source of which is _____ Creek, a tributary to the _____ River (the “Water Right”). The Water Right is described in the General Abstract, dated _____, and attached hereto as Exhibit A; and
- B. The Coalition desires to enter into an agreement to lease the Water Right from WATER RIGHT HOLDER for instream flow purposes to benefit the fishery resource of _____ Creek under the provisions of MCA §85-2-

408, and WATER RIGHT HOLDER is amenable to entering into such agreement.

NOW THEREFORE, the Parties agree as follows:

1. **Lease of Water Right for Instream Flow Purposes.**
WATER RIGHT HOLDER agrees to lease the Water Right to the Coalition to maintain and enhance instream flow for the benefit of the fishery resource in _____ Creek.
2. **Quantity of Water; Historic Use.** The estimated amount of water to be leased is up to _____ acre feet per year at a flow rate of _____ gallons per minute (_____ cubic feet per second). The water right claim filed with respect to the Water Right is predicated upon historical use as reported by WATER RIGHT HOLDER and its predecessors in interest in the filing of the water right claim and is subject to the general adjudication process currently underway in the State of Montana. Consequently, the Parties understand that the actual amount of water available for leasing for instream flow shall be dependent upon the determination(s) made by the Montana Department of Natural Resources and Conservation (“DNRC”) on the application for change of purpose and place of use to be filed with it pursuant to this Agreement and/or by virtue of determinations made by it or the Montana Water Court during the course of the adjudication process.
3. **Term.** This Agreement will be in effect for 10 years, unless renewed pursuant to paragraph 14 or unless earlier terminated pursuant to paragraph 17, and shall commence upon the effective date of Change Authorization (as defined in paragraph 3).
4. **Operation of Agreement; Timing of Change Authorization.** As discussed in paragraph 7, the Coalition will, at its expense, prepare and submit an application to the DNRC for a temporary change authorization for the Water Right (the “Change Authorization”). Upon receipt of the Change Authorization, this Agreement will operate as a state-approved instream flow lease with a 10-year term pursuant to MCA §85-2-408. If the Change Authorization is not in effect by the _____ irrigation season, this Agreement is subject to termination as set forth below in paragraph 17.

5. **Lease Payment.** In consideration of WATER RIGHT HOLDER'S agreement to lease the Water Right, the Coalition shall pay WATER RIGHT HOLDER a lump sum payment of \$_____ (the "Lease Payment"). The Coalition will apply for funding of the Lease Payment from the Columbia Basin Water Transactions Program of the National Fish and Wildlife Foundation ("CBWTP"). If approved, the funding of the Lease Payment will be conditioned by the CBWTP on the receipt of the Change Authorization and shall not be dispersed until the Coalition provides evidence thereof to the CBWTP. The Coalition shall make the Lease Payment to WATER RIGHT HOLDER within 10 days of the Coalition's receipt of such funds from the CBWTP.
6. **WATER RIGHT HOLDER'S Operation of Water Right during Agreement.** During the term of this Agreement, WATER RIGHT HOLDER shall not pump, store, divert or consumptively use any of the water covered under this Agreement.
7. **WATER RIGHT HOLDER'S Representations and Warranties.** WATER RIGHT HOLDER represents and warrants to the best of his/her knowledge that:
 - a. WATER RIGHT HOLDER is lawfully seized and possessed of the Water Right, and title to the Water Right and to the property to which the Water Right is appurtenant are free and clear of any liens, claims or encumbrances;
 - b. WATER RIGHT HOLDER and his/her predecessors in interest have historically made beneficial use of the Water Right and/or have taken actions to evidence the intent not to abandon the Water Right and to preserve the Water Right from abandonment;
 - c. There are no actions, proceedings or investigations pending or threatened against WATER RIGHT HOLDER that would interfere with WATER RIGHT HOLDER'S ability to enter into this Agreement and to consummate the same;
 - d. There are no uncured violations of federal, state or municipal laws, ordinances or requirements outstanding that relate directly or indirectly to this Agreement;
 - e. No casualty and/or condemnation with respect to the property to which the Water Right is appurtenant has

- occurred, and no such condemnation is pending or threatened;
- f. WATER RIGHT HOLDER has not entered into any other sales agreement, lease, contract or other obligation regarding the Water Right or any of the land, whether all or a portion, to which it is appurtenant; and
 - g. WATER RIGHT HOLDER has full authority to enter into this Agreement and to consummate the transaction contemplated herein.
8. **Temporary Water Right Change Authorization.** WATER RIGHT HOLDER authorizes the Coalition to prepare and submit on his behalf an application to the DNRC for the Change Authorization. Such application must be reviewed, approved and signed by WATER RIGHT HOLDER prior to submission to the DNRC. The Coalition agrees to pay any application fees and all expenses related to obtaining the Change Authorization. The Parties anticipate that the Change Authorization will be in effect by the _____ irrigation season. However, if the Change Authorization is not in effect by _____, this Agreement may be terminated as provided in paragraph 16.
9. **Challenges to the Change Application.** In the event that a third party objects, protests, contests, appeals or otherwise challenges the application for Change Authorization, the Parties agree to work cooperatively together with DNRC and/or any third party to resolve such challenges. If the Parties mutually agree to withdraw the application, this Agreement shall be subject to termination as set forth in paragraph 17. The Coalition shall have the option of discontinuing and/or withdrawing the application if completing the change process in a reasonably acceptable time and manner appears to be impractical or excessively costly.
10. **Conditions to Agreement.** This Agreement is conditioned upon the following:
- a. The Coalition's receipt of funding approval and disbursement of funds from the CBWTP. Thus, if the CBWTP does not approve funding of the Lease Payment and disperse funds to the Coalition, this Agreement is subject to termination as set forth in paragraph 17; and
 - b. The granting of the Change Authorization by the DNRC.

11. **Enforcement of State-Approved Water Right Lease.** Upon receipt of the Change Authorization, the Coalition shall be responsible for determining the need for and taking any action(s) that are required to protect the instream flow of the leased Water Right. The Coalition shall keep WATER RIGHT HOLDER reasonably apprised regarding any circumstances that give rise to the potential for interference with the management of the Water Right instream, including but not limited to, any calls made on junior appropriators. Except in cases of emergency, any formal actions taken by the Coalition shall be reviewed and approved in advance by WATER RIGHT HOLDER. Because WATER RIGHT HOLDER remains the owner of the Water Right subject to the terms of this Agreement, the Coalition agrees that if it determines action is necessary, the Coalition will present its findings and proposed course of action to WATER RIGHT HOLDER. The Parties acknowledge that they must reach a consensus in order to pursue such action. If WATER RIGHT HOLDER and the Coalition concur with respect to the need and appropriateness of the Coalition's proposed action, WATER RIGHT HOLDER agrees that the Coalition shall be invested with WATER RIGHT HOLDER's right and authority pursuant to MCA §85-2-408(6) to pursue the course of action proposed by the Coalition to protect the Water Right instream.
12. **Measuring Devices and Monitoring.** The Coalition shall pay all necessary costs associated with installing measuring devices or providing personnel to measure the stream flows. WATER RIGHT HOLDER agrees to provide reasonable access to the Coalition to install and maintain the measuring devices as necessary.
13. **Access with Notice.** WATER RIGHT HOLDER agrees to allow the Coalition or its representatives reasonable access to WATER RIGHT HOLDER'S point of diversion, water conveyance system and irrigated area for the Water Right for measuring and monitoring purposes and for purposes of collecting physical data necessary to complete the application for Change Authorization.
14. **Early Termination; Reversion of Water Right.** If WATER RIGHT HOLDER chooses to terminate this Agreement as set forth in paragraph 17 and the Change Authorization has been issued, WATER RIGHT HOLDER understands that

he/she must notify the DNRC in writing that he/she wishes for the Water Right to revert back to its historical use for irrigation for the entire period of use.

15. **Renewal.** Upon expiration of the lease term, the Parties may agree in writing to renew the lease of the Water Right for an additional time period to be agreed upon by the Parties.
16. **Default.** If either Party fails to carry out any material provision of this Agreement, the party may serve a written notice upon the other party specifying the default. The defaulting party shall have twenty (20) days from the date written notice of default is given to correct the default, if the default is correctable. Upon default by the Coalition, WATER RIGHT HOLDER shall have the right to terminate this Agreement and, in addition, shall have any remedies available to it at law or in equity. Upon default by WATER RIGHT HOLDER, the Coalition shall have the right to terminate this Agreement and, in addition, shall have any other remedies available to it at law or in equity.
17. **Termination.** This Agreement may be terminated by either Party upon the occurrence of any of the events listed in this paragraph 17 and upon reasonable written notice by the terminating party to the other party. Further, WATER RIGHT HOLDER may terminate this Agreement for any reason at any time upon refunding that portion of the Lease Payment allocated for future years. This Agreement is subject to termination by either Party if any of the following events occur:
 - a. CBWTP denial of funding for the Lease Payment;
 - b. Failure of receipt of the Change Authorization by _____;
 - c. Withdrawal of the application for Change Authorization; and
 - d. Default by either Party as set forth in paragraph 16.
18. **No Abandonment of Water Right.** Nothing in this Agreement shall be interpreted to constitute an abandonment or to express an intent to abandon the Water Right. The Parties affirm that the terms of this Agreement do not constitute an abandonment of the Water Right and cannot serve as evidence that could be used to establish an abandonment of any part of the Water Right.

19. **Indemnification.** The Coalition shall indemnify and hold harmless WATER RIGHT HOLDER against any claim or action by third parties challenging the use of the water leased under this Agreement by the Coalition for instream purposes or challenging the validity of this Agreement on any grounds. Excluded from the Coalition's indemnity in the previous sentence are all demands, claims or actions arising out of or in any way related to WATER RIGHT HOLDER's breach of this Agreement, including without limitation, the failure of the representations and warranties made in this Agreement to be true. WATER RIGHT HOLDER will indemnify, hold harmless and defend the Coalition from and against any demands, claims or actions arising out of or in any way related to WATER RIGHT HOLDER'S breach of this Agreement, including without limitation, the failure of the representations and warranties made in this Agreement to be true.
20. **Binding Effect.** The provisions of this Agreement shall be binding upon the successors and assigns of the Parties in like manner as upon the original Parties.
21. **Cooperation of Parties.** The Parties agree to cooperate fully and to provide such assistance and information as may be necessary to implement this Agreement.
- 22 **Notice.** Any notice to be given under this Agreement shall be in writing and shall either be served upon the Party personally or served by first class mail directed to the Party to be served at the address of the Party set forth in this paragraph.
- | | |
|----------------------|---------------------------|
| If to the Coalition: | If to WATER RIGHT HOLDER: |
| PROJECT MANAGER | WATER RIGHT HOLDER |
| Clark Fork Coalition | [ADDRESS] |
| [ADDRESS] | |
23. **Amendment.** This Agreement may not be modified or amended except by the written agreement of the Parties, their successors or assigns. This Agreement may not be modified or amended orally.
24. **Severability.** If any term or provision of this Agreement or the application thereof to any person or circumstance shall to any extent be invalid or unenforceable, the remainder of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

25. **Integration.** This Agreement contains the entire agreement and understanding of the Parties and supersedes all prior and contemporaneous agreements between them.
26. **Attorney's Fees.** If a suit, action or arbitration is instituted in connection with any controversy arising out of this Agreement or to enforce any rights hereunder, the prevailing party shall be entitled to recover such amount as the court may adjudge reasonable as attorneys' or paralegals' fees at trial or on any appeal or review, in addition to all other amounts provided by law.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date indicated above.

WATER RIGHT HOLDER CLARK FORK COALITION

Water Rights Lease Agreement Not Requiring State Approval for Change of Water Right

The following lease agreement was developed by the Arizona Land and Water Trust and is used with permission. For more information, contact Sharma Hammond, land and water program manager, shammond@akwt.org.

This Water Rights Lease Agreement (this "Agreement") is made and entered into effective this ____th day of _____, 201__ by and between Arizona Land and Water Trust, Inc., an Arizona nonprofit corporation ("Lessee") and _____ ("Lessor").

PRELIMINARY STATEMENTS

- A. Lessor owns the _____ Ranch, consisting of approximately _____ acres located in _____ County, Arizona, which ranch is specifically described on Exhibit A attached hereto and incorporated herein by this reference (the "Property");
- B. Lessor desires to fallow approximately _____ acres of irrigated pasture on the Property, which acreage has historically been seeded to grow _____. Such property

- is described on Exhibit B attached hereto and incorporated herein by this reference (the "Leased Property");
- C. Lessor owns the water rights described on Exhibit C attached hereto and incorporated herein by this reference; and
 - D. Lessee desires to lease the water rights from Lessor that would otherwise be used on the Leased Property in order to increase the instream flows on the _____ River and to gauge ecological and riparian systems response along the adjacent _____ River during the irrigation season of _____ 201__ to _____ 201__.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency is hereby acknowledged, the parties agree as follows:

AGREEMENT

1. **Lease of Water Rights.** Lessor hereby leases to Lessee the water rights associated with Well # _____ (the "Well"). Lessor shall shut down and not use such Well for any reason for the duration of this Lease.
2. **Term.** The term of this Agreement shall be for one year commencing _____, 201__. In addition, the Lessee shall have the option to extend this Lease and the lease of the water rights for two additional one-year periods upon the terms set forth herein. Lessee shall be presumed to have exercised its right to extend the Lease unless it shall have given Lessor written notice not to so extend at least sixty (60) days before the end of the then current term.
3. **Lessor Representations and Warranties.** Lessor represents and warrants:
 - A. Lessor owns the Property and has the right and authority to grant this Lease, free and clear of all claims, encumbrances and right of third parties;
 - B. Lessor is lawfully seized and possessed of the water rights described in paragraph 1;
 - C. The water rights described in paragraph 1 are free and clear of all liens, claims or encumbrances; and
 - D. During the term of this Lease and any extension or renewal, Lessee shall have the exclusive right to occupy

the Leased Property free of any other uses, users or conditions. Such use shall be limited to accessing and monitoring the Well.

4. **Lease Payments.** Upon execution of this Lease, Lessee shall be obligated to pay Lessor the total sum of \$ _____ as annual rent. Such sum shall be paid in two installments: the first \$ _____ upon both Parties executing this Lease, and the remaining payment of \$ _____ six months thereafter. Such sum shall be in full satisfaction of all obligations of Lessee. As such, Lessee shall have no obligation for sales tax, real property tax or any other cost or expense related to the Leased Property, which costs shall remain with Lessor. The annual rent for each renewal term shall similarly be paid in two installments.
5. **Fallowing Commitment.** Lessor shall not pump or use any water from the Well during the term of this Lease and any agreed upon renewal or extension of this Lease, except in the event of a flood, heavy rain or other emergency, which event necessitates the operation of the Well to prevent damage. Any such use shall be limited in duration to the minimum amount of time necessary to ensure the integrity of the Well. Lessor shall notify Lessee within twenty-four (24) hours of any such operation, specifying the occasion necessitating the use of the Well, as well as the duration of the use. Failure to so notify Lessee shall be considered a breach of this Lease. Lessor further agrees that the Leased Property shall remain fallow and unused for any purposes during the term of this Lease and any extension or renewal thereof.
6. **Measuring Devices.** Lessee shall pay all costs associated with installing well measuring devices, with the consent and approval of Lessor, or providing personnel to measure water use.
7. **Access.** Lessor agrees to allow Lessee or its representative access to the Property for measuring and monitoring purposes from the term of this Lease and any extensions or renewals. Lessee agrees to provide at least twenty-four (24) hour notice prior to entering the property.
8. **Lessor Default.** If Lessor shall default in the performance or observance of any agreement or condition in this Lease on its part to be performed or observed, or in any other agreement entered into in connection with this Lease, and

shall not cure such default within thirty (30) days (or fifteen [15] days for monetary default) after notice from Lessee specifying the default, Lessee may, at its option, without waiving any claim for damages for the default, at any time thereafter cure such default for the account of Lessor, and any amount paid or any contractual liability incurred by Lessee in so doing shall be deemed paid or incurred for the account of Lessor, and Lessor agrees to reimburse Lessee therefor and save Lessee harmless therefrom. At any time during the term of this Lease, Lessee may cure any such default prior to the expiration of the 30-day period, or prior to notice to Lessor, if the default creates an exigent circumstance and if the curing of the default prior to notice or to the expiration of the 30-day period is reasonably necessary to protect the Property or to prevent injury or damage to persons or property. Lessee shall submit an invoice to Lessor for the costs incurred by Lessee to cure a default of the Lessor and, if Lessor fails to pay the costs so invoiced, together with interest as hereinafter provided, within forty-five (45) days after receipt of an invoice for the same, Lessee shall have the right to deduct such costs from the amounts owed (including from any future rent payments) by Lessee to Lessor.

All rights and remedies of Lessee are cumulative, and the exercise of any one shall not be an election excluding Lessee at any other time from exercising a different or inconsistent remedy.

No waiver by Lessee of any covenant or condition shall be deemed to imply or constitute a further waiver of the same at a later time.

- 9. Lessee Defaults.** If Lessee fails to pay any installment of Rent or other sums due the Lessor, and the continuance of the same for a period of thirty (30) days after notice and demand therefore in writing have been made to Lessee, or Lessee fails to comply with any other covenant, condition or agreement on its part to be performed and such failure continues for a period of sixty (60) days after receipt by Lessee from Lessor of notice in writing specifying in detail the nature of such failure (or if the default cannot be cured within such 60-day period, if Lessee shall not within the 60-day period commence such cure and thereafter diligently pursue same to its completion), then Lessor

may (a) sue for past due rents and/or other past due charges set forth in the Lease; (b) bring an action for injunction, specific performance or declaratory relief with respect to any nonmonetary obligations under this Lease; and/or (c) terminate this Lease upon ten (10) days prior written notice to Lessee, whereupon this Lease shall terminate and no further rental coming due thereafter shall be due hereunder. Without limitation of the foregoing, Lessor acknowledges and agrees that it shall have no right to cause any rental obligation hereunder to be accelerated and Lessor hereby waives the benefit of any statutory or common law that would have provided such right. Lessor hereby waives all claims to punitive, indirect or consequential damages. Lessor agrees to use diligent efforts to mitigate damages resulting from Lessee's default hereunder. Lessor shall send a copy of any notice of default to any person to whom Lessee has requested such notice be sent, and performance by any such person of any default hereunder within the time allowed shall cure such default. Notwithstanding anything contained herein to the contrary, Lessor may cure a nonmonetary default of Lessee prior to the expiration of the 60-day period set forth above, if the curing of such default is reasonably necessary to protect the Property or to prevent injury or damage to persons or property. In the event Lessor shall have cured Lessee's default, as set forth in the preceding sentence, Lessor shall submit an invoice to Lessee for the costs incurred by Lessor, which Lessee shall pay to Lessor within forty-five (45) days of receipt.

10. **No Abandonment of Water Rights.** By entering into this lease, Lessor does not intend to permanently abandon or relinquish the water rights set out herein.
11. **Indemnification.** Each Party agrees to indemnify, defend and hold the other harmless from liability or damage to any person or property resulting from the indemnifying parties' acts or negligence.
12. **Miscellaneous**
 - a. **Time of the Essence.** Time is of the essence in the performance by the parties of their obligations under this Agreement.
 - b. **Entire Agreement.** This Agreement represents the entire agreement between the parties and supersedes all prior negotiations, representations, agreements,

arrangements and understandings, if any, either written or oral, between the parties with respect to the subject matter of this Agreement, none of which shall be used to interpret or construe this Agreement. Any amendment or modification to this Agreement shall be in writing and signed by both Lessor and Lessee.

- c. **Counterpart Executions.** This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.
- d. **Law Governing.** This Agreement shall be construed and enforced in accordance with the laws of the State of Arizona.
- e. **Assigns.** This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, personal representatives, successors and assigns.
- f. **Attorneys' Fees.** If any suit shall be brought by either party to enforce or cancel this Lease, the prevailing party to such suit shall be entitled to recover all costs and expenses necessarily incurred in connection therewith, including reasonable attorneys' fees to be fixed by a court.
- g. **Notices.** All notices required or permitted to be given hereunder shall be in writing and shall be deemed to have been given when delivered in person or on the third business day after posting in a United States Post Office, directed by certified mail or registered mail, return receipt requested, to the parties as follows, or to such address as either party may later designate by like notice to the other:
To: ARIZONA LAND AND WATER TRUST [address]
With a copy to: [Lessor]
- h. **Survival of Terms or Conditions.** The covenants, agreements, representations or warranties made herein that, by their nature, require the parties to perform certain acts shall survive the execution of this Lease and be fully enforceable thereafter in accordance with the purposes and intentions hereof.
- i. **Severability.** If any term, covenant, condition or provision of this Lease or the documents and instruments executed and delivered in connection herewith is held

by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the provisions shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

j. **Other Documents.** Lessor and Lessee agree to execute and deliver any and all other documents or instruments necessary or desirable to carry out the intents and purposes of this Lease.

k. **Facsimile Signatures.** Facsimile transmissions of signatures to this Lease shall be considered delivery and shall be deemed binding.

DATED as of the date first written above.

LESSOR:

LESSEE:

Arizona Land and Water Trust, Inc.

By: _____

By:

Its: _____

Its: President – Board of Directors

Appendices:

A. The Property

B. The Leased Property

C. Water Rights

Key Sources for More Information on Water and Land Trusts

Publications

American Rivers and the Washington Environmental Council. *Instream Flow Toolkit: Advocacy Guide to Healthy River and Stream Flows in Washington*. Seattle: AR and WEC, 2003.

This report provides an overview of state and federal laws impacting instream flow protection efforts and it also addresses Native American water rights. It provides an introduction to the science and key terms of instream flows and river ecology and how they relate to watershed management. <http://wecprotects.org/issues-campaigns/water-for-washington/streamtoolkit.pdf>.

Bates, Sarah. "Where Land and Water Meet: Emerging Partnerships in the West Address Water Conservation Issues." *Saving Land*, spring 2012.

This article provides a brief primer of western water law and discusses the relationship between land and water protection efforts. The article highlights partnerships between landowners, land and water conservation organizations and state agencies. www.landtrustalliance.org/about/saving-land/spring-2012/feature-one-where-land-and-water-meet/view.

Bonham, Charlton H. "Perspectives from the Field: A Review of Western Instream Flow Issues and Recommendations for a New Water Future." *Environmental Law* 36 (2006): 1205–35.

This article assesses challenges in various western states related to instream flow protection, recommends building better relationships at regional and state levels and calls for increased public dialogue and statutory certainty. <http://law.lclark.edu/live/files/267-364bonham>.

Browning, Michael F. "Private Means to Enhance Public Streams." *The Colorado Lawyer* 33, no. 4 (April 2004).

This article provides examples of streamflow protection measures in Colorado, including channel and off-channel enhancements, conveyances, recreational in-channel diversions, dry-year and split-season leases and loans of water. [www.pbbllaw.com/articles/Browning%20-%20Private%20Means%20to%20Enhance%20Public%20Streams%20\(00011299\).PDF](http://www.pbbllaw.com/articles/Browning%20-%20Private%20Means%20to%20Enhance%20Public%20Streams%20(00011299).PDF).

Charney, Sasha. *Decades Down the Road: An Analysis of Instream Flow Programs in Colorado and the Western United States*. Denver: Colorado Water Conservation Board, July 2005.

This report provides background on the evolution of state laws and programs to protect instream flows and compares the various approaches, with a focus on how they might be applied in Colorado. <http://cwcb.state.co.us/public-information/publications/documents/reportsstudies/isfcompstudyfinalrpt.pdf>.

Citron, Aaron, and Dustin Garrick. *Benefiting Landowners and Desert Rivers: A Water Rights Handbook for Conservation Agreements in Arizona*. Tucson: Arizona Land and Water Trust, 2010.

This handbook describes and provides examples of strategies employed by the Arizona Land and Water Trust to protect water and working landscapes, including forbearance agreements (also known as nondiversion or nonpumping agreements). Protecting groundwater is a primary concern in Arizona; the guide highlights tools, such as retiring groundwater rights when replaced by an alternative sustainable supply, well-spacing agreements and contracting groundwater use. It also describes the use of land agreements to benefit riparian areas. The publication evaluates each tool's strengths and weaknesses, provides a description of how the tool works and gives examples. The publication also offers practical guidance on issues such as due diligence in water rights transactions under Arizona law, water rights valuation and appraisal, drafting agreements and stewardship. www.aolt.org/images/pdf/ALWTWaterHandbookPart1.pdf.

de la Vista, Rio. "Keeping the 'Wet' in Wetlands: A Colorado Community's Strategy for Securing Water for Wetlands and Agriculture." *National Wetlands Newsletter*, January–February 2012.

This article describes the work of the Rio Grande Headwaters Land Trust, which works with agricultural landowners in Colorado's San Luis Valley to "tie water to the land" in

order to protect and enhance wetlands and riparian vegetation and replenish groundwater. The article includes details about obtaining funding for this work and presents an overview of water rights as they relate to land trust work. www.wetlandnewsletter.org/pdf/34.01/34.1.pdf.

Doscher, Paul, Nat Gillespie, and Damon Hearne. *A Guide for Land Trusts: Working with Trout Unlimited; Partnerships for Conserving Coldwater Streams and Watersheds; TU Land Conservation Handbook Volume II*. Contributing authors The Land Trust Alliance and Colorado Cattlemen's Land Trust. Arlington, VA: Trout Unlimited, 2010.

This guide describes Trout Unlimited's conservation work for a land trust audience. It provides an overview of Trout Unlimited's structure and the services it can offer to land trusts, including fishery science, habitat stewardship, local knowledge, advocacy, fundraising and grant programs. www.tu.org.

———. *A Guide for TU Chapters: Working with Land Trusts; Partnerships for Conserving Coldwater Streams and Watersheds; TU Land Conservation Handbook Volume I*. Contributing authors The Land Trust Alliance and Colorado Cattlemen's Land Trust. Arlington, VA: Trout Unlimited, 2010.

This guide for Trout Unlimited's volunteers and leaders provides advice for working with land trusts to achieve common goals for water quality, fishery health, angling access and water resource protection. It provides examples of Trout Unlimited's partnerships with land trusts around the United States and tips for communicating with agricultural landowners. www.tu.org.

Ferguson, John J., Barbara Chillcott Hall, and Brianna Randall. "Keeping Fish Wet in Montana: Private Water Leasing: Working within the Prior Appropriation System to Restore Streamflows." *Public Land and Resources Law Review* 27 (2006).

This article provides an accessible and comprehensive description of water leasing in Montana, describing this state's tactic as a bottom-up approach to water conservation. The authors describe transactions in Montana's Little Blackfoot River to demonstrate the success of this approach. <http://scholarship.law.umt.edu/plrlr/vol27/iss1/>.

Herzog, Steven J. “Final Report: Guidelines for the Appraisal of Water Rights in California.” Modesto, CA: Herzog Group, September 2006.

Written at the request of the California Department of Fish and Game, this report gives guidance to federal agencies involved in the appraisal of water rights in California. It provides summaries and applications of the approach used for assessing sales comparisons, costs, income and public interest value, and it provides case studies highlighting how appraisals function for appropriative, groundwater and riparian water rights, as well as contractual entitlements to water from large projects. <http://www.fws.gov/cno/fisheries/docs/TitleContentsandExecutiveSummary.pdf>.

Hicks, Thomas. “An Interpretation of the Internal Revenue Code and Treasury Regulations Supporting the Tax Deductibility of the Voluntary Charitable Contribution in Perpetuity of a Partial Interest in an Appropriative or Riparian Water Right Transferred Instream for Conservation Purposes (with an Emphasis on California Water Law).” *West-Northwest Journal of Environmental Law and Policy* 17, no. 2 (summer 2011): 93–159.

This article analyzes provisions in the federal tax code provisions that may allow the voluntary charitable contribution of appropriative and riparian water rights for permanent instream flow. www.rrri.org/pdf/WNW%2017-2%20HICKS.pdf.

King, Mary Ann. “Getting Our Feet Wet: An Introduction to Water Trusts.” *Harvard Environmental Law Review* 28 (2004): 495–534.

This article provides an excellent history and overview of water trusts’ origins and operating principles, using Oregon and Washington organizations as case studies. http://www.law.harvard.edu/students/orgs/elr/vol28_2/king.pdf.

King, Mary Ann, and Sally K. Fairfax. “Beyond Bucks and Acres: Land Acquisition and Water.” *Texas Law Review* 83 (June 2005): 1941–84.

This article describes the ways in which land trusts can draft conservation easements that restrict the transfer of water rights to ensure continued irrigation. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=874789.

Lind, Brenda. *Protecting Surface Water Quality with Conservation Easements: A Process Guide for Land Trusts, Landowners and Public Agencies*. Washington, D.C.: Land Trust Alliance, 2004.

This report provides advice from experienced land trust practitioners across the country, describing successful easement programs and samples of specific easement language addressing water quality protection goals. (This book is out of print. A PDF download is available on the Land Trust Alliance's online learning center. <http://tlc.lta.org/library/documents/33793>.)

MacDonnell, Lawrence John. "Environmental Flows in the Rocky Mountain West: A Progress Report." *Wyoming Law Review* 9, no. 2 (2009): 335.

This article describes key features of and provides commentary on advantages and limitations of state programs in Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1995815.

——— "Return to the River: Environmental Flow Policy in the United States and Canada." *Journal of the American Water Resources Association* 45, no. 5 (October 2009): 1087–99.

This article describes and categorizes instream flow laws in the United States and Canada and recommends elements of a model environmental flow policy based on lessons learned from state programs. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1995821.

Malloch, Steven. *Liquid Assets: Protecting and Restoring the West's Rivers and Wetlands through Environmental Water Transactions*. Arlington, VA: Trout Unlimited, March 2005.

This report surveys some of "the most important water transactions" for environmental benefit in the West and provides a framework to understand market-based tools for protecting water. The author provides valuable insights into the challenges and lessons learned by practitioners in water transactions. The report's appendices present snapshots of various state law systems and the organizations active in each of those states. www.tu.org.

Merriman, Dan, and Anne M. Janicki. "Colorado's Instream Flow Program: How It Works and Why It's Good for Colorado."

Colorado Water Conservation Board, 2005.

This report offers a succinct overview of Colorado water law, focused on instream flow protection. It describes how the Colorado Water Conservation Board works with partners to protect flow levels in streams and lakes. <http://cwcb.state.co.us/environment/instream-flow-program/documents/whyisfprogram-worksgoodforcopdf.pdf>.

Mooney, Donald B., and Marsha A. Burch. *The Water Acquisition Handbook: How to Acquire Water for the Environment in California*. With Elise Holland. San Francisco: The Trust for Public Land, 2005.

This handbook provides an introduction to the legal tools for short-term water transfers for environmental benefit in California. It outlines the basic steps for protecting instream flows: identifying a project; obtaining funding; securing legal counsel; developing objectives; gathering local support; and resolving political issues. The publication also addresses how to gather data, use experts and measure success. www.tpl.org/publications/books-reports/california-water-acquisition.html.

Nichols, Peter D. "Do Conservation Easements and Water Mix (in Colorado)?" *University of Denver Water Law Review* 5 (2002): 504.

This article discusses the overlap between conservation easements and water rights in Colorado, including methods to legally structure land conservation agreements to protect irrigation, wetlands and other uses of water, such as instream flows.

Nichols, Peter D., et al. *Water Rights Handbook for Colorado Conservation Professionals*. Rev. ed. Denver: Colorado Water Trust and Bradford Publishing Company, 2011.

This handbook describes the procedures for water rights transactions in Colorado and provides detailed information on drafting conservation easements to protect water rights in relation to irrigation. It also provides information on due diligence requirements, water right appraisals and tax implications. www.bradfordpublishing.com/Attorneys/Water-Rights-Handbook-for-Colorado-Conservation-Professionals-Revised-Edition.

Postel, Sandra, and Brian Richter. *Rivers for Life: Managing Water for People and Nature*. Washington, D.C.: Island Press, 2003.

This book provides a comprehensive review of scientific research on the benefits of instream flow programs and provides international insights on effective solutions for ecological benefits that also meet human needs. www.ibiologia.unam.mx/pdf/directorio/z/Manejolagos/managing%20water%20postel.pdf.

Scarborough, Brandon, and Hertha L. Lund. *Saving Our Streams: Harnessing Water Markets; A Practical Guide*. Bozeman, MT: PERC, 2007.

This report provides a succinct and useful overview of water markets as they relate to streamflow restoration, including a state-by-state review of instream flow laws, water marketing and water banking. www.waterexchange.com/UserFiles/File/dataroom/SavingOurStreams2007updatebyBrandonScarsborough.pdf.

Trust for Public Land. *Building Green Infrastructure: Land Conservation as a Watershed Protection Strategy*. San Francisco: The Trust for Public Land, 1999.

This report provides an overview of how land conservation protects water quality, illustrated with case studies from Austin, Texas; Barnegat Bay, New Jersey; Mountain Island Lake, North Carolina; and the Indian River Lagoon, Florida. www.tpl.org.

Washington Rivers Conservancy. *Landowner's Guide to Washington Water Rights*, second ed. Wenatchee: Washington Rivers Conservancy, 2009.

This practical handbook provides an overview of state law as it applies to people purchasing property and conducting activities on their land such as irrigation. It includes a description of the state's instream flow program and summarizes advantages to landowners wishing to convert all or part of their water rights to enhance streamflows.

Western Governors' Association and Western States Water Council. *Water Transfers in the West: Projects, Trends and Leading Practices in Voluntary Water Trading*. Denver, CO/Murray, UT: WGA and WSWC, December 2012.

This detailed survey of water transfer activity in the western states focuses on leading practices for achieving beneficial transfers while avoiding or mitigating damages to agricultural economies and communities. It outlines

policy options available to western officials to facilitate these activities. www.westgov.org/component/docman/doc_download/1654-water-transfers-in-the-west?Itemid.

Ziemer, Laura, and Stan Bradshaw. *Private Water Leasing: A Montana Approach; A report on the 10-year history of a unique program*. Arlington, VA: Montana Water Project of Trout Unlimited, undated.

This report provides an accessible and informative analysis of Montana's experience with private water leasing. The publication tracks the progress of instream leasing during its first 10 years and provides recommendations for the future. It also provides specific examples of instream flow leases that benefit both agricultural and environmental interests. www.tu.org.

Organizations

Many organizations engage in work that supports or encourages protection of aquatic resources, including instream flows. Here is a partial list of organizations whose work relates to the conservation values of water in the western United States.

Alliance for Water Efficiency (AWE)

www.allianceforwaterefficiency.org

This stakeholder-based nonprofit organization, based in Chicago, advocates for programs, products and policies that enhance water efficiency. The organization is a good source for best-practice specifications, research reports, training materials, codes and standards and other resources. Of particular interest is the AWE report on instream flows, produced in collaboration with American Rivers, which focuses on water efficiency efforts in the Colorado River Basin: <http://www.allianceforwaterefficiency.org/1Column.aspx?id=6314&LangType=1033&terms=instream+flows>.

American Rivers

www.amrivers.org

This nonprofit organization focuses on linking people and their communities to the rivers and streams in their area for mutual benefit. It provides a variety of publications and online resources to learn about river advocacy in the United States, ranging from

pollution to water conservation to recreation access.

Columbia Basin Water Transactions Program

www.cbwtp.org/jsp/cbwtp/program.jsp

This program is funded by a surcharge on Bonneville Power Authority utility customers. Its grants support local partners in Oregon, Washington, Idaho and Montana who assist landowners to voluntarily restore flows for key fish habitat in tributaries of the Columbia River. The program's website features videos and other resources that illustrate mutually beneficial water conservation arrangements between landowners and conservation partners.

Instream Flow Council

www.instreamflowcouncil.org

This nonprofit organization, with membership from almost all state wildlife agencies and their counterparts from the Canadian provinces, offers training programs, conferences and resources for professionals interested in learning more about the scientific and legal aspects of instream flow protection.

River Network

www.rivernetnetwork.org

Started in 1988, the River Network works to protect freshwater ecosystems with nearly 2,000 partners across the country, including grassroots organizations, public agencies and tribal governments. Its programming includes education and hands-on restoration projects. The annual River Rally is the water trust equivalent of the Land Trust Alliance's annual Rally: The National Land Conservation Conference.

Trout Unlimited's Western Water Project

<http://www.tu.org/tu-programs/western-water>

This specialized corps of Trout Unlimited's water experts protects coldwater fish habitat, restores rivers and streams and promotes habitat-friendly water policy through science, legal advice and relationship building. State-specific water project staff offices operate in California, Colorado, Idaho, Montana, Utah, Washington and Wyoming.

University of New Mexico School of Law, Utton Transboundary Resources Center

- Provides "E-Flows" links to organizations active in the

protection of instream flows for the environment: <http://uttoncenter.unm.edu/instream/links.php>.

- Provides a bibliography of environmental flows publications: <http://uttoncenter.unm.edu/instream/selected-sources.php>.
- Publishes the *Environmental Flows Bulletin*: <http://uttoncenter.unm.edu/instream/bulletin.php>.

Glossary

- Call for water:** In areas following the prior appropriation system of water rights where water supplies do not meet all of the demands, water users may “call” for their water, based on the priority system of “first in time, first in right.” A call generally shuts off diversions by some junior water rights in order to satisfy the needs of senior water rights.
- Decree:** A ruling of a water court defining the point of diversion, priority date, adjudication date, diversion amount, type of use and place of use of a water right.
- Dewatering:** The removal or draining of groundwater or surface water from a riverbed by pumping or evaporation.
- Ditch company:** Ditch companies coordinate the use of, and ensure proper maintenance and efficient operation of, surface water irrigation systems and conveyances.
- Diversion:** Control or removal of water from its natural course or location by ditch, pipe or other conduit.
- Ephemeral desert streams:** A channel of an ephemeral stream always lies above the water table and only has water flowing through it as a direct response to recent and local precipitation.
- Forbearance agreement:** A special agreement to postpone, reduce or suspend the use of a water right for a limited and specific time period.
- Groundwater:** Water located beneath the earth’s surface in spaces between soil particles and in the fractures of rock formations, generally referred to as aquifers. Groundwater may be hydrologically connected to surface water (often called *tributary groundwater*), in which case pumping from shallow wells may reduce streamflows or otherwise interfere with surface water uses. States vary tremendously in their regulation of groundwater use.
- Headgate:** A control structure or gate that controls the flow of water from a stream into an irrigation ditch.
- Instream flows:** Water remaining in its natural course for the benefit of fisheries, recreation and aquatic and riparian habitats,

as opposed to water that has been diverted artificially for other purposes; sometimes referred to as *environmental flows*.

Mainstem river: The primary downstream segment of a river, as contrasted with its tributaries.

Point of diversion: A specific place where water is removed from a body of water, such as by irrigation ditch, pipe or other conduit.

Prior appropriation rule of water allocation: A system of allocating water rights from a water source generally used in the western United States. The legal details vary from state to state; however, the general principle is that water rights are based on when the use originated rather than on the location or ownership of the land on which the water is applied. Appropriative water rights are separate from land ownership and can be sold or mortgaged like other property. For a more detailed description of this rule, see “Western Water Law 101” on page 14.

Return flow: The part of the water withdrawn for an agricultural, industrial or domestic purpose that returns to the groundwater or surface water in the same watershed as where it was extracted. The water can potentially be withdrawn and used again.

River basin: The land area that is drained by a river and its tributaries.

Stream reach: A continuous part of a stream between two specified points.

Water-user association: A group of water users, such as irrigators, who pool their financial, technical, material and human resources for the operation and maintenance of a water system. The specific names of these entities vary a great deal: ditch company, water conservancy district and irrigation district, for example. Sometimes these are public entities chartered under state law, and sometimes they are wholly private organizations.

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About the Project Team

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Benjamin Sudduth graduated from Cornell University with a science degree focusing on water resources and worked in the water consulting field prior to attending law school at the University of Montana. He graduated from the University of Montana School of Law in 2013 and now works for the Montana Water Court in Bozeman, Montana.

A valuable, new resource for land trusts working on water issues in the West, *Land Trusts and Water: Strategies and Resources for Addressing Water in Western Land Conservation* provides stories, tools and resources on protecting water resources as a regular part of land conservation work. The authors highlight several productive partnerships between water trusts, land trusts and other organizations who share long-term goals of sustainable land and water use. Also included are sample conservation easement and water transaction language and resources to learn more about state-specific laws and programs.

“In the arid West, water is life. It’s irretrievably connected to the health of our land, the plants and animals that call the land home, and the very future of our communities. How can we claim to protect the land if we don’t also consider the water and all it brings to the land? Factor in climate change and the stakes only grow, but through creativity, strategic partnerships and persistence we can help bring life back to the land and prepare ourselves for the uncertainties of the future. *Land Trusts and Water: Strategies and Resources for Addressing Water in Western Land Conservation* is an essential guide for land trusts and other organizations who do this very important work.”

—BRAD CHALFANT, Deschutes Land Trust

“In the West there are many exciting opportunities to link land and water conservation projects to meet landscape-scale conservation objectives. Land trusts, water trusts and other conservation organizations can work together with landowners for greater impact when protecting our terrestrial and aquatic ecosystems, but these opportunities are not without challenges. *Land Trusts and Water: Strategies and Resources for Addressing Water in Western Land Conservation* will help conservationists understand what works, what is possible and where the trends are heading across the West at the nexus of land and water conservation.”

—CHRIS HERRMAN, Trout Unlimited, Western Water Project

“Throughout the West, it is difficult to do a land conservation project without considering water, and vice versa. By considering both, one can achieve a better conservation outcome.”

—ANDREW PURKEY, Director, Western Water Program,
National Fish and Wildlife Foundation

