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MARKET STRATEGIES FOR THE PROTECTION
OF WESTERN INSTREAM FLOWS AND WETLANDS

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INTRODUCTION*

The Nature Conservancy is an international membership organization dedicated to the preservation of natural diversity often through the acquisition of real estate in the marketplace. In the West, the Conservancy is branching into water rights because they are marketable real estate, and is developing strategies to acquire water rights to protect instream flows and wetlands. This paper offers references and a smattering of commentary on the law of western instream and wetland water rights, and presents some of the "nuts and bolts" of how the Conservancy and others have been able to apply that law: (1) to make original appropriations of instream water rights, privately or in cooperation with state agencies, (2) to purchase or otherwise acquire existing water rights and change them to instream or wetlands use, (3) to purchase or rent the right to release water from storage for instream or wetlands use, or to modify storage operations to improve instream flows, and (4) to restrict the development or change of existing water rights with private covenants to protect instream flows. The Conservancy is projecting strong growth in this water marketing sector.

NEW INSTREAM WATER RIGHTS: PRIVATE FILINGS

The Nature Conservancy has been able to appropriate instream water rights in Arizona and Nevada. Such original appropriations might be considered a marketplace strategy to the extent that the property rights are acquired privately and competitively and to the extent that instream flows are not protected by some regulatory or planning scheme.

Arizona

The starting point for private instream water rights in Arizona is *McClellan v. Jantzen*,¹ in which the Court held that the stocking of fish was not an appropriation of water for which a water right permit must be obtained, and also suggested that "in 1941 when wildlife, including fish, and in 1962 when recreation was added to the purposes for appropriation [at Ariz. Rev. Stat. §45-151(A)], the concept of *in situ* appropriation was introduced--it appearing to us that these purposes could be enjoyed without a diversion." The Arizona statute also provides that "any person" may appropriate water for a beneficial use.²

Ramsey and O'Donnell Creeks Filings by The Nature Conservancy

In 1979, the Conservancy filed Applications Nos. 33-78419 and 33-78421 for permits to appropriate instream water rights on Ramsey and O'Donnell Creeks. The instream use was to occur on stream reaches that flowed through land owned by the Conservancy at its Mile Hi/Ramsey Canyon and Canelo Hills Cienaga Preserves in the headwaters of the San Pedro River Basin in Arizona. The applications were opposed by several downstream water users who thought that the Conservancy was trying to reserve water for later diversion, storage, and consumption. A contested hearing on the applications was held on May 29, 1981, and the protests were resolved by issuing the permits subject to conditions that essentially prohibited any unnatural manipulation or consumption of water, or any impairment of any other vested water rights.³ The legal question of whether a water right could exist without diversion was addressed in an order denying a motion for rehearing filed by several of the protestants.⁴

* This paper is developed from an outline prepared for the NRLC conference *Moving the West's Water to New Uses: Winners and Losers*, June 6-8, 1990.

The permits were issued for .45 cfs and .48 cfs for "wildlife habitat preservation which will serve recreation and wildlife, including fish purposes," and required that The Nature Conservancy maintain a record of the stream flows at its preserves and submit the record as the proof of the completion of the appropriation, no earlier than 5 years after the date of the permit.⁵

After taking instantaneous flow measurements on Ramsey Creek approximately twice per month for five years, the Conservancy learned that the monthly median base flow exceeded the .49 cfs permitted amount and varied from month to month. The Conservancy has therefore reopened the permit in order to prove up or certify the greater flow amounts.⁶ The amended application has been protested by two downstream water users, but the Conservancy expects these protests to be overruled or withdrawn, because diversion and impoundment of water will again be prohibited, and because downstream users will not be affected by the increased flow amounts under the amended application.

An important lesson from the Ramsey Creek case may be that permits for instream water rights should include a margin for the measurement of higher flows during any certification period. The period of record and statistical expression of available flows have become important issues in many of the applications for instream water rights that followed the permits for Ramsey and O'Donnell Creeks.

The Conservancy has had difficulty taking consistent flow measurements at its Canelo Hills Cienaga Preserve and is considering an extension of the certification period.

Recently Issued Permits for Instream Water Rights

Permit No. 33-87114 Issued to the BLM for the Aravaipa Creek Wilderness Reach, March 17, 1989. The biological justification for this permit was an Instream Flow Incremental Methodology (IFIM) study of the habitat needs of two endangered, native fish: the spike dace and the loach minnow. The instream use of water for recreational purposes was based on survey of hikers through the wilderness reach. The availability of water was constrained by the average monthly flow over a 21 year period at a U.S.G.S. gage several miles downstream from the wilderness reach, even though there were a number of irrigation diversions between this gage and the downstream terminus of the wilderness reach. The original application sought 15 cfs year-round or 10,860 acre-feet, while the permit allocated this volume over each month of the year, with average rates of flow in some months exceeding 15 cfs, and being less than 15 cfs in others. The permit must be proved up or certified by taking at least two measurements per month for a period of five years at a new gage operated by the BLM at the upstream end of the wilderness reach. One protest to the application by a downstream water user was resolved by incorporation of the protective conditions established for the permits for Ramsey and O'Donnell Creeks. There are several water users upstream of the wilderness reach, but none protested the application.

Permit No. 33-92304 Issued to The Nature Conservancy for Hassayampa River, April 19, 1990. This permit was biologically based on the association of the existing surface flow with the profile of riparian vegetation and with the wildlife which depended on the instream and riparian habitat. The annual visitation to the Conservancy's Hassayampa River Preserve was

submitted in support of the passive recreational use of instream flows. There were no protests to the application, upstream or down, even though the Conservancy's preserve is below a number of water users on the Hassayampa River including the City of Wickenburg. The available flows were documented by the measurement of average daily flows over a one year period at a gage operated by the Conservancy at the upstream end of its preserve, and by instantaneous measurements suggesting the variation in this flow below the gage to the downstream terminus of the preserve. The permitted amounts are based on the monthly medians of the average daily flows. Because the one year in which the flow was measured was fairly dry, the permitted amounts at the upstream gage were factored up to avoid reopening the permit should a wetter cycle be encountered during the certification period.

*Permit No. 90410 Issued to the BLM for People's Canyon, April 19, 1990.*⁷ This application concerned a small, undeveloped headwater stream in a wilderness study area, and was similar to the applications on Ramsey and O'Donnell Creeks. The beneficial instream uses will be habitat for two rare, reintroduced native fish (the gila top minnow and the desert pupfish), riparian wildlife habitat, and passive, water-based recreation. These uses, and their dependence on instream flows were described, but not quantified in a report supplementing the application. Prior to and during the pendency of the application, instantaneous flow measurements were taken one to four times a year over a six year period and included measurements during each season of the year. The permitted amounts are the medians of the instantaneous measurements during each season. Because of the consistency and relatively long period of this hydrologic data, the permit only requires another two years of taking one instantaneous flow measurement during each season.

The Prospects for Instream Water Rights in Arizona

General administrative guidelines for instream water rights in Arizona have yet to be finalized and there are still many unresolved issues. But the guidelines on the necessary hydrologic documentation were helpfully revised in 1989, and permits are being issued where the application is supported with specific documentation on the beneficial instream use and on what flows are available hydrologically. The Arizona Department of Water Resources (ADWR) is proceeding slowly and carefully but is proceeding.

The legality of instream water rights may be judicially reviewed in the general adjudication of water rights in the Gila River Basin which is now ongoing. The first watershed or major tributary basin to be examined in detail will be the San Pedro River Basin in which instream permits have been issued for reaches of Ramsey, O'Donnell, and Aravaipa Creeks. The Conservancy and the BLM have filed claims in the adjudication for each of these permits. There are also a number of pending applications for instream water rights in this watershed including an application for over 500,000 acre-feet for the upper mainstem of the San Pedro River and including several for headwaters within The Nature Conservancy's Muleshoe Preserve. Where the ADWR has issued permits, the adjudication court will likely defer to the agency's determinations of what constitutes a beneficial instream use and what flows are available, and may condition the general decree for any watershed on the later certification of final flow amounts under those permits. It is not clear, however, how pending applications that are contested or on which the ADWR has not been able to act, will be addressed in the adjudication. There is a chance that some instream water rights

will be excluded from the initial rounds of the adjudication, and consequently would not be enforceable by the ADWR against all other water rights until a watershed is re-adjudicated. The Nature Conservancy and the BLM are giving priority to documenting their instream filings in the San Pedro River Basin because of these uncertainties about the general adjudication.

Nevada

Condor Canyon

In 1981, the Conservancy filed Application No. 44394 for a permit to appropriate up to 3.0 cfs year-round for instream use in the Condor Canyon of the Meadow Valley Wash in Nevada. The Conservancy purchased 80 acres of riparian land near the upstream end of Condor Canyon about the same time as the filing, and then sought a permit for an instream water right that covered the stream reach through this land plus several more miles downstream through BLM land to the mouth of the Canyon. The stream in Condor Canyon is inhabited by three rare, native fish: the Panaca spinedace, the White River speckled dace, and the White River desert sucker. The spinedace is thought to occur nowhere else in the world.

A permit was issued in 1983, the instantaneous flow of Meadow Valley Wash on the Conservancy's property was measured at 1.84 cfs in the spring of 1985, and the water right was certified for that amount several months later.⁸

Blue Lake Case

About the time the Conservancy's private instream water right at Condor Canyon was certified, the Nevada State Engineer issued a permit to the BLM in the *Blue Lake Case*⁹ for using a natural lake for

public recreation and fishery purposes without any artificial impoundment or release of water. In upholding the permit, the Nevada Supreme Court found that because "[d]iversions are not needed for and are sometimes incompatible with many recreational uses of water..." the legislative recognition of recreation as a beneficial use of water in 1969¹⁰ "mandates recognition of in situ appropriation of water for recreation." The Court also found that the history to this 1969 enactment clearly indicated that the *in situ* use of water for fishing and wildlife purposes was beneficial.

Arizona's statutory recognition of recreation and wildlife water uses as beneficial is nearly identical to the Nevada statute, and this Nevada decision probably encouraged the ADWR to issue the recent permits for instream water rights in Arizona.

The issuance of any water right permit in Nevada must not threaten "to prove detrimental to the public interest..."¹¹ The Court found that the Blue Lake permit was in the public interest because it was issued to a public agency which managed the land surrounding the lake, because the water right was non-consumptive and would not reduce the amount of water available for other uses, and because livestock and wildlife retained access to the water. So the case does not squarely hold that a private party, or a party that did not own any riparian land, or a riparian landowner that denied public access to a stream or lake, could appropriate water for instream use. But like Arizona, the Nevada statute provides that "any person" may appropriate water for a beneficial use.¹²

In 1989, the Nevada legislature underscored the outcome of the *Blue Lake Case* by enacting A.B. 322 which provides that "the watering of wildlife, and the establishment and maintenance of wetlands, fisheries, and other wildlife habitats" is a

beneficial use of water.

Private Instream Water Rights in Other States

Montana

A few months before the *Blue Lake Case* was decided in Nevada, the Montana Supreme Court addressed a very similar claim for an in-lake water right and reached the opposition conclusion in the *Bean Lake Case*.¹³ The distinction between these cases was that the Montana legislature had not generally recognized recreation or wildlife water uses as beneficial, and had explicitly provided for the appropriation of instream water rights only on specified stream reaches (Murphy Water Rights) before the adoption of its state constitution in 1973, which did not authorize the appropriation of instream water rights. Then the legislature had repealed the Murphy Water Right statute, and enacted a comprehensive scheme which generally recognized recreation and wildlife water uses as beneficial, but provided for the "reservation" of water for such beneficial use, and not for its appropriation as a property right.

Washington/Oregon

A similar reservation scheme was adopted and extensively developed in Washington, and was in force in Oregon until 1987 when that state switched to a property right system for the protection of instream flows.

Idaho

Idaho had also given early legislative recognition to in-place water rights only at specified springs and lakes, much like the Murphy Water Right statute in Montana. After the Idaho Supreme Court found in the *Malad Canyon Case*¹⁴ that such legislation

was constitutional even if there was no artificial diversion of water, the Idaho legislature authorized a state agency, the Idaho Water Resources Board, to appropriate water for instream and in-lake use as a property right.¹⁵ The question of whether such authorization was exclusive, and therefore precluded a privately held instream water right in Idaho, has not been tested.

Colorado

In response to the circulation of a petition for a constitutional amendment providing for private, instream water rights, the Colorado legislature deleted the diversion of water from the statutory definition of an appropriation and also authorized a state agency, its Water Conservation Board, to appropriate instream water rights in 1973.¹⁶ Again, it was not clear whether this authorization was exclusive, and several private instream water rights were decreed in Colorado. In 1987, the statute was amended by S.B. 212 to make the Conservation Board authorization exclusive, although the same amendment encouraged private parties to enter agreements with the Conservation Board for the purchase or donation of existing water rights and for their change to instream use in a water court proceeding.

The argument for private instream water rights is forcefully made by Brian Gray in "A Reconsideration of Instream Appropriation Water Rights in California," *Instream Flow Protection in the West*.¹⁷ The argument against is made by Tim De Young in "Instream Flow Protection in a Water Market State: The Case of New Mexico."¹⁸ *Instream flow Protection in the West* is the most current and comprehensive review of western instream flow law now available, and is an invaluable reference for all practitioners and policy makers in the field.

NEW INSTREAM WATER RIGHTS: COOPERATION WITH AUTHORIZED STATE AGENCIES

While the Conservancy has been successful in obtaining private instream water rights in Arizona and Nevada, it has taken a pragmatic approach in other states and also has been successful in cooperating with authorized state agencies to establish both new instream water rights, and to transfer existing water rights to instream use. What is important to the Conservancy is protecting instream flows with property rights that have the permanence of land holdings, not whether the property is publically or privately held.

Minnie Miller Springs

The Minnie Miller Springs are the last undeveloped large springs in the Thousand Springs complex along the rim of the Snake River canyon in the Hagerman Valley, Idaho and are located on the Ritter Ranch which the Conservancy purchased in 1986. The Minnie Miller Springs and the outflow from a hydropower plant just next door also feed a large estuary surrounded by the Ritter Ranch.

Instead of testing whether it was entitled to a private instream water right for the Minnie Miller Springs, the Conservancy sought the assistance of the Idaho Department of Parks and Recreation, which then requested that the Idaho Water Resources Board file a statutorily authorized application to appropriate an instream water right. This cooperative strategy proved quite effective.

In early 1986, the Water Resources Board quickly filed Application No. 36-8307 for a permit to appropriate 200 cfs year-round from the outflow of the Minnie Miller Springs and to appropriate 450 cfs year-round

in the estuary below the springs. The Conservancy, the Department of Parks and Recreation, and a number of local citizens supported the application at a public hearing on March 19, 1987, and the Director of the Idaho Department of Water Resources finally approved the application on December 8, 1987:

- The Department of Parks and Recreation was required to develop three years of seasonal flow data, and the amount of instream flow finally licensed will be based on that data. The Conservancy and the Department have continued to work together to take instantaneous measurements every two months.

- The instream water rights were subordinated to the depletion of the Snake Plain Aquifer pursuant to the legislative approval of the Swan Falls agreement. The Conservancy estimated that such a subordination would expose the springs to only an eight percent decline, and retained the right to protest further depletions of the aquifer as not being in the public interest notwithstanding the Swan Falls Agreement.

- The Idaho statute only authorized the appropriation of a water right for a "minimum flow... and not the ideal or most desirable flow."¹⁹ The entire outflow from Minnie Miller Springs and the estuary were still considered "minimum flows" because they were a relatively small part of a much larger complex of springs.

- The Conservancy successfully resisted the insertion of a clause which would have expressly provided for the re-opening of the license after a fifteen year period or at any time.

Under the Idaho statute, permits for instream water rights are subject to legislative review.²⁰ The Minnie Miller Springs permit was approved by the Idaho legislature when

it adjourned on March 31, 1988 without taking any action to endorse or reject the permit. Prior to adjournment, a concurrent resolution approving the permit did pass the House with only thirteen dissenting votes.

This same kind of strategy for establishing new instream water rights is possible in Colorado, Wyoming, and Oregon. Its weakness is that a private party must rely on the discretion of a governmental agency to seek and enforce the new instream water right. The lesson of Minnie Miller Springs may be that such reliance can sometimes be well placed.

TRANSFER OF EXISTING WATER RIGHTS TO INSTREAM USE

The Nature Conservancy has sought the appropriation of new instream water rights on headwater streams or undeveloped springs like Minnie Miller. These new appropriations all have fairly junior priority dates. An important strategy for the Conservancy on lower and more developed streams is to acquire existing, generally senior water rights through purchase or donation, and to transfer such senior water rights to instream or wetlands use. Although this kind of water right marketing is difficult and hardly a panacea, the Conservancy anticipates that such a strategy can make a significant contribution to the protection of western instream flows.

Colorado

Initial Authorization

Colorado's instream flow statute initially authorized its Water Conservation Board to "acquire" water rights for minimum flows to preserve the environment to a reasonable degree, in addition to making original appropriations. Several private or municipal parties including The Nature

Conservancy then negotiated agreements with the Colorado Water Conservation Board under which they sold, licensed or leased their water rights to the Conservation Board and under which the Conservation Board then asserted its statutory authority to hold instream water rights in the water court proceedings to change these water rights.

G. Berkeley Ditch. The Conservancy purchased this 1862 irrigation water right for 1.0 cfs, subject to its re-purchase by the State of Colorado and its change to instream use in the urban reach of Boulder Creek. The water court approved this change in 1983 in the name of the state with certain minor subordinations, and then the Conservancy conveyed the now senior instream water right to the state, with one important string attached. The ownership of the water right would revert to the Conservancy if the Conservation Board ever "ceased to hold" the water right for instream use. Just what might trigger such a reverter, or whether the Conservancy could enforce the water right for instream use if the reverter was triggered, was not spelled out.

Red Mountain Ditch and Hunter Creek Flume and Pipeline. As part of a settlement concerning transbasin diversions by the Fryingpan-Arkansas Project, the City of Aspen licensed or loaned these senior irrigation and municipal water rights on Hunter Creek to the Colorado Water Conservation Board on a year-to-year basis, and then joined the Conservation Board as a co-applicant in the change of water rights proceeding. The change to instream use was approved in both the City's and the Conservation Board's name in 1985.²¹ Under the license and the change of water rights decree, the City of Aspen retains ownership of the water rights and can use them for municipal purposes at any time.

Natural Lake Water Rights of Mexican

Cut. In the early 1970s, the Rocky Mountain Biological Laboratory privately obtained decrees for fairly senior water rights to maintain, without artificial impoundment, the natural levels of a number of lakes located very near the top of the Crystal River drainage. The Nature Conservancy purchased the mining claims on which these lakes were located, leased them to the Biological Laboratory, and sought state designation of the property as a natural area. When the validity of the Lab's natural lake water rights was questioned, the Conservation Board agreed to lease these water rights from the Lab for 100 years, and to make its own junior filings on the lakes as a backup. There were no collaborative water court proceedings since the Lab's water rights were already decreed for natural lakes purposes.

Second Generation Agreements

The Colorado Water Conservation Board's statutory authority to change existing water rights to instream use, and to negotiate contractual enforcement remedies with the private parties that offered such water rights to the Board was elaborated in 1986 under S.B. 91 and again in 1987 under S.B. 212.

Boulder Creek. The G. Berkeley Ditch transaction has led to a comprehensive agreement between the Conservation Board and the City of Boulder to protect up to 15 cfs in the urban reach of Boulder Creek with some of the city's senior irrigation, exchange, and storage water rights. Under S.B. 212 any decree changing a water right to instream use can now only be issued to the Conservation Board, but the city will still be a co-applicant in the water court proceeding and be able to assure itself that the water rights are not unduly compromised in that proceeding. The city will also have the initial responsibility for enforcing the instream use of the water rights as the Conservation Board's agent and the city has retained the option to switch the use

of its water rights back to its municipal water supply system during an extreme drought.

Ruedi Reservoir. Instead of asserting federal water rights or regulatory programs that might conflict with water rights and compact entitlements sanctioned by state law, the U.S. Fish and Wildlife Service is going to invoke the Colorado Water Conservation Board's expanded statutory authority, and is going to acquire and enforce cooperatively, instream water rights to protect the endangered, big river fish in portions of the upper Colorado River Basin. Under the first agreement for this program, the Conservation Board has leased 10,000 af of storage water in Ruedi Reservoir and is contractually obligated to deliver this water at the direction of the U.S. Fish and Wildlife Service to endangered fish habitat in the mainstem of the Colorado River near Grand Junction, Colorado. The central terms of the lease are renewable at the option of the federal agency, and the agreement leaves open the possibility of enforcing its terms in federal rather than state water court.

Black Canyon of the Gunnison. The Nature Conservancy has just reached an agreement with the Conservation Board to donate a 300 cfs water right with a 1965 priority date to the Board for change to instream use in the Black Canyon of the Gunnison River. This water right was donated to the Conservancy by the Pittsburg and Midway Coal Mining Company, a Chevron subsidiary. The agreement specifies how the 300 cfs instream water right will be enforced against some large, junior water rights for diverting water out of the river at the Gunnison Tunnel, just upstream from the Black Canyon, and gives the Conservancy a contractual remedy should the Conservation Board fail to enforce or defend the instream water right in general. These contractual enforcement remedies have been sharply defined and are better understood than the

reverter clause that the Conservancy negotiated in the G. Berkeley Ditch transaction.

Conditional Water Rights

In Colorado, conditional water rights are recognized as soon as a *bona fide* plan to put water to beneficial use is formulated, and the priority date for such water rights will relate back to the date when the first real step to carry out the plan was taken so long as the plan is carried out with reasonable diligence. Conditional water rights are vested property rights which can be bought, sold, and transferred to other uses and locations, much like absolute water rights under which water has been put to use. An interesting marketplace strategy in Colorado is to acquire such water rights through purchase or donation and to change them to instream use in cooperation with the Colorado Water Conservation Board.²²

This strategy with conditional water rights must be pursued carefully to resolve conflicts over future water developments and may not be appropriate as a policy matter if the change of the conditional water right would impose a new call on existing water projects and diversions. The 300 cfs water right that will be changed to instream use in the Black Canyon is a conditional water right, but while it is senior to a number of large conditional water rights for the Gunnison Tunnel, it is junior to most absolute water rights upstream, and will be largely supplied by the huge return flows from hydropower operations at the Aspinall Unit (Blue Mesa, Morrow Point and Crystal reservoirs and power plants). The agreement with the Colorado Water Conservation Board on this water right also includes several accommodations for upstream junior water rights, and the Conservation Board must generally evaluate the impact which enforcing the 1965 priority for a 300 cfs instream water

right for the Black Canyon will have on upstream juniors, before it finally accepts ownership of the water right and initiates the water court proceeding to change its use.

The purchase and change to instream use of the conditional water rights for two big dams on the lower Yampa River may also be fundamental to the success of the interagency program to recover the endangered fish in the upper Colorado River Basin. These predominantly storage water rights could be changed to instream water rights that mimicked the natural hydrograph of the Yampa River in some important ways -- most of the diversion entitlement occurs during the spring run-off and then drops off dramatically. The buy-out of these water rights would also eliminate the threat that the big dams would be constructed on the mainstem and block the migration route of the endangered Colorado Squawfish. The relatively natural hydrograph of the Yampa River, and the hundreds of unimpeded river miles of the lower Yampa and upper Green rivers appear essential to the survival of this native fish. Such large, fairly senior conditional water rights will not be dedicated to instream use, however, unless the Colorado Water Conservation Board is satisfied that such instream water rights make sensible water policy. The impact on upstream juniors, on compact entitlements, and on the overall development of the basin upstream will have to be carefully evaluated, and some compromises will undoubtedly be made.

Arizona

The same statutory scheme that implies that water rights may be originally appropriated for instream use in Arizona, also implies that existing water rights may be purchased and changed to instream use. But it is not as clear that a private party may make such changes. The statute authorizes the severance of a water right and its change

to recreation and wildlife purposes including fish when it is used for these purposes by a state agency. Even if the transferee is a state agency, any irrigation district within the same watershed as the water right to be changed has an unqualified right to veto the change.²³

Where a water right is changed to instream use at a location far from the land to which it was originally appurtenant, these restrictions in the Arizona statute clearly apply. But it is not as clear that these restrictions apply where the water right is changed to instream use only along that reach which is bordered by the land on which it was originally used. An earlier version of Arizona's severance and transfer statute was part of its 1919 water code, and arguably does not apply to and cannot restrict the change of water rights which were initiated prior to its enactment. The standards by which pre-1919 water rights can be changed to instream use, whether such a change can be made privately, and even whether such a change can be made at all without an implied statutory declaration that instream uses are beneficial, may become issues in the pending adjudication of the Gila River Basin.

The Nature Conservancy owns several large blocks of land along Aravaipa Creek immediately up and downstream of the BLM wilderness reach, and there are a number of very senior pre-1919 irrigation water rights appurtenant to these lands. The Conservancy is considering the change of some of these water rights to instream use along the properties to which they are now appurtenant, but is first planning to file for new instream water rights pursuant to the water code to establish administratively what total amounts would be considered beneficial. If the Conservancy is able to change its senior rights to instream use, the flow amounts changed will be protected under senior priorities, and the amounts which are certified under any new and junior instream

water rights will be reduced accordingly.

Nevada

To the extent that instream water rights can be originally appropriated in Nevada by a private entity, it should be possible for private parties to change existing water rights to instream use in this state. Oregon, Wyoming, Utah, Montana

When Oregon switched to a system of property rights for instream flows with the passage of S.B. 140 in 1987, it also expressly authorized the purchase or lease of existing water rights for conversion to instream use.²⁴ A private party may take responsibility for prosecuting the administrative proceeding to change a water right to instream use. But the instream water right must be held in trust by the Oregon Water Resources Department for the public benefit, rather than for the benefit of a person or private enterprise. This statutory scheme might not enable the kinds of private contractual remedies that are possible in Colorado for the enforcement of purchased, donated, or leased water rights that have been changed to instream use.

Multi-purpose storage, municipal, or hydroelectric power water rights take precedence by statute over all new instream water rights but not over any pre-existing water rights that are converted to instream use. As in most other change of water right proceedings, the changed water right retains its original priority date.

Also in 1987, Oregon authorized the conversion of "conserved" water to instream use.²⁵ Conserved water must be water that was "consumed or irretrievably lost," and not previously available to subsequent appropriators. It also can only be changed to another use including instream use if the change can be made without injury to existing water rights. The change of conserved water

to another use in Oregon looks much like a consumptive use transfer in Colorado, and does not authorize the transfer of most ditch seepage and irrigation return flows to instream use. In fact, the Oregon statute may be more restrictive than a consumptive use transfer in Colorado since at least 25 percent of the conserved water is allocated to the state. It is then up to a state agency whether that 25 percent is dedicated to instream use.

The Oregon statutes nevertheless explicitly encourage marketplace strategies for protecting instream flows. The Nature Conservancy is optimistic about the prospects for acquiring water rights and changing them to instream use in this state, but the statutes are relatively new and the Conservancy has yet to put any deals together. This is also the case in Wyoming and Utah whose statutes also explicitly authorize the change of existing water rights to instream use in cooperation with a state agency.²⁶ Just last year Montana passed H.B. 707 which authorized the leasing of instream water rights for instream use on a pilot study basis.

TRANSFER OF EXISTING WATER RIGHTS TO WETLANDS USE

In cases where wetlands are situated below and can be served by existing diversions of water, it is possible to transfer existing water rights to wetlands use without implicating instream flow law. The basic legal principle for such transfers is less radical and is that the diversion and non-commercial use of water to maintain wetlands is legally beneficial. This principle can be easily inferred from those state statutes that recognize the use of water for recreation and wildlife as beneficial. It may not be as clear, however, in those states where non-commercial environmental water use has only been recognized as beneficial when it occurs instream without a diversion.

Stillwater Marsh

The Conservancy is investing heavily in the purchase of Newlands Project water rights in Nevada for transfer to the maintenance of the Stillwater Marsh. The water for the Marsh will still be diverted and the maintenance of wetlands as a beneficial use is non-controversial in Nevada. The Marsh is also considered to be within the original service area for the Newlands Project, and the use of water to maintain the wetlands is considered to be within the authorized purpose of this project.²⁷ But the Newlands Project has been embroiled for decades in bitter water right controversies which make this water right marketing strategy quite risky.

The Newlands Project was one of the first federal reclamation projects authorized, but it was not clear until 1983 who owned the project water. The United States had obtained decrees for the Newlands Project in federal court adjudications of all of the water rights in the Carson and Truckee rivers, and retained title to all of the project works. But the U.S. Supreme Court held in *U.S. v. Nevada*,²⁸ that the federal ownership of the project water rights was nominal and that individual landowners under the project had a substantial ownership interest that could not be cut-off or re-allocated without their consent, although that ownership interest may still be subject to sweeping governmental regulation just like any other kind of private property.

But great uncertainty still exists in the water rights market within the Newlands Project because the general adjudication decrees for the Carson and Truckee rivers only confirmed a water right to divert and store water for the whole project and set certain water duties per acre of irrigation. The exact acreage within individual ownerships which was entitled to a part of

the water right for the whole project was not adjudicated and was not very carefully documented for some time. For example, there are over 73,000 water-righted acres within the Newlands Project but there may be less than 60,000 acres that are actually irrigated. Over 3,000 of those acres have been water righted by virtue of a flurry of transfers in the wake of *U.S. v. Nevada* and the exhaustion of the appeals over the *Alpine Decree*. The *Alpine Decree* confirmed the Carson River water rights for the Newlands Project and directed that any changes in these rights were to be made pursuant to state law.²⁹ All of these transfers are now clouded by litigation over whether many of the transferred water rights had been abandoned, forfeited or ever perfected.³⁰

The Nature Conservancy strategy is to take a conservative approach in the state proceedings to change Newlands Project water rights to the Stillwater Marsh. To date, the Conservancy has only sought to transfer those portions of Newlands Project water rights involving acreages mapped by the U.S. Bureau of Reclamation as being irrigated under the baseline for the 1987 operating plan for the project. The Bureau is now working on a composite of aerial photography and satellite imagery to document the acreage that was actively irrigated under the Newlands Project in any year from 1984 to 1989. This composite mapping should provide a broader indication of recent and continued irrigation activity under the project water rights. Finally, the Conservancy is deferring the transfer of any project water rights that are subject to the abandonment litigation.

Since Newlands Project water rights which meet such criteria usually can only be purchased in the open market along with those that do not, the Conservancy must essentially pay more per acre of water right that is transferrable to the wetlands. Such a premium is common in water right transfers

based on historic water use. This conservative approach has also helped avoid the concern that the transfer of Newlands Project water rights to the Stillwater Marsh might indirectly increase the draft of the whole project on the Truckee River and further threaten the survival and recovery of the endangered cui-ui fish at Pyramid Lake.

Another premium may be required for the transfer of Newlands Project water rights to wetlands use. The *Alpine Decree* sets a reduced rate of transfer per water-righted acre for any use "other than irrigation." Generally the headgate entitlement per acre must be reduced from 3.5 to 2.99 acre-feet. This discount might be avoided by arguing that the wetlands use is really no different than conventional irrigation, but then the wetlands use would be subject to all the other strictures in the *Alpine Decree* on conventional irrigation: it would not be possible to apply more than 3.5 acre-feet per wetland acre (even when five acre-feet per acre is sometimes needed), all return flow and drainage water which is now reaching any wetland acre would be counted against the 3.5 acre-foot duty, and the transferred irrigation duty would be tied to each wetland acre and could not be moved around the Marsh or put into storage.

The Conservancy's initial applications to transfer Newlands Project water rights to the Stillwater Marsh were protested by the Truckee Carson Irrigation District. The Conservancy intends to re-sell these water rights to the U.S. Fish and Wildlife Service, which manages the Stillwater Marsh in cooperation with the Nevada Department of Wildlife, and the District was concerned that its operation and maintenance charges on these water rights would not be secure once they were federally owned. The tax lien that secures these charges when the water rights are privately owned would be ineffective against the federal government, and the U.S.

Fish and Wildlife Service was not authorized to enter a long-term contract with the District for their payment. The Conservancy and the District are now working together to authorize such long-term contracts and the District has withdrawn one of its protests as a token of good faith.

To date the Conservancy has invested over \$900,000 in private endowment and risk capital funds to purchase 2,755 acre-feet of Newlands Project water rights. A much bigger campaign will be necessary to maintain the Stillwater Marsh. The current uncertainties surrounding the transfer of Newlands Project water rights to wetlands use will have to be resolved and the risk substantially reduced if such a large-scale campaign is to be mounted.

Other Transfers to Wetlands Use

The Nature Conservancy is getting ready to transfer existing irrigation water rights to wetlands use at two of its preserves in Idaho. The Stalker Marsh is an important headwater to Silver Creek, and the Conservancy's conservation easement over this marsh is a part of the Conservancy's Silver Creek Preserve. The Conservancy is now working with the Hillside Ranch to transfer the senior water rights for the irrigation of 76 acres of pasture to wetlands use at the Stalker Marsh. Only the place and nature of use of the water rights will be changed while the point of diversion will not.

At its Formation Springs Preserve, the Conservancy purchased a senior water right to divert water through a series of travertine ponds and irrigate some 400 acres. The Conservancy then sold most of the farmland off, retained the pond and wetland acreage, and reached an agreement under which the other owners of water rights to the spring would not oppose the Conservancy's application to add the year-round flow of

water through the ponds as a beneficial use under the senior water right.³¹

In the Warner Basin of southeastern Oregon, the Conservancy helped the BLM to acquire over 13,000 acre-feet of irrigation water rights for wetlands use. These water rights had originally been decreed in 1929 as overflow water rights from a natural lake, and might have been considered instream water rights that long preceded the modern era. But when a large competing claim was filed upstream, the natural overflow was found to be an inefficient means of diversion and the irrigators had to build up the lake and pump water from it under a more junior appropriation.³² The historic irrigation use of these water rights and the wetlands use proposed by the BLM are quite similar, and the BLM is still evaluating whether any change in the nature of the water rights is necessary.

WATER STORAGE STRATEGIES

Storage Releases

Instream flows or wetlands can be protected by the purchase or other acquisition of the right to release water from storage. Since the storage and release of water from Lahontan Reservoir is a major component of the Newlands Project, the purchase of Newlands Project water rights for transfer to the Stillwater Marsh is an example of the marketplace acquisition of storage water for wetlands use. The storage water component of Newlands Project water rights is not broken out when they are used for conventional irrigation and will not be distinguished from any of the other primary water supplies for the project when these water rights are changed to wetlands use.

The lease of 10,000 acre-feet of Reudi Reservoir water by the Colorado Water Conservation Board for delivery and instream

use to protect endangered fish habitat is another example of this strategy. It will not be necessary to change the storage water rights for Reudi Reservoir to instream use in Colorado water court, since these water rights already include the instream use of stored water where the Conservation Board has a leasehold or other controlling interest in the storage water.

An open question in Colorado is whether storage water rights can be appropriated or purchased for instream use by an entity other than the Colorado Water Conservation Board. One Colorado water court has held that the storage of water for instream use is fundamentally different than the original appropriation of existing streamflows by the Colorado Water Conservation Board, and that such a storage right can be privately appropriated.³³ The distinction which the water court made was that the release of storage water for instream use was necessarily preceded by its physical capture and diversion to storage. The subsequent use of such stored water instream for a recognized recreational or biological beneficial use was therefore no different than making such use of the water while it was still in the reservoir.

The interlocutory appeal to the Colorado Supreme Court of this decision has been dismissed, but the decision is likely to be reviewed after a trial before the water court. If the water court decision is upheld, it will open the door in Colorado for not only the private appropriation of storage water rights for instream use in the first instance, but also for the private purchase and change of storage water to instream use.

The Nature Conservancy has been able to lease storage water privately for instream use under the auspices of the water bank for the upper Snake River in Idaho. This water bank grew out of agreements

among the irrigation districts served by the federal reclamation projects in the upper Snake River drainage, and was more formally organized after such water banks were authorized by statute in 1979.³⁴ Water can only be rented from the bank on a year-to-year basis, and the rental price is effectively controlled by the Bureau of Reclamation which is concerned about profiteering. The current rental price is \$2.50 per acre-foot per year. Large blocks of water have been rented in recent years for hydropower purposes, and a formal proceeding to change the nature of use or the place of use of the water is not required.³⁵

The Conservancy, the U.S. Fish and Wildlife Service, and the Trumpeter Swan Society went to this water bank in February, 1989 when about 500 Trumpeter Swans, a quarter of the population in the lower 48 states, were threatened after frigid temperatures created ice buildups on the Henry's Fork of the Snake River and cut off the swans' aquatic food supply. The Conservancy quickly agreed to rent 3200 acre-feet out of the Island Park Reservoir. This commitment was matched by another 3200 acre-feet rented by the Trumpeter Swan Society, and by the donation of nearly 10,000 acre-feet by the Snake River Water District No. 1. This storage water was then released down the Henry's Fork to break up the ice and save the swans. Because the Henry's Fork Reservoir then filled up in the spring notwithstanding this winter time release, the Conservancy was relieved of its rental payment.

The most remarkable aspect of this transaction was the quickness in which it was made and in which the water was delivered for instream use. Such ease is attributable to the long, local experience with water banking.

Changes in Project Operations

Instream flows can also be protected by modifying the operation of storage reservoirs and by not storing water. As part of the interagency program to recover the endangered fish in the upper Colorado River Basin, the operation of the Flaming Gorge and Aspinall Units of the Colorado River Storage Project may be modified to improve downstream endangered fish habitat. On the Green River below Flaming Gorge Reservoir, the problem may be the release of too much water from storage during the late summer, which floods back water habitat and depresses water temperatures to the detriment to the endangered fish. So the operation of the project may be modified to limit those late season releases. Such modifications in storage operations would be compelled by the Endangered Species Act, and would not be induced in the marketplace.

The Conservancy has been able to bring market forces to bear to induce a change in the storage operations which enhanced instream flows at its Phantom Canyon Preserve on the North Fork of the Poudre River northwest of Fort Collins, Colorado. The North Poudre Irrigation Company has long operated Halligan Dam and Reservoir just upstream from this preserve as a part of an irrigation system serving thousands of acres. The Company has generally drawn the Halligan Reservoir down in the summer and then refilled it through the winter and spring so that water generally is not delivered through Phantom Canyon during the fall and winter months. While the rainbow fishery in Phantom Canyon is outstanding, and while flows through the canyon during the summer months are virtually guaranteed by the operation of the irrigation system, this historic reservoir operation has stressed the rainbow fishery in the winter and severely limited the reproduction of brown trout, which requires

spawning flows in the late fall.

At first, the Conservancy considered buying shares in the North Poudre Company. After ascertaining that any wintertime delivery of water under those shares would be vigorously resisted, the Conservancy instead arranged, for several years running now, to prolong transfer of the storage water from Halligan Reservoir to some lower reservoirs during the fall months and then to make survival bypasses during the winter. In consideration for this change in operations, the Conservancy has rented shares in the North Poudre Irrigation Company and foregone deliveries during the next irrigation season to make up for the bypassed water. If the reservoir does not fill up because of any bypass, the number of shares that the Conservancy must rent and not deliver, doubles, so that the dividend for all shares is kept in proportion.

In one year, the Conservancy was also able to rent water supply units from the federally constructed Colorado Big Thompson (CBT) project to pay back the bypass, and this last year was able to purchase an option to rent CBT units which it could then trade for shares in the North Poudre Company to make the payback if Halligan Reservoir did not fill because of the winter bypass. Where federal reclamation water can be traded, rented, or bought essentially as private real estate, as is the case with CBT units, the water bank for the upper Snake River, and the Newlands Project, the Conservancy has found ways of directly or indirectly putting such water to instream or wetlands use.

RESTRICTIVE COVENANTS

The Nature Conservancy frequently acquires conservation easements rather than fee ownerships to protect land. Conservation or similarly restrictive easements or covenants can also be acquired to protect instream flows

by limiting the development or the change of water rights. The 300 cfs water right which was given to The Nature Conservancy by the Pittsburg and Midway Coal Mining Company (P&M) for change to instream use in the Black Canyon of the Gunnison River, was part of a much larger configuration of water rights owned by P&M. This larger configuration included the right to store 162,700 acre-feet in a reservoir that would have inundated a 13 mile reach of the Black Canyon known as the Gunnison Gorge. Along with the gift of the 300 cfs water right, P&M gave The Nature Conservancy a covenant which prohibited the development of this storage right in that 13 mile reach.

It is not clear whether this restriction can be conveyed and enforced as a conservation easement under the Colorado statute.³⁶ The issue is whether the reference in this statute to restrictions "with respect to a land or water area...owned by the grantor" of the easement is broad enough to include restrictions on the right to use and develop water, or only covers a water area after it has been diverted or impounded. Even if Colorado's conservation easement statute does not apply, the restriction granted by P&M against its other Gunnison River water rights could be conveyed and enforced as an easement in gross at common law or as a restrictive covenant that ran with and benefitted the 300 cfs water right that was conveyed to the Conservancy for change to instream use.

When The Nature Conservancy reconveyed a portion of the senior right which it acquired at Formation Spring, it inserted a covenant in the deed which prohibited any change in the point of diversion for this water right. This point of diversion was located about a mile below the head of the spring and was one of the last points of diversion before the stream from the spring dissipated back into the ground.

As long as this senior water right is diverted, this covenant insured that the senior water right could call water past some junior water rights at the head of the spring, down the mile of stream, and through the Conservancy's pond and wetland acreage. It means that the stream and the ponds cannot be dewatered by moving the senior water right upstream.

This restrictive covenant complemented The Nature Conservancy's agreement for adding the flow of water through the Conservancy's ponds as a beneficial use under the senior water right. Such an alternative use of the senior water right keeps the restrictive covenant on the change in the point of diversion from being frustrated by the abandonment of the irrigation use of the water after it had flowed through the ponds.

CONCLUSION

The cases and transactions surveyed in this paper may offer little in the way of broadly applicable solutions to the problem of protecting western instream flows and water rights. But The Nature Conservancy has found that this problem is highly site specific, and that with some effort and ingenuity, western state water laws can be adapted to address this problem case by case.

ENDNOTES

1. 547 P.2d 494 (Arizona App. 1976).
2. A.R.S. §45-151.
3. Arizona Department of Water Resources, Decision and Order re: Application Nos. 33-78419 or 33-78421, April 29, 1983.
4. Order Denying Motion for Rehearing, July 29, 1983.
5. Permit Nos. 33-78419 and 33-78421, October 17, 1983.
6. Amendment to Application No. 33-78419, November 29, 1989.
7. Spelling per permit documents. But see spelling in Kulakowski & Tellman, *Instream Flow Rights: A Strategy to Protect Arizona's Streams*, Water Resources Center, University of Arizona (April, 1990).
8. Certificate No. 11239, August 8, 1985.
9. *State v. Moros*, 766 P.2d 264 (Nevada 1988).
10. N.R.S. §533.030(2).
11. N.R.S. §533.370(3).
12. N.R.S. §533.325.
13. *In the Matter of the Adjudication of the Water Rights in Dearborn River Drainage*, 766 P.2d 228 (Montana 1988).
14. *Department of Park v. Department of Water Administration*, 530 P.2d 924 (Idaho 1974).
15. I.C. §§42-1501 -1505.
16. S.B. 97 codified at C.R.S. §§37-92-102(3) and 103(4).
17. Edited by Lawrence J. MacDonnell, Teresa A. Rice, and Steven J. Shupe, *Natural Resources Law Center*, University of Colorado School of Law, 1989.
18. *Ibid.*
19. I.C. §42-1503(d).
20. I.C. §42-1503.
21. Case Nos. 80 CW 61 and 62, Water Division No. 5.

22. See David L. Harrison and Robert Wigington, "Converting Conditional Water Rights to Instream Use: A Property Transfer Strategy," *Water as a Public Resource: Emerging Rights and Obligations*, Natural Resources Law Center, University of Colorado School of Law, June 1-3, 1987. Most of these Colorado transactions are discussed in more detail by Robert Wigington in "Water Right Marketing Strategies to Protect Instream Flows in Colorado," *Water for Instream Needs: Is Colorado Law Adequate*, Boulder County Bar Association and Natural Resources Law Center of the University of Colorado School of Law, April 21, 1990.
23. A.R.S. §45-172.
24. S.B. 140 is codified at O.R.S. §536.322. See also Chapter 690, Division 77, Instream Water Rights Oregon Administrative Rules Water Resources Department, November 1988.
25. Or. Rev. Stat. §§537.455 -537.500.
26. W.S. §41-3-1001 - 1014 and U.C. §73-3-3.
27. Memorandum from the Solicitor for the U.S. Department of the Interior to the Secretary regarding the Authority to Provide Water to Stillwater Wildlife Management Area, July 10, 1989.
28. 463 U.S. 110 (1983).
29. Final Decree in Civil Action No. D-183 BRT, U.S. v. Alpine Land and Reservoir Company, Federal District Court for Nevada, October 20, 1980.
30. See U.S. v. Alpine Land and Reservoir Company 887 F.2d 207 (9th Cir. 1989).
31. Stipulation Regarding the Application for Permit No. 11-7356 of the City of Soda Springs, March 1989.
32. See Warner Valley Stock Company v. Lynch, 336 P.2d 884 (Oregon 1959).
33. Order on Motions in Case Nos. 86 CW 202 and 203, Water Division No. 4, May 5, 1988.
34. I.C. §§42-1761 - 1766.
35. See Ronald D. Carlson, "The History of Water Banking on the Upper Snake River" (unpublished and undated).
36. Colo. Rev. Stat. §§38-30.5-102 - 30.5-111.