

Water Right Marketing Strategies
to Protect Instream Flows in Colorado

by

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I. Introduction.

The Nature Conservancy is an international membership organization dedicated to the preservation of natural diversity largely through the acquisition of real estate in the marketplace. Since water rights are marketable real estate in Colorado, and since the instream use of water by the Colorado Water Conservation Board is a legal use of water rights, the Conservancy's basic strategy in Colorado is to acquire water rights through purchase or donation and to turn them over to the Conservation Board with certain strings attached.

The Conservancy is considering a similar strategy in Idaho and Oregon which have similar statutory schemes for the protection of instream flows.¹ In both of these states, The Nature Conservancy has also acquired rights for the diversion of water to maintain wetlands and ponds, at its Silver Creek, Formation Spring, Sycan Marsh, and Warner Basin Preserves. Since all of these water rights involved diversions, the instream flow statutory schemes in these states are not implicated and the water rights are privately held, except for the Warner Basin Preserve where the Conservancy has turned both land and water rights over to the BLM.

¹ See, I.C. Sections 42-1501 to 42-1505, and O.R.S. Sections 537.332 to 537.360.

In Nevada, the Conservancy is acquiring reclamation project water rights, is changing them from irrigation to wetlands use, again with continued diversions, and is then turning them over to the federal government for use in cooperation with the state government. In Nevada, it also now appears legal to own instream water rights privately,² and The Nature Conservancy has privately appropriated an instream water right for its Condor Canyon Preserve in that state.

In Arizona, the Conservancy invented the original appropriation of privately held instream water rights,³ and has several private filings pending there now. But the change of existing irrigation water rights to instream use in Arizona may have to be done in cooperation with the state, just as it is authorized in Colorado, Idaho, Oregon, Wyoming, and Utah.⁴

What is important to us is protecting instream flows with property rights that have the permanence of land holdings, and we

² See, State v. Moros, 766 P2d 264 (Nevada 1988).

³ The administrative record for the Conservancy's private instream water right at Ramsey Creek is highlighted in the Arizona Department of Water Resources, April 29, 1983 Decision and Order, its July 29, 1983 Order Denying Motion for Rehearing, and its October 17, 1983 Permit, all concerning Application No. 33-78419.

⁴ See A.R.S. Section 45-172. The Wyoming statute is found at W.S. Sections 41-3-1001 to -1014, and Utah's is at U.C. Section 73-3-3.

have been pragmatic about whether the instream property right is privately or publicly held.

The Conservancy thinks the prospects for its strategy are promising in Colorado. The water markets in Colorado are probably better developed than any other state in the West because of Colorado's rigorous system of adjudications, and because of the experience in this state in changing water rights. Our business is more uncertain and perhaps more expensive in other western states which are just beginning to adjudicate water rights comprehensively, and where the transfer of water rights from one use to another is not as practiced. Colorado also recognizes vested property rights in the potential to develop water, and therefore presents an opportunity to resolve conflicts over the future of relatively undeveloped rivers in the marketplace. And, we are finding that the Colorado Water Conservation Board is willing to accommodate creatively our private interest in protecting instream flows.

II. The G. Berkeley Ditch Case.

This transaction was The Nature Conservancy's first attempt at its marketplace strategy for instream flows in Colorado and might be considered a precursor to S.B. 91 in 1986 and S.B. 212 in 1987 which elaborated on the statutory authority for converting already appropriated water rights to instream use

through a contractual arrangement with the Colorado Water Conservation Board.⁵ At the time that this deal was put together, the statute simply recognized that the Colorado Water Conservation Board could "acquire" water rights for instream use, in contrast to establishing them through an original appropriation. Since the original appropriations would all be fairly junior, the Conservancy was interested in this acquisition authority as a way of establishing more senior priorities for instream water rights.

The G. Berkeley Ditch is a 1 cfs water right with an 1862 priority date that was originally diverted from Boulder Creek along with a number of other rights in the center of town at the Broadway Street Bridge. The Conservancy purchased the water right contingent on the re-purchase by the Colorado Department of Natural Resources acting through the Division of Wildlife and the Colorado Water Conservation Board and on the issuance of a water court decree approving its change from irrigation to instream use. The state agreed to re-purchase and then prosecuted the change of water right with the state. Although the re-purchase agreement with the state provided that The Nature Conservancy could be a co-applicant in the change case, the Conservancy ended

⁵ S.B. 91 and S.B. 212 are codified at C.R.S. Section 37-92-102(3).

up just contributing legal services and the change application was filed and decreed solely in the state's name.⁶

Senate Bill 212 limited the issuance of water rights decrees for instream use, be they original or change decrees, to only the Colorado Water Conservation Board. This does not preclude, however, a private or municipal entity being a co-applicant in water court and having a say in the prosecution of the change case, and then issuing the decree solely to the Conservation Board. Because a water right can be modified significantly or even declared abandoned in a change case, the right to control a change application can be an important issue in any contractual arrangement with the Conservation Board to change a purchased or donated water right to instream use.

Another basic issue in any such contract with the Conservation Board is the degree to which the private donor or seller retains control over the exercise of the water right once it is changed to instream use. In the case of the G. Berkeley Ditch, the Conservancy inserted a covenant in its deed to the state under which the ownership of the water right would revert to the Conservancy if the Conservation Board ever ceased to "hold

⁶ See, Decree in Case No. 79-CW-308, Water Division No. 1, May 31, 1981.

the water right for the protection of the environment including instream flow uses".⁷

This covenant seems straightforward, but its implications are unclear if the Conservancy ever became dissatisfied with the zeal with which the Conservation Board exercised and defended the G. Berkeley Ditch water right. On one hand, the Conservancy might argue that the Conservation Board was no longer "holding" this water right for instream purposes if it was not opposing potentially injurious water right filings or was not vigorously exercising or calling the priority of the priority of the water right. On the otherhand, the Conservation Board might believe that this covenant would only be violated if it attempted to change the water right to some other use besides an instream use through the City of Boulder. Another troublesome question is whether The Nature Conservancy could enforce the change decree privately, if the reverter was ever triggered. In hindsight we suggest that such issues be addressed more explicitly as will be illustrated in some of the more contemporary agreements discussed below.

The G. Berkeley Ditch transaction opened the door for a much more comprehensive approach to protecting instream flows on Boulder Creek as it winds through the corridor park which the

⁷ Warranty Deed from The Nature Conservancy to the State of Colorado, March 24, 1984.

City of Boulder has intensively developed in recent years. The City is now very close to an agreement with the Conservation Board under which the City would contribute a number of senior water rights for instream use which, along with the Berkeley Ditch right, would bring the instream flows through town up to 15 cfs. The agreement is more complicated than the Berkeley Ditch agreement, and will give the City the initial responsibility for calling the contributed water rights for instream use as an agent of the Conservation Board.⁸ The City's contributed water rights will also complement the Conservation Board's original appropriation for 15 cfs in the urban reaches of Boulder Creek. The Boulder Creek agreement will be a good example of how municipalities can cooperate with the Conservation Board and still have a meaningful and active role in the management of instream water rights inside their boundaries.

III. Natural Lake Water Rights for the Mexican Cut Preserve.

The natural lake water rights at the Conservancy's Mexican Cut Preserve near the headwaters of the Crystal River is an example of a fairly unique contractual arrangement with the Conservation Board which preceded S.B. 91 and S.B. 212. The Mexican Cut Preserve consists of a number of mining claims

⁸ A very recent draft of this proposed agreement is discussed by Bill McDonald in his March 15, 1990 memorandum to the Colorado Water Conservation Board.

acquired by the Conservancy which are leased to the Rocky Mountain Biological Laboratory and which also have been designated as a state natural area. In the early 70's the Biological Laboratory obtained water right decrees for maintaining the natural water levels at several high altitude lakes and ponds within the Mexican Cut Preserve. The decrees were obtained without making any artificial impoundment of water for the purpose of "piscatorial, biological research and teaching, wildlife procreation and natural heritage preservation" and confirmed that such water use dated back to 1932.⁹ When The Nature Conservancy asked the Department of Natural Resources to include these water rights in the natural area designation, the validity of these natural lake water rights was questioned.

This questioning was mooted when the Colorado Water Conservation Board agreed to obtain junior natural lake water rights for the same water bodies but for the purpose of preserving the natural environment to a reasonable degree, and to lease the natural lake water rights privately held by the Biological Lab for a period of 100 years. The lease appears to obligate the Conservation Board to defend the validity and priority of the leased rights for their originally decreed, natural area purposes, and gives the Biological Lab the right to terminate the lease and effectively take back these water rights

⁹ Decrees in Case Nos. W-566 through W-582, Water Division No. 5, December 31, 1972.

if the Biological Lab became dissatisfied with the Board's defense.¹⁰ The amended natural area designation, however, may have qualified the purpose of the more senior private water rights by requiring that they be managed "consistently" with the overfilings by the Conservation Board to preserve the environment to reasonable degree.¹¹ Besides introducing a measure of reasonableness into the purpose of the private water rights, the Conservation Board's overfilings also serve as a back-up in case these senior private rights were ever challenged for lack of a diversion. The arrangement leaves most other questions about the exercise of the two sets of natural lake water rights unstated, but is serviceable because the water rights are located at the top of the drainage where there are no competing diversions upstream.

IV. The Black Canyon Water Rights Donation.

The agreement with the Colorado Water Conservation Board for the conversion of a 300 cfs water right to instream use in the Black Canyon of the Gunnison River was developed after the passage of S.B. 91 and S.B. 212. It might be considered part of the second generation of such agreements, along with the City of

¹⁰ Lease between the Rocky Mountain Biological Lab, the Department of Natural Resources, and the Colorado Water Conservation Board, December 31, 1980.

¹¹ Amended Articles of Designation for the Mexican Cut/Galena Mountain Scientific Natural Area, May 8, 1981.

Boulder's program to maintain 15 cfs of minimum flow in Boulder Creek, and the lease of 10,000 acre feet of Ruedi storage water to improve the instream habitat of endangered fish near Grand Junction.¹² The Black Canyon agreement may also be interesting because it concerns the conversion to instream use of a conditional water right, one of those property rights to develop water in the future.

The Pittsburg and Midway Coal Mining Company had been granted conditional water rights to construct a 162,700 acre foot reservoir on the Gunnison River which would flood out most of the river from its confluence with the North Fork up to the boundary of the Black Canyon of the Gunnison National Monument, and to divert 800 cfs out of the river near the North Fork confluence, all under a 1965 priority date.¹³ The Conservancy persuaded the Company to donate 300 cfs out of the direct flow water right and to grant a kind of easement against the storage water right that would preclude the construction of a dam under that water right

¹² A nearly final draft of the Ruedi Reservoir agreement and of several related documents are discussed by Bill McDonald in his November 7, 1989 memorandum to the Colorado Water Conservation Board. This agreement has been now approved and executed.

¹³ Decree in CA No. C-5873, District Court for Delta County, August 11, 1969.

in the 13 mile reach of the Gunnison River just below the Monument.¹⁴

The Conservancy has now reached an agreement with the Colorado Water Conservation Board which will turn over the ownership of these water rights to the Conservation Board and which spells out the Board's obligations to change, enforce, and defend these water rights for instream use.¹⁵ The Conservancy has also worked very hard to make the Uncompahgre Valley Water Users Association a party to this agreement and to spell out the relationship between the 300 cfs instream water right and two very large sets of water rights owned by the Water Users for the Gunnison Tunnel, just upstream from the National Monument. Gunnison Tunnel diversions along with hydropower and storage operations at the Aspinall Unit (Crystal, Morrow Point, and Blue Mesa Reservoirs and Power Plants) also just upstream can dramatically influence the instream flows through the Black Canyon.

¹⁴ Agreement for Donation of Water Rights between the Pittsburg and Midway Coal Mining Co. and The Nature Conservancy, December 31, 1987.

¹⁵ A nearly final draft of this agreement for Donation of A Water Right between The Nature Conservancy, the Colorado Water Conservation Board, and the Uncompahgre Valley Water Users Association is discussed by Bill McDonald in his March 14, 1990 memorandum to the Conservation Board. The Board approved the execution of this draft with Alternative 1 for paragraph 14(d).

The pending agreement for the 300 cfs instream water rights features the following accommodations:

1. It recognizes that irrigation diversions under the senior water right for the Gunnison Tunnel can be increased, but that such increases will be limited to the historic pattern and duration of the irrigation season and that the Water Users can generate hydropower at the same time that they are making these irrigation diversions. The instream right for 300 cfs then takes priority ahead of the junior water rights for hydropower at the Gunnison Tunnel after the stipulated increases for irrigation purposes.

2. Except for any other water rights which The Nature Conservancy may acquire from the Pittsburg and Midway Company, the agreement leaves open the question of whether other purchased or donated water rights with priorities senior to the hydropower rights at the Gunnison Tunnel can be stacked on top of the 300 cfs water right. The question of whether purchased or donated water rights can be stacked for instream use probably depends on whether the upstream draft of these water rights was or could be cumulative prior to their change to instream use. For example, irrigation water rights that were directly across from each other on a stream might be stacked for instream use, while hydropower water rights that were one above the other on a stream where the return flow from the upstream water right would make water

available for diversion under the downstream right, would not be stackable.

3. The Conservancy has waived any right of reversionary ownership under the agreement in exchange for some fairly explicit provisions, which the Conservancy could enforce contractually, obligating the Conservation Board to call and defend the instream water right. The Conservation Board also cannot compromise any enforcement proceeding without The Nature Conservancy's consent.

4. The agreement sets up a two stage procedure. In the first stage the Conservation Board will evaluate whether at least the 300 cfs water right is needed to preserve the environment to a reasonable degree and is therefore not excessive under the standard set by statute. But because the Conservancy only has a 300 cfs water right to offer, the agreement does not require that the Conservation Board also determine whether this 300 cfs is the most that would ever be reasonable for instream use in the Black Canyon. It could become very difficult to match up purchased or donated water rights to instream needs unless the Board can take this kind of incremental approach.

5. Also as part of the first stage of the agreement the Conservation Board will evaluate the impact which perfecting the conditional water right for instream use will have on upstream

juniors. The theory is that the perfection of a conditional water right for instream use is no different than perfecting a conditional water right for any other beneficial use and that as a matter of water law, the perfection of a conditional water right could introduce a new call on upstream juniors.¹⁶ The agreement recognizes, however, that introducing a more senior call for instream use on a river system where there was not such call before is an important policy question for the Conservation Board. If the call would be disruptive, the Conservation Board could simply decline to accept ownership of the conditional water right and to change it to instream use. The operation of the Aspinall Unit is likely to buffer any call from a 1965 priority 300 cfs instream water right in the Black Canyon and we do not expect the calls to be disruptive. The 1965 priority is also junior to the larger absolute water rights upstream and would not step in ahead of them.

6. If the Conservation Board determines that a 300 cfs instream water right with a 1965 priority for the Black Canyon is

¹⁶ This legal theory is more fully discussed by David L. Harrison and Robert Wigington in "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. See especially C.R.S. 37-92-103(5) and 305(3); Twin Lakes Reservoir and Canal Company v. Aspen, 568 P2d 45 (Colo. 1977); and Judgement and Decree in Case No. 2686, Water Division No. 5, December 5, 1979. Two recent developments that reinforce this theory are S.B. 13, 57th General Assembly, 2nd Session, and Talco, Ltd. v. Danielson, 769 P2d 468 (Colo. 1989).

reasonable and good policy as against upstream, mostly conditional juniors, then the Conservation Board is obligated under the second stage of the agreement to change the water right to instream use in water court and to enforce it. The Conservation Board will be the sole applicant in the change of water rights proceeding, except that the accommodation on the Gunnison Tunnel water rights must be incorporated into the change decree, and The Nature Conservancy can compel the Conservation Board to go to trial in the change proceeding if the Conservancy is not satisfied with any proposed settlement.

So you see we have come a long way from the G. Berkeley Ditch transaction and The Nature Conservancy has been impressed by the willingness to negotiate exhibited by the Conservation Board, its staff, and the Uncompaghre Valley Water Users.

V. Yampa River Strategies.

On the Yampa River the Conservancy sees the purchase and conversion to instream use of the conditional water rights for the Juniper-Cross Mountain Project as fundamental to the protection and recovery of 4 endangered native fish. These 4 big river fish have been decimated throughout their historic range and the Yampa and upper Green Rivers are their last stronghold. The relatively natural hydrograph of the Yampa River and the hundreds of unimpeded river miles in both the Green and Yampa

rivers appear essential to their survival.¹⁷ The marketplace purchase of the Juniper-Cross Mountain water rights is strategic for two reasons: First, the upstream draft of these predominantly storage rights mimics the natural hydrograph in some important ways --- most of the diversion entitlement occurs during the spring runoff and then drops off dramatically.¹⁸ Second, the construction of the dams would block the migration route for the Colorado Squawfish, and the buy-out of the water rights eliminates that threat.

Some environmentalists question whether it is really necessary to purchase and convert to instream use these conditional water rights on the Yampa River since there are substantial questions about whether the big dams are economically or environmentally feasible and whether diligence can be kept up on the water rights. If Two Forks cannot withstand economic and environmental scrutiny, some environmentalists say, Juniper-Cross Mountain hasn't got a chance. The difficulty with this argument is that it leaves the fate of the Yampa River in a kind of stalemate which hardly satisfies the mandate of the Endangered

¹⁷ Harold M. Tyus and Catherine A. Karp, "Habitat Use and Streamflow Needs of Rare and Endangered Fishes, Yampa River, Colorado", U.S. Fish and Wildlife Service, Colorado River Fishes Project, Vernal, Utah, July 1989.

¹⁸ W.W. Wheeler and Associates, "Reconnaissance Investigation: Potential Yield of Water Rights for Juniper-Cross Mountain Water Rights", for The Nature Conservancy, November 1987.

Species Act to ensure the survival and recovery of the endangered fish. If the U.S. Fish and Wildlife Service is to streamline permitting requirements under the Endangered Species Act for water projects upstream of river habitat occupied by the endangered fish, the protection of their last instream stronghold on the Yampa River must have some legal certainty.

It is possible for the Conservation Board to file for an original instream water right on the Yampa River with a very junior priority date but that water right could be wiped out by the development of the Juniper-Cross Mountain water rights or any of a host of other upstream conditional filings. There would be no legal certainty about the amount of protection afforded by this junior water right until each and every upstream, senior conditional water right was bought out or abandoned. It is also not clear how the U.S. Fish and Wildlife Service would have any remedy to back up the enforcement of any original appropriation of a junior, instream water right made by the Conservation Board. The Juniper-Cross Mountain water rights, on the otherhand, are senior to most of the conditional filings on the Yampa River and are amenable to contractual or reversionary enforcement by the federal government under an agreement negotiated pursuant to S.B. 212. Such seniority and enforcement back-up would afford the legal protection for the Yampa River required by the Endangered Species Act.

But if the Juniper-Cross Mountain water rights are a necessary vehicle for satisfying the Endangered Species Act on the Yampa River, then that vehicle will be driven on a two-way street. Before entering an agreement pursuant to S.B. 212 on these water rights, the Conservation Board must be satisfied that it is good water policy to dedicate these water rights to instream use. In negotiating an agreement under S.B. 212, the Conservation Board will also have a fundamental say in how much of these water rights are dedicated to instream use and under what terms.

There are several reasons why converting the Juniper-Cross Mountain water rights to instream use is good water policy:

1. While the Juniper-Cross Mountain water rights are senior to most other conditional water rights in the Yampa River basin, they are junior to most absolute water rights which are all relatively small. The change of the Juniper Cross Mountain water rights to instream use therefore would not impose any new burdens on existing water uses upstream.

2. The Juniper-Cross Mountain water rights are subject to several subordinations that would accommodate perhaps 100,000 acre feet of new water depletions upstream.¹⁹ So while the bulk

¹⁹ W.W. Wheeler and Associates, supra nt. 18, pp. 10-12.

of the 1,000,000 acre foot average flow at the Juniper-Cross Mountain sites would be protected instream if the water rights were purchased and changed, the converted rights would be subject to the same subordinations and would not impose a moratorium on upstream development. The reservation of 100,000 acre feet for future development would support another energy boom and all attendant municipal growth. A 100,000 acre foot reservoir upstream from occupied habitat on the Yampa River could provide flatwater recreation equivalent to Ruedi or Green Mountain Reservoirs. To the extent that the existing subordinations did not provide an acceptable margin for upstream development, a greater portion of these rights could be reserved, with the substantial balance of the water rights still being dedicated to the endangered fish.

3. The conversion of Juniper-Cross Mountain water rights to instream use is good water policy because it is consistent with Colorado's compact entitlements. Right now the existing flows of the Yampa River contribute significantly to the filling of Lake Powell and to meeting the Upper Colorado River Basin obligation to the Lower Basin under the Colorado River Compact of 1922. Converting the Juniper-Cross Mountain water rights to instream use would only institutionalize this contribution. It also appears that this kind of contribution from the Yampa River was contemplated at the time that the Upper Colorado River Compact of 1948 was drafted, and would have occurred if the

Juniper-Cross Mountain dams were constructed to generate hydroelectric power.²⁰

A different policy decision by the Colorado Water Conservation Board might be required in other circumstances. For example, the conversion of a 2000 cfs conditional hydropower right with a moderately senior priority on the mainstem of the Colorado River very near the stateline might impose a disruptive call on existing absolute water rights upstream. Instream flows on this reach of endangered fish habitat may need to be increased, in contrast to protecting the status quo with the conversion of the Juniper-Cross Mountain water rights on the Yampa River, but it would hardly be good water policy to secure such flow enhancements by taking water away involuntarily from some existing use. A more appropriate strategy for this reach of endangered fish habitat may be to purchase and change already developed or absolute water rights or water already in storage. Lastly, it might compromise Colorado's compact position to commit both a substantial portion of the Yampa River to instream use and another 2000 cfs on the mainstem of the Colorado.

The disposition of conditional water rights may also be the key to legal protection of inflows to the Yampa River just above

²⁰ Memorandum from Robert Wigington to Bill McDonald regarding Maybell Delivery Requirement/Other Legal Questions on Yampa River Instream Flows, June 10, 1988.

Dinosaur National Monument from the Little Snake River. The Juniper-Cross Mountain water rights are located just upstream from the confluence of the Little Snake and control perhaps 2/3 of the flow through Dinosaur National Monument while the Little Snake contributes the other 1/3. In contrast to the Yampa River mainstem, there are no downstream, relatively senior conditional water rights that control the legal availability of instream flows on the Little Snake and there are just 3 sets of major conditional water rights that encumber the Colorado side of the Little Snake upstream. It may be much more feasible in this drainage to file for a junior water right to protect the inflow into the Yampa River and then to buy-out the upstream senior conditional water rights. Keeping the upstream conditionals and changing them to protect flows at the mouth of the Little Snake may also be complicated by the interstate nature of this major tributary.

One difficult question posed by just buying out these upstream conditional water rights is appraising their fair market value, when they may not be retained and converted to instream use and when their development as dam projects may be questionable. Clearly, the market value of such conditional water rights is not equivalent to the market value of absolute water rights or developed storage and should be discounted in

accordance with the prospects for developing dam projects under the conditional water rights.²¹

VI. The Six Way (not including the Conservation Board) Agreement for Instream Flows at Phantom Canyon.

The agreement which The Nature Conservancy has worked out to provide instream flows at its Phantom Canyon Preserve does not involve any instream water rights and the Colorado Water Conservation Board is therefore not a party. But the agreement is a remarkable example of how a conservation organization, irrigators, municipalities, and industry can work together to improve instream flows.

The Phantom Canyon Preserve, which was purchased by The Nature Conservancy in 1987, includes 6 miles of spectacular canyon on the North Fork of the Poudre River northwest of Fort Collins. Just upstream from the preserve, the North Poudre Irrigation Company operates Halligan Reservoir for irrigation purposes, drawing it down in the summer and then refilling it through the winter and spring, so that water is generally not

²¹ For a review of some basic appraisal principles that may apply to this problem see: Bonnie Colby Saliba and David Bush, Water Markets in Theory and Practice, 1987, pp. 205-207; and Stanely Works v. Commissioner, 87 TC No. 22, Dec. 43, 274, August 12, 1986. The approach taken in the Cooperative Agreement between the U.S. Fish and Wildlife Service and the Wyoming Water Development Commission, February, 1990 should also be noted.

delivered through Phantom Canyon during the fall and winter months. While the rainbow trout 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, the historic operation of Halligan Reservoir has stressed the rainbow fishery in the winter and severely limited the reproduction of brown trout, which require spawning flows in the late fall.

Initially the Conservancy considered buying shares in the North Poudre Company but then learned that even if it owned shares, those shares would not entitle the Conservancy to deliveries of storage water during the late fall and winter. But the irrigation company did not turn us away and was instead willing to innovate.²²

The Company first agreed to stretch out the emptying of Halligan Reservoir at the end of the irrigation season. Historically, the Company moved whatever water was left in Halligan Reservoir at the end of the irrigation season down to some of its other reservoirs at a rate of 75-100 cfs, which evacuated the reservoir in fairly short order and minimized the transit loss in moving the water down. In consideration for

²² The North Poudre Irrigation Company and The Nature Conservancy have entered 1 year agreements for the last 3 years. The last for fall-winter 1989-1990 is the most comprehensive.

moving the same amount water over a much longer time, the Conservancy agreed to lease and not take delivery the next irrigation season on an amount of shares in the Company that would be equivalent to the increased transit loss over the longer evacuation period. The Company also agreed to turn down the releases from Halligan Reservoir more gradually at the end of the irrigation season so that fish would not be stranded in the Canyon by a rapid drop in flows.

After Halligan Reservoir was drawn down completely in the late fall, the Company next agreed to bypass a small survival flow until irrigation deliveries started up again next spring, and to start up those deliveries more gradually so as not to flush out any brown trout fry that may have been spawned in the fall. In consideration for this bypass, the Conservancy leased an equivalent number of shares from the Eastman Kodak Company and agreed not to take delivery on those shares in the next irrigation season. Eastman Kodak entered this lease without any consideration from The Nature Conservancy because the City of Greeley was willing to give Kodak some credit against Kodak's raw water obligations with Greeley. Greeley allowed this credit mindful that the bypassed water could be recaptured below Phantom Canyon at Greeley's Seamen Reservoir. With Kodak and Greeley, it was a four way agreement.

The last two parties come into play if the bypassed water keeps Halligan Reservoir from filling in the spring. The winter bypass is small enough so that Halligan Reservoir would fill up anyway in most years but a shortfall in a dry year could force the Company to reduce the yield to all shares in the Company disproportionately. To keep the Company and its shareholders whole in case the bypass did keep Halligan from filling, the Conservancy agreed to purchase options to lease shares in the Company that would cover such shortfall on a 2 to 1 basis and not take delivery on those shares. The 2 to 1 payback was necessary to maintain a uniform yield per share throughout the Company if Halligan did not fill. The Conservancy was then able to purchase an option to lease 1 block of North Poudre shares from the City of Fort Collins and an option to lease a number of CBT units from the City of Loveland for trade to the City of Fort Collins for the balance of the North Poudre shares required under the agreement.

Last year, Halligan did not fill because of the bypass and The Nature Conservancy exercised its option with Fort Collins and paid \$20,000 to maintain deliveries to all other shareholders in the Company. This year because of the wet March, Halligan Reservoir is about to spill and the Conservancy will be able to release its options with Loveland and Fort Collins.

This rather complicated series of transactions would not have been possible without the very public spirited cooperation of 5, rather typical members of what is sometimes viewed the traditional water establishment. The Conservancy is optimistic about working out a long term agreement for instream flows at Phantom Canyon.

VII. Conclusions.

The Nature Conservancy is optimistic generally about the prospects for protecting instream flows under Colorado law as it now exists and believes that the marketplace transactions that are encouraged by Colorado's existing water law, can make a significant contribution. Whether our optimism is justified depends a great deal on how skillfully the Colorado Water Conservation Board negotiates agreements to change and enforce senior water rights for instream purposes. The Board must be willing to obligate itself to the meaningful enforcement of senior water rights which are acquired in the marketplace and offered for instream use, and it must make some tough policy decisions about the conversion of major conditional water rights to instream use. Based on our dealings with the Conservation Board so far, we sense that the Board is ready to embrace this mission and to embrace it vigorously.