An analysis of water marketing and reallocation options in Montana

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for the
Water Policy Interim Committee
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Purpose

The 2007 Legislature asked the Water Policy Interim Committee to analyze water marketing and water reallocation options available in Montana, including:

* leasing water rights, water banking, water trading, and water sales;
* the lease-to-sale ratio of water rights in Montana;
* the number of market purchases that have been completed in Montana;
* the purposes for which water trades or sales have taken place;
* the feasibility of creating and operating a water bank in Montana; and
* the administrative procedures and costs that would be necessary to establish and operate a water bank in Montana.

Following is an overview of these topics. Additional information will be presented at the March meeting by several speakers.

Introduction

Property rights are often described as a bundle of sticks associated a parcel of land. However, each stick has value independent of the bundle. While there are differences in how different rights may be marketed, a water right is one of those sticks. For the purposes of this discussion, the term water marketing covers the buying, selling, transferring, or leasing of water rights.

Water marketing is not a new debate topic in Montana. In 1984, the Legislature's Select Committee on Water Marketing published a voluminous report and several suggestions for future legislation.[1]

"These recommendations concern a strategy for a water policy for Montana in an interstate setting," wrote Sen. Jean Turnage, who chaired the panel. "This agenda is too important and too complex to be addressed by one interim committee or one legislative session. These issues significantly affect the future of Montana. The deliberations around them must be ongoing."

Though those words were written nearly a quarter century ago, water markets are still in their infancy, according to Water Strategist, a newsletter that analyzes water policy, marketing, finance, legislation and litigation in 17 western states.

[1] http://leg.mt.gov/content/publications/lepo/1984watermarketing.pdf

"Water assets are not traded westwide; no indicator can measure overall activity in water markets," the newsletter said in its April 2006 edition. "The economic value of water depends upon the reliability of the underlying water right, quantity, quality, uses and the location and availability of competing sources of supply."

However, in Montana and other states, competing demands for water are driving water marketing discussions. The 2007 Legislature passed House Bill 831 regulating groundwater appropriations in closed basins. Mitigation plans required under that statue may contain some aspect of water marketing. The strategic plan for the Water Resources Division of the Department of Natural Resources and Conservation includes the tasks of determining where water is physically and legally available for development and creating a report of what rights that might be available for sale or change.[2]

Water Marketing in Montana

At the suggestion of the water marketing committee, the 1985 Legislature established a water leasing program administered by the Department of Natural Resources and Conservation. The statute allows the department to acquire water through appropriation in its own name, by agreement or purchase with another water right holder or by contract for water in certain reservoirs. The water may be leased for beneficial uses.[3]

The statute was amended in 2007. Previously, program was limited to leasing 50,000 acre-feet. Now, the department may lease up to 1 million acre-feet of water under contract with the federal government from Fort Peck, Tiber, Canyon Ferry, Hungry Horse, Koocanusa or Yellowtail or from other reservoirs.. Of that 1 million acre feet, up to 50,000 acre feet may be leased for beneficial uses outside Montana.[4]

Since its inception, no water has been leased under this statute.[5]

However, the 2005 Legislature passed a resolution urging the DNRC to enter into negotiations with the federal Bureau of Reclamation to determine the availability and cost of water stored behind Hungry Horse Dam in hopes that the state might contract for water and then lease it for water development in the Clark Fork River basin.[6]

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[2] DNRC Water Resources Division Strategic Plan 2005-2010. http://dnrc.mt.gov/wrd/pdfs/wrd_strategicplan05.pdf

[3] 85-2-141, MCA

[4] Senate Bill 376. http://data.opi.mt.gov/bills/2007/billhtml/SB0376.htm

[5] Rich Moy, DNRC.

[6] http://data.opi.mt.gov/bills/2005/billhtml/HJ0003.htm

In 2007, the legislature appropriated $260,000 to pay for a Hungry Horse leasing study. The DNRC, the Bureau of Reclamation and others are working on the study now.

Montana owns several of its own water projects around the state, such as Deadman's Basin Dam in Wheatland County and the Tongue River Dam in Big Horn County. The state, through DNRC's state water projects bureau, owns water rights in these projects and leases them primarily for irrigation. The bureau administers almost 2,000 water marketing contracts for nearly 300,000 acre-feet of water annually though local water user associations. Revenue from the water purchase contracts, leases of lands associated with the projects, and net revenue from hydropower generation supplements funds for state water project rehabilitation costs.[7]

Other water marketing provisions in Montana law are mostly utilized by private parties, although some non-profit corporations and the Department of Fish, Wildlife and Parks also play roles.

The law allows for temporary changes in appropriation rights with department approval for 10 years, subject to 10 year renewals. In cases where new water conservation or a storage project is involved, the change may be approved for up to 30 years, again subject to 10 year renewals.[8]

Water may be leased for up to 90 days without DNRC approval for road construction or dust abatement projects[9].

In 1989, in response to drought conditions that left some streams dry and killed fish, the Legislature passed a bill to allow FWP to lease consumptive water rights for instream flows for terms up to 10 years. This statute, 85-2-436, MCA underwent significant changes in the 2007 session.[10] Until July 1, 2019, FWP may change consumptive use appropriation rights that it holds in fee simple to instream flow purposes on up to 12 stream reaches without any time constraints. The department may enter into leases for instream flow purposes on an unlimited number of stream reaches for terms up to 10 years, with 10 year renewals. However, after June 30, 2019, the agency may not enter into new lease agreements or renew leases that expire after that date. Any change in purpose or place of use must be approved by the department and is subject to other criteria to protect the rights of other appropriators from adverse impacts.[11]

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[7] State Water Projects Bureau 2006 report.

[8] 85-2-407, MCA

[9] 85-2-410

[10] Senate Bill 128. http://data.opi.mt.gov/bills/2007/billhtml/SB0128.htm

[11] The 2019 date, as well as other portions of the law, may be amended by future Legislatures.

The owner of a consumptive water right also may either convert the use of that right or lease the right for instream flow to benefit fishery resources.[12]

The lease of an existing right to FWP pursuant to 85-2-436 or the temporary change of a right under 85-2-407 or 85-2-408 does not constitute and abandonment of the right.[13]

A water right holder also may lease or sell water saved through conservation. Lining a ditch to reduce seepage or other measures may result in this so-called "salvaged water."[14]

Except for the temporary change for road projects and dust abatement, the appropriators in each of these changes must prove by a preponderance of evidence that the change meets several criteria, including:[15]

* The proposed change will not adversely affect the use of the existing water rights of other persons, permitted uses or reserved uses.

* Except for instream flow changes, the proposed means of diversion, construction, and operation of the appropriation works are adequate.

* The proposed use of water is a beneficial use.

* Except for instream flow changes, the applicant has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use.

* If the change in appropriation right involves salvaged water, the proposed water-saving methods will salvage at least the amount of water asserted by the applicant. The water quality of an appropriator will not be adversely affected.

* The ability of a discharge permitholder to satisfy effluent limitations surface water discharge permit will not be adversely affected.

Much of the leasing in Montana under these statutes has been done by three entities: Fish, Wildlife and Parks, Trout Unlimited and the Montana Water Trust.

Since it was granted the authority to lease water, FWP has signed 17 agreements for instream flow. One lease on Tin Cup Creek could not be renewed and is now held by the Montana Water Trust. Three have been terminated. Most of the leases are with private parties, but one is with a water and sewer district and one is with the Forest Service. The quantity of water leased and the

[12] 85-2-408, MCA.

[13] 85-2-404, MCA.

[14] 85-2-419, MCA.

[15] 85-2-402, MCA.

cost varies. A complete history is available in Figure 2 of the 2006 leasing report. There were no new leases in 2007.[16]

Montana Trout Unlimited holds six leases, all in the Blackfoot River Valley. The amount leased varies as does the cost per acre foot - ranging from 75 cents to more than $25 an acre foot.[17]

The Montana Water Trust, a non-profit organization founded in 2001, works with landowners on instream flow leases. The organization holds 15 leases on about 2,600 acre feet of water per year. In 2007, the Water Trust paid about $63,000 for water.

In addition to these, the DNRC has recorded 23 change authorizations by individuals who changed a part of their water right to instream flow since 1991.[18]

Water rights also may be sold, although unless the owner severs the right from the land it passes with the conveyance of the parcel.[19] Until action by the 1985 Legislature, the DNRC tracked the number of change authorizations for severed water rights. There are 70 recorded.[20] In 2007, the Legislature mandated that starting this July, a water right holder who severs the right from the land must alert the DNRC.[21]

It is important to note that Montana water may be marketed for uses out of state, however there are criteria that must be met, including:[22]

* the proposed use must conform to permit requirements including that the water is legally available and that senior water right holders are not adversely affected.
* the proposed out-of-state use of water is not contrary to water conservation.
* the proposed out-of-state use of water is not otherwise detrimental to the public welfare of the citizens of Montana.

Water banking

Under the umbrella of water marketing is water banking. But water banking is a multi-faceted term as well. In general, a water bank is an institutional process that facilitates the transfer of

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[16] 2006 FWP Annual Progress Report - Water Leasing Study.

[17] Trout Unlimited. Terms of Instream Flow Transactions in the Blackfoot.

[18] Terri McLaughlin, DNRC

[19] 85-2-403, MCA.

[20] Terri McLaughlin, DNRC

[21] http://data.opi.mt.gov/bills/2007/billhtml/HB0039.htm

[22] 85-2-311, MCA

water to new uses. In one sense, the water bank operates like a broker, bringing together buyers and sellers. However, the institutional nature of a water bank comes with set procedures and some sort of public sanction for its actions:[23]

Statewide water banking in Montana is not addressed in statute[24]. The leasing laws the state has in place might constitute what is called a lease bank, where a single lessee solicits and temporarily obtains water from one or more lessors for a specific use, often for environmental purposes. In contrast, a water bank involves the exchange of water entitlements through the interaction of multiple sellers and multiple buyers.[25]

The goal of a water bank is to facilitate the transfer of water from on use to another use by bringing buyers and sellers together. Doing so may meet one or more of the following objectives:[26]

* Create a reliable water supply during dry years.
* Ensure a future water supply for people, farms, and fish.
* Promote water conservation by encouraging right holders to conserve and deposit rights into the bank.
* Act as a market mechanism.
* Resolve issues of inequity between groundwater and surface-water users.
* Ensure compliance with intrastate agreements of instream flow.

Water banks may be structured in many ways, but they can be broken down into these general categories:[27]

* Institutional bank. This might be called a paper bank. It functions as a way to exchange water rights and other entitlements. Institutional banks are developed for areas where physical

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[23]Lawrence J. MacDonnell, "Water Banks: Untangling the Gordian Knot of Western Water."

[24] The Fort Belknap-Montana Compact, codified in Title 85, chapter 20, part 10, establishes a water bank for implementation in years of significant short term water shortage. However, the compact must still be ratified by Congress, so no water banking activity has taken place. The provisions provide for grants to purchase water, pricing alternatives and requirements, how banked water is allocated, and a clause providing that the water bank established in the compact is not intended to preclude a more comprehensive water marketing system within the Milk River Basin.

[25] Clifford, Peggy; Landry, Clay; Larsen-Hayden, Andrea. "Analysis of Water Banking in Western States," Washington Department of Ecology and WestWater Research. July 2004. http://www.ecy.wa.gov/biblio/0411011.html

[26] Ibid.

[27] Ibid.

water storage is limited or for large geographic areas. These banks also may be used for natural flow rights or a combination of natural flow and storage rights.

* Surface storage bank. In this case, the exchange of water is backed by water stored in reservoirs or other storage facilities.

* Groundwater bank. Groundwater banking exchange credits or entitlements for water withdrawls from an aquifer. Under conjunctive use programs, excess surface water is injected or infiltrated into the groundwater aquifer to be extracted during times of limited surface water supply. Groundwater banking programs also are being developed to provide mitigation in areas with excessive surface water withdrawals.

The entity that administers the bank will likely affect the cost to establish and administer the bank. The administration of the bank also may play a part in the level of trust and participation by water users.[28]

Examples of administrative structures include:[29]

* Public - Most existing water banks are operated by a federal, state, or local governmental agency or an administrative board specifically developed to provide administrative oversight.

* Private nonprofit - This could be a new organization comprised of representatives from stakeholder groups or a contract with an existing nonprofit.

* Private for profit corporation - There have been limited attempts at this model.

* Public-private partnership - In this model, a private corporation and a public entity jointly invest capital and operate the water bank.

The administrative costs also will be affected by what services a water bank chooses to offer. At the least, a water bank might aggregate water supplies from willing sellers and facilitate the sale to buyers. Other services may include:[30]

* Registry of water rights or entitlements.
* Regulating or setting market prices.
* Setting and implementing long-term strategic policies and daily operations.
* Establishing whether the bank operates on a year-by-year or continual basis.
* Determining which rights can be banked.
* Quantifying the bankable water.
* Specifying who can purchase or rent from the bank.
* Setting transfer or contract terms.
* Dealing with any regulatory agencies.
* Resolving disputes.

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[28] Ibid.

[29] Ibid.

[30] Ibid.

Policy questions

Water marketing is a vast topic and can spur discussion on a variety of issues. But a few policy questions to consider may include:

* Are current lease and change laws working? Are changes needed?
* What role should the state play in water marketing?
* Is an intermediary such as a water bank necessary?
* Would a water bank be a statewide entity, or would it apply to specific basins?
* Should a water bank operate year round, during a growing season or only during droughts?
* How would a water bank protect the water rights of users who are not part of the water bank from adverse effects?

As part of a wide-ranging water study, the 2004 Environmental Quality Council studied some aspects of water banking in Montana. The EQC decided that while water banking works in some states, Montana has water marketing alternatives in place and there was no need to add more. The panel also found that Montana lacks the physical strictures needed for water banking in the state.[31]

Additional information

Two publications that examine water marketing in Montana are included in the mailing packet. "Private Water Leasing: A Montana Approach" is produced by Trout Unlimited.[32] The Political Economy Research Center produced "Saving our Streams: Harnessing Water Markets," which examines water marketing in the West.[33]

Much of the information about water banks in this report comes from the "Analysis of Water Banking in Western States," a 2004 report from the Washington Department of Ecology and WestWater Research. The overview of the report is included in the mailing packet, but the full report and a state-by-state comparison is available online.[34]

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[31] http://leg.mt.gov/content/publications/lepo/2005waterreport.pdf

[32] http://www.tu.org/atf/cf/%7B0D18ECB7-7347-445B-A38E-65B282BBBD8A%7D/MT_WaterReport.pdf

[33] http://www.perc.org/pdf/sos_2007.pdf

[34] http://www.ecy.wa.gov/biblio/0411011.html

In 2005, the Montana Water Center at Montana State University-Bozeman oversaw a student analysis of water banking in western states.[35] This too is included in the mailing packet.

[35] Water Marketing 101: What Montana can learn from other states about water banking.