

The times, they are a-changin'

An overview of changes in appropriation rights and water marketing

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Introduction

Nearly four decades ago, a group of Montana's finest minds gathered in Helena to talk about water law and its relation to the economic development of the state's water. Some advocated for a central system to keep track of water rights as they were issued and, inevitably, as they were changed to meet new demands for water.

One of the participants was Charles Bowman, a professor of agricultural engineering at Montana State University.

"We must remember that we have to have something to meet these changing times," Bowman said, "because we have had changing uses of water from the time people came into the state until now."¹

Some things never change.² With the March 2010 meeting of the Water Policy Interim Committee, fine minds will again convene around a table to discuss the evolving uses of water and the laws that govern those changes.

It is appropriate that the WPIC will discuss water rights changes, sometimes called transfers, during the same meeting as it delves into water marketing. In many cases, a sale or lease of water also requires a change authorization from the Department of Natural Resources and Conservation.

Like other western states that operate under the Prior Appropriation Doctrine, Montana will likely deal with an increasing number of requests to transfer water rights from an historic use, such as irrigation, to other uses, including residential and commercial development.

"As states turn to alternative means of firming and stretching water supplies to meet future needs, transfers will become an increasingly important way to move water to higher valued or more efficient uses," according to a report written by the Western States Water Council, an organization consisting of representatives appointed by the governors of 18 western states.

¹ Symposium on Water Law and Its Relationship to the Economic Development of Montana's Water Resources, 1971. <http://www.archive.org/details/symposiumonwater00symprich>

² Of course, that isn't completely true. Two years after the 1971 symposium, the Legislature passed the Water Use Act, which included a provision for regulating changes in appropriation rights. The law has been evolving ever since.

"However, traditional western water law imposes barriers on transfers. In addition, states' efforts to mitigate the negative effects of transfers on third parties and the environment may impose additional barriers."³

Changing a water right is handled in much the same way as an application for a new appropriation of water. An applicant for a change in appropriation right in Montana must show, if applicable, that:

- * the proposed use is a beneficial use of the water;
- * the proposed means of diversion, construction, and operation of the appropriation works are adequate;
- * 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; and
- * the proposed change will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments under a permit, certificate, or state water reservation.

Changes - The basics

There are common questions about changing appropriation rights. The answers form a basis for understanding the process, as well as how change authorizations relate to water marketing.

Who can change a water right?

The owner of a pre-1973 right, post 1973 permits, and state water reservations.

When is a change authorization needed?

If there is any change in the point of diversion, the place of use, the purpose of the use, or the place of storage. Some examples: If the point of diversion is moved; if the irrigator wants to increase or realign the acreage beyond the original permit or right; or if the use changes from irrigation to industrial.

³ Water Laws and Policies for a Sustainable Future: A Western States' Perspective, Western States Water Council, 2008. <http://www.westgov.org/wswc/publicat.html>

Why is authorization from DNRC needed for a change?

Changes may affect water conditions upon which other appropriators rely for their beneficial uses. A proposal to change a water right must be weighed against the water rights of existing users who are generally entitled to the conditions of the stream as they existed at the time of their appropriations. Harm may occur from depriving an appropriator of the quantity or quality of water available before the change. For example, moving a point of diversion or changing a place of use may deprive other users of the return flow that existed when they received their water right.⁴

Return flow is an important component of water use. Montana defines return flow as the portion of diverted flow that is applied to irrigated land but is not consumed. Rather, the water returns underground to its original source or another source of water. Other water users are entitled to that water as part of their water right. Return flow is not wastewater. Return flow results from use and not from water carried on the surface in ditches and returned to the stream.⁵

The DNRC is charged with ensuring that changes in water rights do not adversely affect existing water right holders. This includes the protection of rights that may be junior to the right held by the applicant for the change.

What kinds of changes do not need authorization?

Changing crops or switching from flood irrigation to sprinklers are not usually considered changes as long as the purpose of the use and the place of use remain the same. Though such changes may increase consumption or decrease the amount of return flow, this exemption is built on historic assumptions of irrigators that they should be able to plant their crop of choice and irrigate as needed, within the confines of the original water right or permit.⁶

How much water can be changed to the new use?

The amount of water diverted after the change cannot exceed the amount previously diverted or beneficially used. However, attention is paid not only to how much water was historically diverted, but how much was consumed. That means that the amount of water allowed

⁴ Water Law in a Nutshell, 2009. David Getches, p. 177.

⁵ 36.12.101, ARM.

⁶ Water Law in a Nutshell, 2009. David Getches, p. 183. However, a change to sprinklers may include a proposal to irrigate additional acreage, thus changing the place of use and requiring a change application.

to be changed may be less than the amount historically diverted if the new use does not require the same amount of diverted water to achieve the amount of water historically consumed. It also means the applicant must submit evidence beyond what may have been claimed, including photographs, water use records, or testimony from those with first-hand knowledge of the historic use.⁷

In irrigation, the volume historically consumed includes the water used by the plant, the amount that evaporated, and any other amount that does not return to ground or surface water.⁸

In November 2009, the DNRC adopted rules that provide an optional formula to calculate historic consumptive use. The formula can be used if the applicant either does not know the historic use or does not want to spend the time and money necessary to prove the historic use.⁹

Are changes permanent?

They can be. But the law also provides for temporary changes. Temporary changes in appropriation rights can be approved by the department 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. The temporary change retains the original priority date. No authorization is needed for a temporary change to revert back to the permanent purpose, place of use, point of diversion, or place of storage after temporary change expires.¹⁰

Is water quality considered?

The applicant must address water quality issues only if a valid objection to the change proposal contains substantial credible information that the change would adversely affect the

⁷ In Montana, this is articulated in 36.12.1902, ARM. "(2) Final Water Court approved stipulations, master's reports, or examination information related to the water right being changed must be submitted with the application; however, this information or an abstract of a water right from the department or the Montana Water Court by itself is not sufficient to prove the existence or extent of the historical use. (3) The amount of water being changed for each water right cannot exceed or increase the flow rate historically diverted under the historic use, nor exceed or increase the historic volume consumptively used under the existing use.
http://www.dnrc.mt.gov/About_Us/notices/december/3621612173.pdf

⁸ 36.12.1902 (12), ARM. http://dnrc.mt.gov/About_Us/notices/december/3621612173.pdf

⁹ Montana Administrative Register 22-11/25/09

¹⁰85-2-407, MCA

water quality of an appropriator or the ability of a discharge permit holder to satisfy effluent limitations.¹¹

How much water can be changed?

There is no limit. But applications to change the place of use or the purpose of use for appropriations of 4,000 or more acre feet of water annually and 5.5 cubic feet per second of water require additional consideration, including evidence that the use is reasonable.¹²

Can a change be approved for out-of-state use?

Yes. But any application to change for use outside the state cannot be approved unless the department determines the out-of-state use of water is not contrary to water conservation in Montana and is not otherwise detrimental to the public welfare of Montana citizens. If the proposal is to consume a large amount of water, the DNRC approval must be affirmed by the Legislature.¹³

What is salvaged water?

Montana encourages the conservation and full use of water. If a water right holder conserves water - such as lining a ditch to reduce seepage - the holder may retain the right to use the salvaged water for beneficial use. The water right holder must apply for a change authorization if the salvaged water is used for any purpose or in any place other than that associated with the original appropriation right. The applicant must prove that the water-savings will be at least equal to what is claimed by the applicant.¹⁴

¹¹ 85-2-402, MCA

¹² 85-2-402 (4) and (5).

¹³ 85-2-402 (5) and (6). Similar criteria applies to applications for new appropriations of water.

¹⁴ Last fall, a district court judge ruled that the term "associated with" in 85-2-419, MCA, means that salvaged water may be used - without obtaining a change authorization - on parcels immediately adjoining land listed as the original place of use for the water right. The DNRC interprets the law to mean that if the salvaged water is used anywhere but in the original place of use, a change authorization is needed. The case is set for trial in October 2010. DV-08-30, DNRC v. Catlin Ranch LP.

What is instream flow?

Consumptive water rights, such as irrigation, can be changed to keep water in a stream. Keeping water in a stream to benefit a fishery resource is a defined beneficial use and is protected from being considered as abandoned. A proposal to temporarily change a right to instream flow must meet additional criteria beyond that required of other change requests. The applicant must detail the reach of stream where the flow is to be maintained or enhanced and provide a stream flow measuring plan. The applicant must show there is no adverse effect and the proposed amount of water to be changed is needed to benefit the fishery resource.¹⁵

Only the amount of water historically consumed - or less, after DNRC review - may be changed to instream flow.¹⁶

Is a change needed for water marketing?

Yes. Historically, speculation has been discouraged when it comes to water. Laws steer people toward the immediate use of water and away from hoarding.¹⁷ Montana law states the applicant must show a bona fide intent to appropriate water for a beneficial use. If the applicant plans to market the water to other users, the applicant must provide information on:¹⁸

- * each person who will use the water and the amount of water each person will use;
- * the proposed place of use of all water by each person;
- * the relationship between the applicant and each person using the water; and
- * each firm contractual agreement for the specified amount of water for each person using the water.

¹⁵ 85-2-408, MCA

¹⁶ The instream flow statute is the subject of a pending Supreme Court case. In 2009, a district court judge ruled that an analysis of return flow is not essential for instream flow changes as long as the increased instream flows do not cause adverse effects. The DNRC contends that because of inadequate historical use information, it was unable to analyze return flows, and therefore unable to determine if there would be an adverse effect. Case No. DA-09-0429, Hohenlohe v. DNRC.

¹⁷ Law of Water Rights and Resources. A. Dan Turlock, p. 5-120.

¹⁸ 85-2-310, MCA. Another section of law, 85-1-101, MCA states that "Any attempt to gain control of or speculate on large quantities of ground water of the state of Montana is not in the interest of the people and is to be restricted."

Water Marketing

In broad terms, the phrase water marketing includes the buying, selling, or leasing of water rights. Montana law provides for each of these actions.

Water rights are attached to the land where the water is used. If the land is sold, the water right passes with the conveyance of the parcel unless the owner severs the right.¹⁹ In either case, if the place of use, point of diversion, place of storage, or the purpose of use of the water right changes after it is sold, the new owner must apply for a change authorization.

In Montana and other states, competing demands for water are driving water marketing discussions. With the passage of House Bill 831 in 2007, many ground water withdrawals in closed basins may be permitted only with a mitigation plan that offsets adverse effects on surface water. One mitigation option is to purchase and change an existing appropriation right to offset any adverse effects of the new ground water appropriation.

Instream Leasing

Instream leasing has been one of the more common examples of water marketing in Montana over the last two decades.

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.²⁰ 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

¹⁹ 85-2-403, MCA.

²⁰ Senate Bill 128. <http://data.opi.mt.gov/bills/2007/billhtml/SB0128.htm>

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.²¹

As discussed previously, 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.²²

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. Four have been terminated. Most of the leases are with private parties, but one was with a water and sewer district and one is with the Forest Service. The quantity of water leased and the cost varies. A complete history is available in Figure 2 of the 2009 leasing report. There were no new leases in the last two years.²³

Montana Trout Unlimited holds leases in the Blackfoot drainage and on Madison River tributaries. The organization also assists water right holders who want to change to instream flow.²⁴

The Montana Water Trust works with landowners and irrigation districts on instream flow leases and irrigation efficiency projects. The organization has completed 37 water transactions totaling about \$590,000. It currently holds 12 water leases that contribute up to 6,300 acre feet of water per year to 10 streams. In 2009, the Water Trust paid about \$136,000 for water.²⁵

²¹ The 2019 date, as well as other portions of the law, may be amended by future Legislatures.

²² 85-2-408, MCA.

²³ 2009 FWP Annual Progress Report - Water Leasing Study.

²⁴ Mark Aagenes, Trout Unlimited, correspondence 2/2/2010.

²⁵ Barbara Hall, Montana Water Trust. Correspondence 2/18/2010. In March 2010, the Water Trust joined the Clark Fork Coalition. That organization will continue the Water Trust's water transaction work in the Clark Fork basin.

State Water Marketing

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 through 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.²⁶

In a few cases, the water is used outside of agriculture. The Middle Creek project near Bozeman provides drinking water for 2,000 households in Bozeman. In Ravalli County, the Department of Fish, Wildlife, and Parks leases purchases 15,000 acre-feet of water for fisheries downstream of the Painted Rocks dam. Deadman's Basin provides municipal water for Ryegate, Roundup, and Melstone.²⁷

In 1985, at the suggestion of an interim committee, the Legislature established a water leasing program administered by the DNRC. 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.²⁸

The statute was amended in 2007. Previously, the 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, Kooicanusa 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.

²⁶ State Water Projects Bureau 2009 report.
http://www.dnrc.mt.gov/wrd/water_mgmt/planning_reports/pdfs/govs_rpt_waterstorage_09/govrpt_waterstorag e2009.pdf

²⁷ Ibid.

²⁸ 85-2-141, MCA

No water has been leased under this statute, but 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.²⁹

In 2007, the legislature appropriated \$260,000 to pay for a Hungry Horse leasing study. The DNRC, the Bureau of Reclamation, and others continue to work on the on a proposal.

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.³⁰

Water banking

Under the umbrella of water marketing is water banking. Water banking is a multi-faceted term. In general, a water bank is an institutional process that facilitates the transfer of 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:³¹

Statewide water banking in Montana is not addressed in statute.³² The leasing laws the state has in place might constitute what is called a lease bank, where a single lessee solicits and

²⁹ <http://data.opi.mt.gov/bills/2005/billhtml/HJ0003.htm>

³⁰ DNRC Water Resources Division Strategic Plan 2005-2010.
http://dnrc.mt.gov/wrd/pdfs/wrd_strategicplan05.pdf

³¹ Lawrence J. MacDonnell, "Water Banks: Untangling the Gordian Knot of Western Water."

³² 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.

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.³³

The goal of a water bank is to facilitate the transfer of water from one use to another use by bringing buyers and sellers together. Doing so may meet one or more of the following objectives:³⁴

- * 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 ground water 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:³⁵

* 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 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 withdrawals 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

³³ 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>

³⁴ Ibid.

³⁵ Ibid.

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 play a role in how much it costs 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.³⁶

Examples of administrative structures include:³⁷

- * 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:³⁸

- * 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.

³⁶ Ibid.

³⁷ Ibid.

³⁸ Ibid.

Other States

Several western states have water banks that vary widely in their purposes and administration. Following are a few examples.³⁹

* The Arizona Water Banking Authority stores unused water for future needs as opposed to bringing together buyers and sellers.

* California has used a drought water bank to contract with sellers to use ground water instead of surface water. Locally, water districts store excess surface water underground to renew aquifers and provide conjunctive management for ground water and surface water.

* The Idaho water bank primarily facilitates voluntary transfers. It brings together buyers and sellers and suggests a price, though it does not set a price. Ten percent of the lease price goes to the water bank for administration. Water in the bank is protected from forfeiture and is not subject to transfer requirements. The state also allows for local water districts to operate rental pools.

* The Deschutes Water Alliance in Oregon administers a ground water mitigation bank where new users of ground water purchase credits from the bank to mitigate the new use. Water rights are donated or leased to the bank and used as instream flow.

* The Texas Water Bank is a clearinghouse for voluntary buyers and sellers.

* The Washington State Trust Water Rights program, administered by the state, provides a way to legally hold water rights for future uses without the water right relinquishing. Water is held in trust to benefit ground water and instream flows and other beneficial uses. While water is held in trust it retains its original priority date.⁴⁰ In a specific portion of the state where new wells exempt from permitting must be water neutral, the state set up a water exchange to help facilitate the mitigation of new ground water use.⁴¹

³⁹ Most of these brief descriptions come from Chapter 2, Section 7 of Water Laws and Policies for a Sustainable Future: A Western States' Perspective, Western States Water Council, 2008. More detailed descriptions can be found here: <http://www.westgov.org/wswc/publicat.html>

⁴⁰ Washington Department of Ecology. <http://www.ecy.wa.gov/programs/wr/market/trust.html>

⁴¹ Washington Department of Ecology. <http://www.ecy.wa.gov/programs/wr/cwp/wtrxchn.html>

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