Water Banking -- A General Description and Policy Issues
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The term water banking is a term that is most often used when discussing water quantity, water availability, and water marketing. Often those discussing water banking have different thoughts about what a water bank is and how it would or should work. Montana does not have a law addressing water banks in Montana and how they work here. In fact, the state of Washington did a survey in 2003 and at that time only 9 of the 18 states west of the Mississippi River had water banking laws. A majority of these laws were implemented in the late 1990's and early in the 2000's. Some of the states who have implemented water banking laws, such as Colorado, Kansas, and New Mexico are just getting to the point where the water bank(s) is up and running. Each of these states has set up their water banking program differently and are having varying results on the amount of use they are experiencing. But, before we get too far into the discussion, let's talk about what water banking means. Since Montana doesn't have a specific water banking law, defining what water banking means in Montana would be one of the firsts tasks that would need to be addressed.

What is water banking?

Lawrence J. MacDonnell summed it up well in his book "Water Banks: Untangling the Gordian Knot of Western Water". He stated that a water bank in its most generalized sense is "an institutional process specifically designed to facilitate the transfer of developed water to new uses. The primary objective of a water bank is to bring together those holding legally valid water use entitlements interested in making the water available to those needing to obtain additional supplies of water for their uses. Broadly speaking, a water bank is an intermediary. Like a broker, it seeks to bring together buyers and sellers. Unlike a broker, however, it is an institutionalized process with known procedures and with some kind of public sanction for its activities."

Types of water banks

- Trust water bank -- A trust water bank generally means that a state entity is authorized by the legislature to hold water rights in trust for entities that want to lease, sell, or donate their water rights. Depending on how the authorizing legislation is crafted, some of the uses that water rights could be held by the bank for are instream flow purposes to benefit such things as fisheries, water quality, recreation, or aesthetics. Water rights could be held for out of stream purposes as well. The options are endless, depending on the ingenuity of those crafting and enacting the legislation. The water leasing ability that is provided to Montana's Department of Fish, Wildlife, and Parks in 85-2-436, MCA might qualify as a type of "trust water bank". The difference would be that FWP and the private property right holder negotiate the lease and there is no intermediary that actually serves as a "bank". The 2003 FWP Annual Progress Report -- Water Leasing Study is attached for your review. This report details the work that FWP is doing with regards to leasing and gives a status of the program.

- Storage water bank -- A "storage" water bank usually requires a facility that can hold additional water at certain times of the year. For example, Idaho has a storage water bank where water is stored in reservoirs and can be released as it is purchased. Idaho has a statewide bank and in addition, there are three separate rental pools that essentially operate as separate banks. The Idaho Water Resource Board determines the rental rate for the bank and pools to lease water. In Washington, the Bureau of Reclamation (BOR) has operated a "water bank" in the Yakima basin since 1905. In this example, the BOR operates the physical system and the accounting system as a unified whole."Deposits" into storage water banks are usually foregone deliveries that are allowed to stay behind the dam and are accounted for and released when a user purchases or leases the water for their use.[1]

- Surface flow water bank -- The surface flow water bank does not require a storage facility, the flow remains in the stream or river. An example of using surface flow is the what the Montana Water Trust has done.[2] The Montana legislature provided for surface flow water marketing when it enacted section 85-2-408, MCA in 1995. This statutory provision allows for a temporary change authorization of a water right for instream flow purposes. Water right owners voluntarily agree to a temporary change in their right. A surface flow water bank could work with entities that have upgraded their irrigation works to a type of system that requires less water to irrigate the defined acreage. Therefore, there is extra water that they then lease or sell to another user who is interested in the water. The entities still have to apply for a "change" in their water right, in this case a temporary change since that is all that is allowed by law, and must meet the change criteria. However, if they go through the permitting requirements and the "extra" water is leased or sold, the water right is enforceable, with the same priority date as the historic use, down to the point of diversion. Obviously, it would be more advantageous to lease water from an entity that is further down the drainage with an early priority date. Again, Montana doesn't have the intermediary "bank" that holds the water on paper rather than in a physical structure. The way it is working in Montana right now, it is a contractual agreement between two entities. The way it is being done right now may be the best option, however, the statute terminates in 2005. It would be up to the legislature to make a policy choice between the following 4 alternatives.
    - Allow the statute to terminate in June 2005, removing the opportunity for this type of water marketing with entities other than FWP.
    - Remove the termination date and allow this marketing process to continue like it operates today.
    - Remove the limitation of only allowing a "temporary change" in the water right and allow it to be permanent.

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[1]Clifford, Peggy. "Water Banking in Other States", Washington Department of Ecology, 2003, http://www.roundtableassociates.com/ywe/meetings.htm

[2]http://www.montanawatertrust.org/

- Examine the feasability of implementing a water banking structure and compare the risks and benefits associated with each approach.

- Groundwater bank -- Groundwater banks are set up to protect or enhance the groundwater aquifer. The Southern Nevada Water Authority maintains their groundwater source through "artificial recharge". Water in the principal groundwater aquifer normally originates from mountain snowpack. In the case of the Southern Nevada Groundwater Bank, treated water from Lake Mead is injected directly into the aquifer by wells.[3] The Arizona Water Banking Agreement was approved in July 2001. It allows Nevada and other states to store unused and surplus Colorado River water in Arizona's groundwater aquifer for future use.

- Others -- the types of banks are very numerous. A few examples beyond what I have provided here include Nevada's bank. They use surface water for groundwater recharge to be withdrawn at a future date. The possibilities are endless. The most important element is setting up the bank with clear cut guidelines so that entities that would like to use the bank can easily understand the process and procedures involved.

Effect on water rights

The effect on water rights is a policy decision that must be made by the legislature. In Idaho, putting a water right or a portion of a water right into a bank provides a "safe haven" for the right. Therefore, the water right can not be forfeited or considered abandoned. If the goal of a water banking program is to promote water marketing and to address water from a supply and demand approach, it would probably be necessary to provide some sort of a protection for the water right. If no protection was afforded then water users may not be as willing to enter into the agreements and participation in the program may be limited. The other option would be for the state to actually purchase the water right and store the water for some future use. The problem or challenge associated with this is how and where the water would be stored.

Use of water banking in negotiating federal and tribal reserved rights

Various forms of water banks have been used throughout the nation when settling tribal reserved rights, including Montana. A brief description of these are included below.

- Fort Belknap Compact - Montana[4]

The Fort Belknap-Montana Compact provides for the Milk River Watershed Improvement Trusts - Establishment of Water Bank. The purpose of the section is to establish a water bank for implementation in years of significant short term water shortage -- extreme drought periods. The provision provides for the establishment of the bank and what is

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[3]http://www.snwa.com/html/wr_groundwtr_bank.html

[4]85-20-1001, MCA, Fort Belknap-Montana Compact, Article IV, C, 8.

required of the Bureau of Reclamation in estimating a potential shortage in the upcoming year, publication of notice of the availability of grants to purchase water for the purpose of alleviating shortage, pricing alternatives and requirements, how the banked water can be 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.

- Fallon Paiute Shoshone Indian Tribes Water Rights Settlement Act of 1990 -- Nevada[5]

In this settlement, the Secretary of the Interior, in consultation with the state of Nevada and the operator of the Newlands Project, is authorized to use and enter into agreements to allow water right holders to use Newlands Project facilities in Nevada, where the facilities are not otherwise committed or required to fulfill project purposes or other Federal obligations, for supplying carryover storage of irrigation and other water for drought protection and other purposes, consistent with the expansion of authorized purposes and the Truckee River diversions that are addressed earlier in the settlement. The use of the banked water has to be consistent with and subject to applicable state laws.

- 1990 Fort Hall Indian Water Rights Agreement -- Shoshone -Bannock Water Bank -- Idaho

This agreement allows the tribes the right to create a water bank pursuant to Idaho law in order to rent as, prescribed in the agreement, all or any part of the water accruing to the federal contract storage rights for any beneficial use outside the Reservation that is not used on Indian lands or exchanged pursuant to the agreement. There are requirements that storage water from certain reservoirs have to be rented and delivered to certain basins.

Other issues associated with water banking

- Geographic location

In developing a water banking program, one of the primary issues to decide is what geographic area the bank will apply to. Other state's laws vary from banks covering the entire state to banks operating on a basin and sub-basin level.

- Time frame

A policy that would also need to be decided is when a water bank can be activated. Is it a water bank that lasts year around, during the growing season, or only during times of extreme drought? The use of water banks in drought times is reflected above in the tribal reserved rights agreements. California also has a bank that is specific to drought times. Other states have banks that are active all of the time.

- Management of the banked water

[5]Public Law 101-618 [S.3084], November 16, 1990, Section 209, (d) Water Bank

How will the bank be managed? The first year that the bank operated in California it purchased water based on early estimates of demand. However, after the bank made commitments to purchase the water, the weather changed and more rain fell than was estimated. Therefore, demand for the banked water was reduced. The bank was unable to resell all the water it had purchased and as a result changed its procedures. Upfront deposits and contractual commitments from buys are required prior to contracting to purchase water on their behalf. Water that is acquired by the bank from voluntary sellers is allocated to buyers based on a supply and demand relationship. Leases are usually purchased from the bank in bulk packages by large water purveyors.[6] The risks associated with different management schemes would need to be assessed prior to deciding on one particular approach. It would be up to the legislature to determine who makes the decision regarding how a bank operates, how it is managed, who can take part, etc.

- Market based philosophy

Is the market based philosophy appropriate to addressing Montana's water resource? The market approach is based primarily on the belief that the water will go to the highest and best use of the water because based on the supply and demand scenario the highest and best use will be willing to pay the most for the water. There are examples throughout the United States and the World of using the market based philosophy when addressing a finite resource such as water.

Summary

It is easy to see from the limited amount of information provided above that water banking can become quite complex. An important question to ask yourself when looking at how water marketing works in Montana is whether or not Montana needs water banking. Are the current processes that have been established for marketing water adequate? Is an intermediary such as a water bank necessary or are there other approaches to water marketing that might work as well or better? The water banking philosophy might work on certain basins or sub-basins but who decides which basins and how do they decide? Are entities that are involved in water marketing asking for water banking in a certain area? All of these issues have to enter into any discussion about water banking in Montana.

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[6]Clifford, Peggy. "Water Banking in Other States", Washington Department of Ecology, 2003, http://www.roundtableassociates.com/ywe/meetings.htm