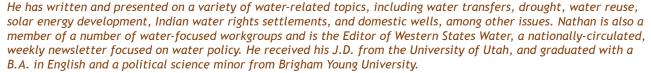
Water Transfers in the West

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Nathan is the Assistant Director and General Counsel for the Western States Water Council, where he works with state water administrators and other experts appointed by 18 western governors to develop policy solutions for water challenges in the West.



It is always a pleasure to come to New Mexico. One of the things I have learned working in the water industry is that there is no better way to bring precipitation than to hold a water conference. It seems the greater the drought or the scarcity, the greater the chance of having rain when you gather to talk about that very scarcity.

I have been asked to talk about a report that I helped put together for my organization, the Western States Water Council (WSWC), and the Western Governors' Association (WGA), which

we published about a year ago. Figure 1 shows the report, *Water Transfers in the West*.

This report highlights a concern that we found in the West among water regulators, other policy makers, and many members of the public, about the impact of water transfers on agriculture and other values. Because agricultural water use constitutes the bulk of water use in the West, including both the water that is drawn and consumed, and as we have had changes in our economy and urban growth, agricultural water has

become the de facto reservoir for much of this development. That has raised a number of concerns among policy makers around the West about the possible adverse impacts to agricultural communities and their economies, as well as environmental values and other issues.

The WSWC represents water managers from eighteen western states on water policy issues. What makes the organization unique is that our members are actually appointed by their respective western governor. Our members typically include the State Engineers, including New Mexico's State Engineer, Scott Verhines, as well as other water managers, public and private attorneys, and other

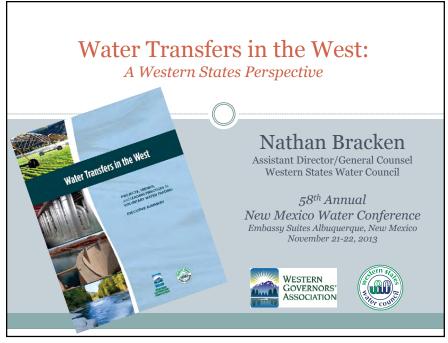


Figure 1. The Western Governors' Association prepared the report, "Water Transfers in the West: A Western States Perspective" in 2012

water experts. Because the governors created the WSWC, we see ourselves as being accountable to the WGA and work very closely with them, essentially serving as WGA's water policy arm. For years, the WGA has had a policy regarding water transfers. It says that states should identify and promote innovative ways to allow water transfers from agricultural to other uses while avoiding or mitigating damages to agricultural economies and communities. In light of this position, WGA approached the WSWC and asked us to work with them in developing a report that looks at this particular issue. The Walton Family Foundation also provided grant funding to support the effort.

To develop the report, we held a series of three stakeholder workshops around the West. We brought together over a hundred stakeholders to get their thoughts on these issues and talked about what is working and what is not. We also did a very extensive survey with our member states and did quite a bit of independent research as well. One of the first challenges we encountered was-how do you define water transfers? It means something different to everyone. For the purposes of our report, we developed this definition:

> A water transfer is a voluntary agreement that results in a temporary or permanent change in the type, time, or place of use of water and/ or a water right. Water transfers can be local or distant; they can be a sale, lease, or donation; and they can move water among agricultural, municipal, industrial, energy, and environmental

While this definition is pretty general, the report does include a couple of important clarifications. One is that we are only talking about voluntary transfers. We are not talking about regulatory transfers that are a result of a court decision or other regulatory action. We are also talking about intrastate and not interstate transfers. When you represent eighteen western states, there is no better way to get yourself fired than talking about taking water from one state and sending it to another.

We also did not make any value judgments about whether transfers are good or bad. In other words, we didn't want to proceed under the assumption that one specific type of transfer should take place or that one type of transfer should not. Instead, we tried to develop an objective overview of what

is happening in the West with respect to transfers and worked hard to make sure that the report was not prescriptive. As a result, we put together a resource document that provides stakeholders with an idea of what is going on around the West concerning water transfers. Hopefully stakeholders can share the information with each other.

Figure 2 comes from the report and is a snapshot of what is happening with respect to transfers in the West. We asked our states how prevalent water transfers are and about the likelihood that they would continue. The states in green are those states that indicated that water transfers were pretty common and expect transfers to continue being used to satisfy growing water demands. Obviously, the main factor that is driving many of these transfers in the West is urban development. There are other concerns and drivers, too, including transfers among agricultural uses, energy development, particularly in North Dakota, and environmental issues and concerns about instream flows.

We also found that there is no one right way of doing water transfers. Every state has very different programs with different needs and perspectives. California, for example, has the largest number of transactions in terms of the volume of water trading hands. This is due in part to the fact that California has very well-developed infrastructure, making it very easy to transfer water from one part of the state to another. California also has a well-developed regulatory structure that encourages temporary one-year transfers. It is much easier to get a temporary transfer than it is to get a permanent transfer, so most transfers there are temporary. If you look at other parts of the West, that may not be the case. If you are an urban water provider and you are looking to increase your supply to plan for anticipated population growth, a one-year water transfer is not going to work if the necessary infrastructure is not readily available because you would likely not want to spend the time and money needed to build the infrastructure needed to convey the water to where you need it for only one year.

What we have seen in many places in the West are so-called "buy and dry" transfers. These are transfers where water is permanently taken out of agriculture and used for another use, usually urban. This was probably the largest concern of many of the stakeholders with whom we

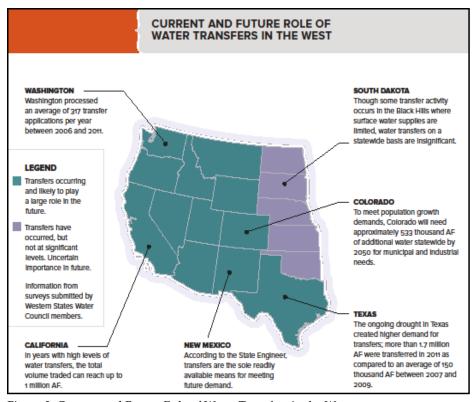


Figure 2. Current and Future Role of Water Transfers in the West

spoke. Dan Keppen will talk in a few minutes about specific impacts, but in many cases agriculture is the single largest driver for many local communities and economies in the West. If you take water out of agriculture, it can make it very hard to sustain those communities and to preserve the values associated with agriculture. For example, Colorado is in many ways the epicenter of the "buy and dry" debate. Colorado's policies indicate that it doesn't think that is the best way to go; they'd like to do something different.

Our report discusses alternative transfer methods including ways of sharing water between users. There are many different terms for it, but the main concept is that agricultural districts or farmers will conserve part of their water, or fallow part of their land, and then lease the savings to other users. Sometimes a supply agreement is developed where an urban user planning for future growth will tap into someone's water every once in a while and will pay a certain amount of money for that water. The benefit of this agreement is that it allows farmers to stay in agriculture while providing them with an income they can rely on for farm improvements and other things.

Regionalism was another issue that popped up when we looked at alternative transfer methods. We found that if you are looking at local transfers, it is usually fairly easy to do because infrastructure is in place and you can often rely on natural streams. But if you are talking about moving water a substantial distance, it usually requires some type of infrastructure, and that is the hard part. For example, Montana reported that much of its urban growth is taking place in areas that are relatively water-short but located substantial distances away from where water is available to purchase or lease, which presents a challenge to water sharing arrangements.

Another issue is abandonment and forfeiture. It is almost impossible to talk about conservation and sharing water without discussing this issue. When we spoke with our state regulators, one of the first things they said was that they understood that people think there is a concern about these transfers, but they have worked hard to develop policies and regulations that will ensure that people can conserve water without being subject to abandonment and forfeiture. Our states also reported that forfeiture and abandonment proceedings are relatively rare. However, when we spoke with the user communities, they had a different perspective. They reported that the risk of abandonment and forfeiture is a huge disincentive for conservation and that there are few reasons to conserve. Part of that is due to the fact that most states only allow water right holders to transfer the amount of water they are actually consuming. If you lessen the amount of water you use, you may lessen the amount of water you can transfer, and therefore adversely impact the value of the right. So the argument is: What's in it for me? I think the truth is somewhere in-between and probably depends very much upon the individual state and the specific circumstances. Nevertheless, this is a

pretty significant area of concern for many right holders.

Another issue that always comes up deals with new approaches. Most alternative transfer methods are new concepts that haven't been fully tested in the states' legal systems. What this means is that nobody wants to be the guinea pig. Nobody wants to be the first to go and find out what happens.

So what are states doing to address these issues? For one, states have adopted general policies to facilitate water sharing. For example, California has policies designed to support voluntary transfers that do not have adverse impacts for agriculture, senior water rights, or environmental values. Moreover, California has directed its staff to facilitate conservation as well.

At the same time, many western states have some type of water bank program, sometimes specific to a particularly region. Some states also have provisions in their codes that state you can deposit water into a water bank (in the same way that would deposit money into a regular bank), and then lease that water without subjecting the underlying right to an abandonment or forfeiture proceeding. Moreover, most states allow for temporary transfers, although the specifics vary considerably from one state to another. Some of these temporary transfers are for emergencies; for example, during drought.

For most permanent transfers, most states will look at whether or not the proposed change will

injure existing water rights and require a public comment period. Some states are also looking at ways to expedite this process, particularly for temporary or emergency transfers.

Funding is always a huge challenge. I mentioned earlier that Colorado is concerned about the "buy and dry" transfers. It has put its money where its mouth is and is funding a grant program that provided at least \$2.8 million for stakeholders to look at this issue and figure out how they can encourage alternative water sharing efforts.

Some states are also looking at ways to address third party impacts. The general rule of thumb is that when you do a change of application, you are almost always looking at injuring other water rights. But there are people who are affected by transfers who don't have a water right. Most states have some sort of public interest review. For example, Idaho has a provision in its code that states that when considering a change of application, the state will not approve it if it will have an adverse effect on agriculture or the economy. Nebraska also has similar concerns—they will look at how the transfer impacts socioeconomic and environmental issues in the area of origin.

Now I would like to talk about some specific examples of some innovative water sharing agreements. We presented three case studies in this report, the first is located in Colorado. Figure 3 shows the Lower Arkansas Valley Super Ditch. The lime-green area is the subject of this particular effort. It is an area with a pretty strong agricultural base, but it is also near Colorado's Front Range, which has been growing exponentially. This area of the state is looking at a 78 percent increase in population between 2008 and 2050. This growth has put a lot of pressure on agricultural water

supplies. There have been many so-called "buy and dry" transfers in this region. In fact, according to some sources there has been a \$33.5 million loss. In some parts of the state, that could result in a \$2,000 per capita hit to the agricultural communities. The situation has people in these agricultural communities thinking about

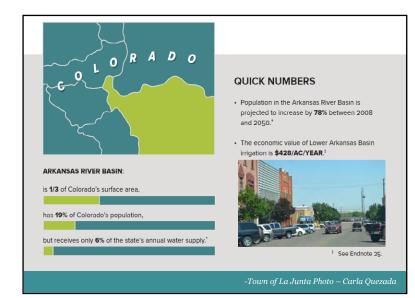


Figure 3. Lower Arkansas Valley Super Ditch in Colorado

what they are going to do. They want to preserve their communities and keep farming, but there is a constant demand for their water.

In 2002, the voters of this area approved what eventually became the Super Ditch, which is essentially a fallowing program. It is a voluntary program in which farmers can fallow a portion of their land and then lease the water saved from that land for use in the Ditch. The Ditch itself acts as a representative and negotiates these agreements on their behalf. It is still a work in progress, but right now they have built the capacity to release 24,000 to 80,000 acre-feet a year depending upon the hydrologic conditions. They have also entered into a number of agreements with citizens from Aurora and Pike's Peak. The basic structure is that they will let you lease up to a specific amount of water over a certain number of years for a set price.

One thing we learned from this example is the importance of empowering the local stakeholders. The farmers in this case were the decision makers. This wasn't an easy process and there was quite a bit of opposition, but many of the agricultural stakeholders involved felt that this was a good way for them to stay involved in agriculture, get some money, and help satisfy some of the growing urban demand for their water.

Next, I would like to talk about the Deschutes Water Alliance in Oregon near the city of Bend. This is a case that in many ways deals with a combination of urban growth and environmental pressures to put water back into the streams. In the early 2000s, Bend and surrounding area experienced a huge influx of people moving to the area. At the same time, a combination of Clean Water Act requirements, Endangered Species Act requirements, and state groundwater mitigation efforts began putting pressure on stakeholders to find ways to leave more water in the streams. The irrigation districts, the City, tribes, and other stakeholders realized that they needed to come together and address these issues. If they did not, someone else was going to make a decision for them, and it probably wasn't going to be something that they could live with.

As a result, these various interests created a "gentleman's agreement" to put 260,000 acre-

feet back in the stream. Roughly 50 percent of that amount will be accomplished through conservation, while the rest will come through transfers (both sales and leases) and reservoir management. Figure 4 is a picture of how one irrigation district piped about 3.8 miles of their existing canals to help reduce the effects of evaporation. This allowed their farmers to pump less. In some cases, farmers were able to see an increase in the amount of water delivered to their farms of up to 25 percent. So far it has been very successful and they have been able to restore 200 cubic feet per second to the stream. If you visit Bend, you can go to the river and see that water is actually there. Historically that hasn't always been the case and the river often ran dry in the summer.

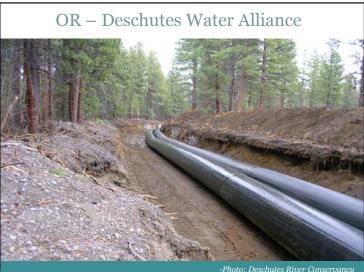


Figure 4. Deschutes Water Alliance in Oregon near the City of Bend

One of the interesting about this example is that the State took a hands-off but supportive approach and basically allowed the parties to develop this arrangement on their own. That being said, this type of arrangement would not have been possible had Oregon not adopted a regulatory structure that allows this type of agreement.

The last example I want to talk about is in California. Figure 5 describes a fallowing agreement between the Metropolitan Water District of Southern California and the Palo Verde Irrigation District. The goal of this agreement is to provide between 30,000 and 120,000 acre-feet/year from Palo Verde to Metropolitan to satisfy urban needs for the next 35 years. What is interesting about this particular program is what the parties

did to mitigate impacts to the local community. This arrangement required a number of years to build the necessary relationships that are in place. Early on, the parties carried out a pilot fallowing program in the 1990s that later served as the basis for the larger, final agreement. One of the things they learned from this initial pilot project, which transferred about 115,000 acre-feet/year, was that the fallowing provided \$25 million in payments to local farmers, but also included the temporary loss of roughly 60 full-time agricultural jobs and an estimated \$4 million loss in farm-related services.

six of whom had lost their jobs due to the fallow program.

One of the key messages from our report is this: The State creates the framework, the State establishes the ground rules, but it is ultimately up to the local folks to develop bottom-up approaches. I think it is very important for agricultural stakeholders to feel that they are in the driver's seat. They must feel that any water sharing arrangement is their choice, that they are making the decision, and that they are the ones retaining control over their water resources. It is

tough to be a farmer these days because they are beset on all sides by a host of problems. A top-down approach that tries to take water from them won't work; an approach that empowers them and allows them to stay in business may.

Another point I want to make is that transfers are just one tool. In the studies we did, transfers weren't the only option that urban areas could use to obtain potable water. Transfers are part of a larger portfolio that will likely need to include conservation,

reuse, new infrastructure, and a number of other measures depending upon the circumstances at hand. The point is that transfers and water sharing agreements represent an important tool that will likely be used to satisfy future water demands throughout much of the West, but they aren't the only tool.

In closing, I want to mention that the report has a number of resources you may find useful. It has a detailed appendix that discusses various types of transfers with pros and cons and summarizes the western states' regulations, policies, case law, and other policies governing transfers. The WGA also maintains a website with copies of the report and other related information at: http://www.westgov.org/initiatives/water/373-water-papers. The WSWC's website is: http://www.westernstateswater.org/. Thank you.



Figure 5. Metropolitan Water District, Palo Verde Irrigation District in California

So, when the parties developed the larger deal, Metropolitan agreed to provide \$6 million for the local community to mitigate potential adverse impacts. The community used this money to create a Community Improvement Fund that provides small business loans and other assistance to businesses in the area to help offset the impacts of the fallowing arrangement. The Fund has been pretty successful and has supported around 120 new jobs, 70 indirect additional jobs, and saved a number of other jobs that were threatened. Examples of businesses the Fund supported include an existing nursing center, a pharmacy, and a furniture store. These were not "big box" stores. The community realized early on that they would see the best bang for their buck by focusing on local businesses. Perhaps my favorite was a truck driving school they developed. The school had an inaugural class of twelve graduates,