Technical Memo

To: Dick Price, General Manager / Charisse Willis, Special Projects Coordinator  
Stevens County Public Utility District

From: Andrew Graham and Jerry Louthain

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Project: Mill Creek Project Alternatives Analysis

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Re: Potential Use of Water Banking in WRIA 59

Introduction

Stevens County Public Utility District (PUD) is evaluating alternatives for providing access to water supplies for new uses in the Colville River Basin (also known as Water Resource Inventory Area 59 [WRIA 59]). One of these alternatives is to use water banking, either in place of, or in combination with, water infrastructure improvements.

This technical memorandum explains how water banking can work, reviews examples of water banks in Washington State and proposes concepts for how a water bank could operate in WRIA 59. It then provides preliminary estimates of near- and long-term costs.

Summary

The purposes of a water bank in WRIA 59 would be to:

1. Reduce the amount of relinquishment of existing water rights due to non-use;
2. Reduce the transfer of existing water rights to areas outside WRIA 59, so those rights can continue to be used in WRIA 59;
3. Make water available for new uses in the basin to provide for a healthy and adaptable agricultural economy and new economic development opportunities in the future.

The PUD, Stevens County, other public-sector organizations and private-sector investors with an interest in the agricultural economy, economic development and natural-resource protection in WRIA 59 should discuss possible establishment of a water bank to achieve the purposes listed above. The bank could be operated by one of these parties, jointly through an interlocal agreement, or through a public/private partnership. Actions could include:

- Education and outreach to encourage water rights holders to use Washington State’s Trust Water Rights Program to avoid relinquishment.
- Payments to water rights holders where needed to either encourage placement of rights into the Trust Water Rights Program and to prevent out-of-basin sales;
- Purchase or lease of water rights by a water bank, to be held in the Water Rights Trust Program for future sale to new users to support local economic activity. A water bank
could be operated by a public sector organization, private non-profit or for-profit organization, or a public/private partnership.

The State Water Trust Program provides a mechanism to protect water rights from relinquishment. However water rights holders in WRIA 59 may be reluctant to participate in this State program, so locally-based outreach to water-rights holders may be needed to help prevent loss of those water rights. The success of this outreach could be enhanced if financial incentives were provided. Full acquisition on a permanent basis may cost on the order of $1,000 to $1,500 per acre-foot, with funds to be repaid through future sales to new users (revolving fund). One-year leases are commonly priced on the order of one-tenth the price of a permanent acquisition (e.g. $100 to $150 per acre-foot). These are broad estimates; actual prices will be subject to negotiation and depend on current market conditions in a given area at a particular time.

To initiate these activities, a near-term funding request should be made to the Department of Ecology, Office of Columbia River (OCR). Near-term funding needs are on the order of $1.5 million to $2 million in seed money, plus $120,000 to administer the program at the local level for two years. The quantity of water to be acquired will depend on negotiations and terms. Use of State funds may require permanent dedication of a portion (e.g. 1/3) of the water rights acquired to meet stream flow purposes, with the remaining portion (e.g. 2/3) left for future out-of-stream uses.

For long-term activity, a water bank will need additional funding from State, local or private sector sources. The maximum cost is likely to be on the order of $5 to $10 million over ten years, with much of that expected to be repaid through revolving fund activity in future years. However these funding estimates should be considered very preliminary. Additional development of an organizational framework and business plan is needed in order to firmly estimate funding requirements.

Further discussion among the organizations that may be involved is necessary in order to improve definition of the appropriate water banking concept for WRIA 59.

**What is Water Banking?**

The term “water banking” has no single definition, as the term applies to a wide range of water management approaches. Water banking typically involves one of two broad approaches:

1. Business transactions to accumulate water rights in order to make them available for new uses, such as providing water for new development (or for mitigation of water uses by development projects). Water banking can be considered as an institutional mechanism used to facilitate the legal transfer and market exchange of surface water or ground water uses. The common goal is to move water from one usage and/or location to another where it can be better utilized. In this case banking is often just a way of organizing multiple sales or leases of water rights, since bundling larger volumes of water or multiple water rights may offer efficiencies over executing one transaction at a time.

2. Using existing, physical storage capacity developed for one purpose, to store water for another purpose. For example, in some basins in the western United States excess storage capacity in federal reservoirs has been made available to non-federal
organizations to store water for purposes that are different than originally designed, as long as the original purposes of the storage reservoirs are not compromised. Among other advantages, this may allow a water rights holder to carry water over from one year to the next, where this would be impossible without the use of available storage.

This technical memorandum focuses mainly on the first of these two approaches. However, the Mill Creek Alternatives Analysis is also exploring opportunities for water storage in WRIA 59. A water banking approach that includes water storage could be relevant if a decision is made to develop new water storage capacity.

Washington State has a Trust Water Right Program established under Chapters 90.38 and 90.42 Revised Code of Washington (RCW). The Trust Water Rights Program allows water-right holders to temporarily dedicate their water rights to stream flow rather than using their water rights for purposes identified in their claim, permit or certificate. Water right holders are exempt from relinquishment of water rights due to non-use for water rights that are in the Trust Program. This can be a tool that complements a water banking approach. The specific trust water right can then be viewed as the “vault” to hold water rights. (The trust program can also be used independently of water banking.) A trust water right typically has a fixed duration assigned, and when that time period expires the water right becomes available again for the original authorized purpose.

Where multiple water right holders or new water users are involved, banking can facilitated by an organization that operates in the role of broker, clearinghouse, or market-maker. A clearinghouse serves mainly as a repository for bid and offer information. Brokers connect or solicit buyers and sellers to create sales. A market-maker attempts to ensure there are equal buyers to sellers in a market. ¹

Several important conditions can help to determine whether a water bank is an appropriate solution for a particular water resource management issue:

- Water needed for new uses must be unavailable from “conventional” sources, either due to hydrologic conditions, legal limitations or high costs.
- There must be existing water rights that are available for transfer to new users, by willing sellers. Water rights to be used in banking must be large enough, in the right locations and with sufficient seniority to support anticipated new water uses.
- The water bank must create an advantage over individual transactions that can already occur between buyers and sellers without needing a water bank. This can be true, for example, when there will be many, new small uses drawing from water rights that were issued originally for a single, large use; or when new uses are far in the future so there are no current buyers for existing water rights.
- In order to create incentives for private market activity, new uses should have a higher economic value than existing uses. This may also be needed for public sector or non-profit organizations, in order to cover transaction costs or carrying costs over time (unless transfers are to be paid for from a dedicated fund that does not require full reimbursement).

• Prior to carrying out transfers, water rights must be well defined including their consumptive ratio (an extent and validity determination meeting Ecology standards can be used to determine consumptive ratio). However, in order to be temporarily placed into the State Trust, this step is not required.

• An analytical or modeling tool may be needed to predict the effects of both the existing water use and the new water use on stream flows and other, senior water users. For ground water uses this is typically a hydrogeological model that has been accepted by Ecology as valid for this purpose.

**Water Banking Objectives for WRIA 59**

Under a separate task performed for the Mill Creek Alternatives Analysis project, HDR prepared a water needs assessment for WRIA 59 to support the development of a range of water storage and water management approaches (HDR Engineering 2013). The water needs assessment was based on assumptions and identified needs from the WRIA 59 Watershed Plan (Golder Associates, 2007). The assessment identified future needs for municipal water, individual household wells, industry and possible expansion of irrigated agricultural land. The total need identified is 7,000 acre-feet of consumptive use by year 2050. However this quantity could range from 4,600 to 12,800 acre-feet. Water needs are distributed within the basin as follows: Upper Basin: 19%; Middle Basin: 44%; and Lower Basin: 37%.

Discussions with PUD staff and stakeholders that were convened by the PUD in March 2013 to discuss the water banking concept identified two crucial, near term objectives:

1. Reduce the amount of existing water rights within WRIA 59 that are relinquished due to non-use (these are generally irrigation water rights); and

2. Reduce transfers of existing water rights from WRIA 59 to water users outside WRIA 59, so those water rights remain available in the future to support new uses within WRIA 59.

In addition, over the longer term water banking should help contribute to meeting the future water needs discussed above. This can be stated as a third objective:

3. Make water available for new uses in the basin to provide for new economic development opportunities in the future and a healthy and adaptable agricultural economy.

A key concern identified by the stakeholder group is that water rights, primarily for irrigated agriculture, are gradually being lost within WRIA 59 as the older generation of farming families retires without being replaced. Some certificated water rights have likely already been relinquished due to non-use under the State Water Code (Chapter 90.14.180 RCW), and other water rights are in danger of being relinquished within the next six months to a year.

In other cases, water rights from WRIA 59 have already been sold and transferred to other locations in the Columbia River Basin and are permanently lost to uses in WRIA 59. Since WRIA 59 is at the upper end of the Columbia River Basin (at least within Washington State), water rights from this area can be transferred to a large area downstream, making them more valuable than water rights farther downstream in the Columbia River Basin.
Through discussions with stakeholders it appears that approximately 10 to 20 agricultural irrigation water rights in WRIA 59 could be up for sale currently or in the near future. These rights have annual quantities \(Q_a\) ranging from approximately 100 acre-feet to 2,300 acre feet. The total \(Q_a\) for all of these rights is approximately 8,600 acre-feet (50% in the upper basin; 44% in the middle basin; and 6% in the lower basin). Stakeholders reported that several of these rights could be faced with relinquishment if a buyer is not found within six months to a year.

Preserving water rights from relinquishment or transfer out of the basin is consistent with the WRIA 59 Colville River Watershed Plan (Golder Associates, 2007), which identifies as one objective:

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\text{Prior to the sale of any WRIA 59 water rights to the state and/or any other non-local user, every possible effort should be made to provide an opportunity for local transfer of the available water right to interested water users within the watershed for domestic, agriculture, municipal, commercial, and other prioritized beneficial uses.....The purpose of this objective is to maintain and enhance economic opportunities within the watershed, while protecting the water rights of WRIA 59 for the maximum net benefit of the people in the watershed. (p. 30, Goal 3, Objective m).}
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**Water Banking Examples in Washington State**

This section summarizes water banking activity in two different areas in Washington State: 1) Kittitas County, comprising part of the Yakima River Basin; and 2) the Dungeness River Basin on the Olympic Peninsula. These examples help to illustrate the range of approaches that can be applied and how Washington State’s natural resource agencies have interacted with local groups establishing water banking approaches.

**Kittitas County Water Banking Example**

**Background**

In 1999, Ecology imposed an administrative moratorium on issuing any groundwater permits for new consumptive uses in the Yakima basin, which includes Kittitas County. This moratorium did not apply to permit-exempt withdrawals of groundwater. In 2007, Ecology received a petition asking that new appropriations of groundwater in Kittitas County be stopped until enough was known about the potential effects of new permit-exempt wells on senior water rights and streamflows. After much discussion with Kittitas County and other entities, Ecology adopted an administrative rule relating to groundwater in the Upper Kittitas area. The U.S, Geological Survey (USGS) is currently conducting a major groundwater study in the Upper Kittitas basin.

**Administrative Rule**

The Department of Ecology (Ecology) adopted Chapter 173-539A WAC the Upper Kittitas Groundwater Rule with an effective date of January 22, 2011. The purpose of this rule was to withdraw from appropriation all unappropriated groundwater within upper Kittitas County pending completion of a groundwater study. The general area covered by this rule is the drainage area of the Upper Yakima River between Cle Elum and Ellensburg, including all of
the Teanaway River watershed. This rule applies to all new uses of groundwater within this area with only a few exceptions, which are described in WAC 173-539A-040.

**Water Banks in the Kittitas Basin**

As a result of the administrative rule and previous water banking-related activity in the Kittitas Basin, a Kittitas Water Exchange has been established for this area with seven separate water banks. The following are the water banks in the Kittitas Water Exchange:

- Lamb and Anderson bank (Upper Kittitas Basin)
- Roan water bank (Swauk Basin)
- SwiftWater Ranch bank (Teanaway Basin)
- Masterson Ranch bank (Teanaway Basin)
- Reecer Creek Golf Course bank (Lower Kittitas Basin)
- Williams and Amerivest bank (Lower Kittitas Basin)
- Roth-Clennon bank (Upper and Lower Kittitas Basin)

These water banks each operate independently and are typically banks operated by private owners of water rights with water available for sale as mitigation for new uses of water. Agreements are executed with Ecology to put the water into the State Water Trust. This enables the owner to cease using water, without losing the rights to use the water in the future, including transferring it to other users. Ecology has defined geographic areas for each water bank, indicating where the water can most likely be used for mitigation purposes, and where it is unlikely to be suitable for mitigation.

**Possible Applicability to Colville River Basin**

There are several factors in the Kittitas Basin which might be applicable to setting up a similar program in the Colville River Basin:

- A major concern in the Upper Kittitas is the need for additional new exempt domestic groundwater uses in an area with limited new water availability.
- The U.S. Geological Survey (USGS) is conducting a major study of the western Kittitas County groundwater-flow system. A USGS ground water flow model (2004) has been developed for the Colville River Basin (it is possible the model would need to be modified in order to support water banking decisions).
- Many of the water rights in each basin are for irrigation.
- Ecology is not the manager of the Water Banks. Instead there are several individual water banks, each owned by a private party.
- Availability of multiple banks at different locations provides the ability to mitigate for new water uses at various locations.
Differences from the Colville River Basin

- There is surface water storage capacity available in Kittitas County in existing federal reservoirs at the upper end of the Yakima River Basin. This provides some flexibility to transfer summer water rights to be used for new purposes that include winter use.

- Expansion of irrigated lands has been identified as one potential future need in WRIA 59, but this is not one of the anticipated uses of the Kittitas County water banks.

- The economy of Stevens County is smaller and less diversified than Kittitas County, making it less attractive for private sector bidders to acquire water rights for uses within the county.

Dungeness River Watershed Example

Background

Washington Water Trust (WWT), a nonprofit organization, has been working with landowners and water right holders in the Dungeness River watershed (WRIA 18) since 2008 in an effort to improve and protect streamflows and water quality. In 2009, WWT offered a late-season water lease program to irrigators in partnership with the Dungeness Water Users Association and other irrigators in the watershed to add 2.5 cubic feet per second to river flows during the low flow period of August and September. Irrigators were paid by the acre to cease irrigation during this late irrigation season. The Department of Ecology (Ecology) has also been working with landowners in this effort as a watershed management program and administrative rule were being developed.

Administrative Rule

Ecology adopted an administrative rule, Chapter 173-518 WAC, with an effective date of January 2, 2013, for water resources management for the Dungeness River watershed. This rule established instream flows and partial year closures on the mainstem Dungeness River and closures for several smaller streams within WRIA 18. This rule applies to all surface waters and groundwaters within the Dungeness River watershed.

This rule places restrictions on future uses of water within the watershed, including reserving certain amounts of groundwater for future domestic supply, with these reserved amounts not subject to instream flows or closures. Limited amounts of water are also available for future use from the mainstem Dungeness River during certain months of the year.

Chapter 173-518 WAC limits the cumulative flow reduction resulting from new water uses in each stream to an amount approximately equivalent to the loss of 1% of the aquatic habitat during the critical period. It is called the maximum depletion amount and it cannot be exceeded. The critical period is defined in the rule as the 30-day period of lowest flow (WAC 173-518-020). Based on current conditions, Washington Department of Fish and Wildlife and Ecology have generally identified the critical low flow period as August 15 to September 15 for the Dungeness River and September 1 to September 30 for the small streams. The mitigation program will be managed to ensure that the maximum depletion amounts are not exceeded and to improve other aquatic habitat conditions.
A section of the rule, WAC 173-518-075, also describes a process for approval of a mitigation plan for the Dungeness Water Exchange, showing how new water users will demonstrate how they will offset the impacts of their proposed consumptive use of water.

Mitigation Plan

A mitigation plan dated December 3, 2012 was prepared by the Washington Water Trust (WWT), who has agreed to initially manage the Dungeness Water Exchange. This mitigation plan was approved by Ecology with a letter dated December 19, 2012. Based on the Ecology approval, the Dungeness Water Exchange is now authorized to accept payment to hold, sell, and assign mitigation credits as mitigation credits are available.

The primary purpose of the approved mitigation program is to fund projects that generate mitigation credits to be sold to prospective water users required by Chapter 173-518 WAC to mitigate for their impacts to small streams and the Dungeness River.

The following are some key elements of the approved mitigation plan:

- $450,000 start-up grant from Ecology for use during FY 2013-2014. WWT will repay this over time as transactions provide revenue.
- Purchase of water rights from the Dungeness Water Users Association members.
- Purchased water rights to be transferred into the State Trust Water Rights Program (Chapter 90.42 RCW).
- Dungeness River groundwater model used to provide estimates of impacts to streamflows based on proposed water uses.
- One shallow aquifer recharge project needed from 0.5 to 2 cubic feet per second on each side of the Dungeness River to offset future domestic uses.
- Mitigation plan intended to provide mitigation for 950-2,350 wells, enough for 5-50 years.
- Mitigation costs for purchasing credits for domestic wells are standardized and range from $1,000 for indoor water use up to $3,000 for extended outdoor usage. These costs may be adjusted from time to time but are intended to remain relatively predictable rather than fluctuating with market conditions.
- Revenue from selling mitigation credits can be used for physical projects to improve stream flows, such as ground water infiltration or other projects.

Possible Applicability to Colville River Basin

There are several factors in the Dungeness River Basin which might be an advantage in setting up a similar program in the Colville River Basin:

- Instream flows and stream closures are in place for each basin.
- New groundwater uses affecting surface waters are subject to instream flow rules for each basin.
• A detailed model is used in the Dungeness Basin to evaluate the impacts of specific water development proposals in order to assess the mitigation requirements. As noted above, a groundwater model has been developed by the USGS for the Colville River Basin (it is possible the model would need to be modified in order to support water banking decisions).

• Many of the water rights in each basin are for irrigation.

• Ecology is not the manager of the Water Exchange in the Dungeness River Basin.

Differences from the Colville River Basin

• There are extensive irrigation canal and ditch systems in the Dungeness River Basin that can move water from where it has been used historically to where it is needed for new uses.

Suggested Actions

This section identifies different kinds of actions that could achieve both of the objectives of slowing or halting relinquishment of water rights due to non-use and making it more attractive for water rights holders to leave their rights within WRIA 59 rather than selling them to water users in other places. These actions could include:

• Education and outreach to encourage water rights holders to use Washington State’s Trust Water Rights Program to avoid relinquishment.

• Payments to water rights holders where needed to either encourage placement of rights into the Trust Water Rights Program or to prevent out-of-basin sales.

• Purchase or lease of water rights by a water bank, to be held in the Water Rights Trust Program for future sale to new users to support local economic activity. A water bank could be either publicly- or privately-owned, or a public/private partnership could be established.

If a water bank is operated by public agency in WRIA 59, a revolving fund could be established, where initial expenditures to acquire water rights would be paid back by subsequent sale of water rights to new users.

A two-phased approach is proposed. Phase 1 would seek immediate funding from the Washington State Department of Ecology’s Office of Columbia River (OCR) for startup and to prevent near-term losses of WRIA 59 water rights from relinquishment. Phase 2 would seek funding for long-term actions to retain water rights in WRIA 59, and may include a combination of State, local and private funding sources. Both phases need some funding for local staff to carry out program activities.

One important practical consideration is that WRIA 59 does not have canal or ditch systems that would enable conveyance of water from one area to another. This means that transfers of water for new uses will need to rely on upstream/downstream relationships between the original location and the new location. Under State law, water typically can be transferred from an upstream location to a downstream location, but not vice versa. This means that acquiring or protecting existing water rights at locations higher in the basin (farther upstream) within
WRIA 59 provides greater value than at locations lower in the basin. For water rights of similar size, those higher in the basin should be a higher priority for acquisition or protection from relinquishment.

Potential Funding Needs

It is likely that to achieve substantial acquisitions by local government agencies, this would require some level of outside funding. One possible funding source is the Washington State Department of Ecology, Office of Columbia River (OCR). Under a public model, funding needs are estimated to be as follows:

**Phase 1:** $1.5 million to $2 million in seed money to provide economic incentives to prevent loss of water rights from relinquishment or sale out-of-basin for high priority rights. Quantity of water to be acquired will depend on negotiations and terms. Full acquisition on a permanent basis may cost on the order of $1,000 to $1,500 per acre-foot, with funds to be repaid through future sales or leases to new users (revolving fund). One-year leases may require only a fraction of that price per acre foot. However, both purchases and leases will likely incur costs for technical analysis or legal services, to be paid using the seed money identified above. Use of State funds from the Columbia River Basin Water Management Grant Program may require permanent dedication of a portion (e.g. 1/3) of the water rights acquired to meet streamflow purposes, with the remaining portion (e.g. 2/3) available for future out-of-stream uses.

$60,000 per year for two years to provide local staff to operate the program and educate landowners on relinquishment and the Trust Water Rights Program. Additional in-kind services from participating organizations may also be required to support startup.

**Phase 2:** Develop local support for additional funding from sources such as Stevens County, cities within WRIA 59, economic development sources and/or private sector sources. Seek matching funds for ongoing State participation to extend scale of program beyond Phase 1. Cost to be determined but maximum is likely to be on the order of $5 to $10 million, with much of that expected to be repaid through revolving fund activity in future years.

Under a private model, similar funds would be required; however these would be provided by private investors.

These funding needs should be considered very preliminary at this time. Additional development of an organizational framework and business plan will be needed in order to firmly estimate the funding needed to establish a water bank.

Organizational Considerations

In order to operate a water bank effectively, the organization with primary responsibility needs to have the capacity to perform several interrelated functions. These include:

- Receiving and administering funds for water bank purposes;
- Purchasing, leasing and selling water rights;
- Permanent tracking and recordkeeping, of purchases, sales, and/or mitigation credits associated with the banked water rights;
- Technical evaluations of water rights and the hydrological effects of transferring water rights to new users, locations, and/or seasonal timing (this function can be contracted to technical service providers);
- Executing agreements with the Department of Ecology under the State Trust Program;
- Outreach and communications to water rights holders, the agricultural community, local governments and development interests.

There are several options for forming a water bank in WRIA 59. Broadly speaking these break down into either a public option, private option, or public/private partnership.

Under a public option, one of the existing local government entities in WRIA 59 would take on the responsibility to form and operate a water bank. Candidates for this role include Stevens County government, the PUD, or the Stevens County Conservation District. Alternatively a bank could be established through an interlocal agreement among these organizations, with one of them taking lead responsibility for banking activity. Under either of these alternatives, establishment of an advisory board may be appropriate to guide banking activities.

Consideration has also been given to the Stevens County Water Conservancy Board (SCWCB) for operating a water bank. At this time SCWCB does not appear well equipped for this kind of role, because it is an all-volunteer organization with no paid staff and minimal capacity for program administration. However participation on an advisory board to help guide the water banking program could be an appropriate role for SCWCB.

A water bank would require a substantial amount of work to establish, and there could be a number of near-term transactions that would require administrative activities and professional services. Once this initial effort is completed, however, it is possible that water bank activity will be somewhat sporadic. Activity will occur when there is new growth in housing, new economic development by private-sector businesses, or other events that create a need for water. During the remainder of the time, there may be minimal activity beyond maintaining records and managing and monitoring the water bank's financial resources.

Because of the sporadic nature of transactions, it does not appear cost-effective to maintain permanent staff at a public agency solely to operate the water bank. If one of the public entities listed above takes on the water banking role, it is more likely that it can be overseen by a part-time position together with periodic attention from upper management and/or the elected board. Professional services could be provided through multi-year contracts with outside organizations, which could include either non-profit organizations with expertise in water banking, professional accounting or consulting firms, law firms or a combination of these service providers.

Under a private, for-profit model, an investor or group of investors would put up funding to acquire water rights, and would then market those rights to new users. This has been done in other areas of Washington State (e.g. Kittitas County) as well as other western states (e.g. Arizona, California). An advantage of this approach is that local governments would not need to participate in water banking activity and would not bear any of the risk or take on any of the costs. A disadvantage is that water rights made available for new uses will normally be sold to the highest bidder. If substantial economic development activities materialize within WRIA 59,
this could drive up the costs of gaining access to new water supplies, well beyond the cost under a public model. Prices exceeding $15,000 per acre-foot have been seen in other locations in the western states. However, it should be understood that prices will reflect market conditions, including the number of buyers and sellers participating in the market and the volume of water needs in comparison with available water supplies.

Under a private, for-profit model, investors would likely have motivations that differ from the objectives identified for the water banking concept. For example, a private bank would likely seek higher profits wherever they could be achieved. If sale of water rights to new users outside WRIA 59 is more profitable than sales to users in the basin, then a private bank would likely choose to sell water outside of the basin. Since WRIA 59 is at the upper end of the Columbia River Basin (at least within Washington State), water rights from this area can be transferred to a large area downstream, making them more valuable than water rights farther downstream in the Columbia River Basin.

Private, non-profit organizations can also own and operate water banks. The Dungeness River Basin example discussed in this memorandum is operated by the Washington Water Trust. The Deschutes River Conservancy is a non-profit organization based in the Deschutes River basin of central Oregon that operates a water bank.

Finally, a public/private partnership could be considered. Under this option, one or more public agencies such as those listed previously could enter into partnership with either a non-profit or for-profit organization, in order to access required functional capabilities and/or capital investment for water banking activities. A partnership with a non-profit would typically be undertaken in order to access functional capabilities and experience with water banking. A partnership with a for-profit investor or business would typically be used in order to access additional capital for water rights acquisitions or other operational costs, and would require a reasonable expectation of return-on-investment for the private party. In either case, contracts would need to clearly assign responsibilities, accountability, and financial arrangements among the public and private parties involved.

References
