



DEPARTMENT OF  
**ECOLOGY**  
State of Washington

## **2008 Report to the Legislature:**

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# **Water Banking in Washington State**

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# **2008 Report to the Legislature:**

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## **Water Banking in Washington State**

*by*  
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# Table of Contents

	<u>Page</u>
Summary .....	ii
Acknowledgements .....	iii
Introduction .....	1
What is Water Banking? .....	2
2009 Water Banking Legislation .....	3
Walla Walla River Basin Water Banking Provisions .....	4
Water Banking for the Yakima River Basin .....	5
Implementing Yakima Work Group Recommendations .....	5
Memorandum of Understanding between Ecology and USBR .....	7
Yakima Basin Reverse Auctions .....	7
2007 Reverse Auction .....	7
2008 Reverse Auction .....	8
Water Banking in Other Areas of Washington State .....	10
Watershed Groups .....	10
Columbia River Water Management Program .....	11
Examining Water Banking Programs in Other States .....	13
Recommendations for Water Banking in Washington State .....	14
Banking at the Watershed Level .....	14
Priority Processing .....	14
Dedicated Account .....	15
Valuing Land and Water Together .....	15
Purchasing Land and Water Together .....	16
Mitigating Local Economic Effects of Water Transfers .....	16
Conclusion .....	18
Appendix: Report on Water Banks in the Western States .....	19

# Summary

Washington State has had specific statutory authority to perform water banking since July of 2003 through House Bill 1640. It authorized the Washington Department of Ecology (Ecology) to use the Trust Water Rights Program in the Yakima River basin for water banking purposes.

Although the Yakima Water Exchange is not fully in place, work continues in implementing the recommendations of the Yakima Work Group, including:

- Ecology and the U.S. Bureau of Reclamation (USBR) have approved a memorandum of understanding<sup>1</sup> on joint management of trust water rights in the Yakima River basin.
- Ecology held the second (2007) and third (2008) reverse water right auctions in the Yakima River basin.

In 2009 the Legislature, in response to both Ecology's recommendations and the widespread interest in water banking, amended the trust water statute significantly. It now clearly authorizes Ecology to conduct water banking activities statewide. Other new provisions in the bill allow groundwater rights to be placed in trust, clarify conditions for placing water rights in or out of trust, and provide further protection of trust water rights.

Another piece of 2009 legislation related to water banking authorizes Ecology, in partnership with local leaders, to pilot an innovative water management approach in the Walla Walla River basin. It allows local irrigators greater flexibility in using their water as long as they agree to keep some water in the stream to help fish recovery.

Despite the new legislation, Ecology recognizes that challenges remain in implementing water banking or making best use of water banking opportunities. Legal challenges could require rule or statute amendments. The Department of Ecology's recommendations address:

- Managing water transfers at the local level.
- Providing priority processing for trust water rights.
- Allowing dedicated accounts.
- Combining the valuation and purchase of land and water rights in some cases.
- Mitigating the economic impacts of inter-basin water transfers.

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<sup>1</sup> [http://www.ecy.wa.gov/programs/wr/cro/images/pdfs/exchangecontract\\_012909.pdf](http://www.ecy.wa.gov/programs/wr/cro/images/pdfs/exchangecontract_012909.pdf)

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# Introduction

*“Water banking in its most generalized sense is an institutionalized process specifically designed to facilitate the transfer of developed water to new 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.”<sup>2</sup>*

Washington State has had specific statutory authority to perform water banking since July of 2003 through House Bill 1640. It authorized the Washington Department of Ecology (Ecology) to use the trust water rights program in the Yakima River Basin for water banking purposes. The legislation requires Ecology to report on water banking to appropriate legislative committees by December 31 of every even numbered year. RCW 90.42.130 (2) reads:

(2) By December 31st of every even-numbered year, the department shall submit a report to the appropriate committees of the legislature on water banking activities authorized under RCW 90.42.100. The report shall:

(a) Evaluate the effectiveness of water banking in meeting the policies and objectives of this chapter;

(b) Describe any statutory, regulatory, or other impediments to water banking in other areas of the state; and

(c) Identify other basins or regions that may benefit from authorization for the department to use the trust water [rights] program for water banking purposes.

Ecology filed the first report on December 31, 2004, and the second on December 31, 2006. This is the third report. Due to staff focus on the coordination of water banking legislation efforts up to and during the 2009 session, this report was published late. While we are disappointed that we did not meet the deadline, we believe that it is an asset to this report to be able to include the highlights of the new law.

**During the last legislative session the statute was amended significantly. It now clearly authorizes Ecology to conduct water banking activities statewide.**

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<sup>2</sup> Lawrence J. MacDonnell, "Water Banks: Untangling the Gordian Knot of Western Water," 1995.

# What is Water Banking?

The July 2004 Ecology report, “Analysis of Water Banking in the Western United States,”<sup>3</sup> discussed the wide variety of activities related to water banking:

*Water banks exist in almost all western states. There are significant differences in the way banks operate, particularly the degree of involvement surrounding sales, pricing, and price controls. Although the approaches may differ, the common goal is moving water to where it is needed most.*

Water banks can be involved to differing degrees in the exchange of water. Water banks have assumed the role of broker, clearinghouse, and market-maker. Brokers connect or solicit buyers and sellers to create sales. A clearinghouse serves mainly as a repository for information on bids and offers. A market-maker attempts to ensure there are equal buyers to sellers in a market. Many water banks pool water supplies from willing sellers and make them available to willing buyers.

Water banks can also provide a host of administrative and technical functions, for example:

- Determining what rights can be banked.
- Establishing the quantity of bankable water.
- Limiting, if necessary, who can purchase or rent from the bank.
- Setting contract terms and/or prices.
- Facilitating regulatory requirements.

The law authorizes Ecology to use water banking to:

- Mitigate for new water uses.
- Hold water for statutorily beneficial uses consistent with terms established by the transferor.
- Meet future water supply needs.
- Provide a source of water to third parties on a temporary or permanent basis, for any allowed beneficial use.

The report “Analysis of Water Banking in the Western United States”<sup>2</sup> defines water banking broadly as:

*“an institutional mechanism that facilitates the legal transfer and market exchange of various types of surface, groundwater, and storage entitlements.”*

Water banking may also be a tool to document transfers of water rights to and from the trust water rights program.

Under this statute, Ecology may not use water banking to:

- Cause detriment or injury to existing rights.
- Issue temporary rights for new potable uses, or
- Administer federal project water rights.

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<sup>3</sup> [Analysis of Water Banking in the Western States](#), Peggy Clifford, Clay Landry, and Andrea Larsen-Hayden, 2004. See Appendix.

# 2009 Water Banking Legislation

Ecology worked closely with stakeholders to produce draft legislation for water banking in the 2009 legislative session. Engrossed Substitute Senate Bill 5583 was signed by the governor on April 29, and it took effect on July 26, 2009.

The bill clarifies that Ecology has the authority to use the state Trust Water Program (RCW 90.42) for water banking purposes statewide. Water banking is not defined. Crafters of the bill were careful to describe banking as a verb (activity), rather than a noun (institution) in order to allow flexibility in bank formation and governance.

Other new provisions in the bill are:

- Groundwater placed in trust may be donated or purchased.
- A water right is considered to be exercised while held in trust.
- Ecology is directed to exercise its authority where appropriate to protect trust water rights.
- The first time the trust program is used for water banking in each WRIA, Ecology is required to provide electronic notice (email), and an opportunity for comment. The notice goes to affected local governments and affected federally recognized tribal governments. Local governments are defined as a “city, town, public utility district, irrigation district, public port, county, sewer district, or water district.”
- Donations of any length and short-term leases (five years or less) that go into trust now have a public notice requirement. Instead of using a newspaper, the notice may be posted on Ecology’s website, and local governments may be notified by email.
- The consumptive quantity of a water right when removed from trust is equal to the consumptive quantity prior to going into trust.
- Where nonuse of a water right is excused from relinquishment under the exceptions listed under RCW 90.14.140 (1), the amount of water eligible to put into trust will be calculated by looking at the highest use in the most recent five-year period before use ended. Where nonuse is excused under RCW 90.14.140 (2) (a) or (d), which exempt hydro power and municipal water supply water rights from relinquishment, water may also be put into trust, but the amount eligible will be based on historical beneficial use; and the total amount of water donated plus the portion continuing to be used cannot exceed historical beneficial use.
- Costs incurred by Ecology for water service contracts with federal agencies may be recovered from individuals receiving water.
- Carryover of water from one water year to another is allowed in the Yakima River basin if it will not negatively impact the total water supply available (TWSA). Return flows in the Yakima River basin must also remain available for TWSA and other uses.

It is possible that we will use the carry over provision from the new law (Sec. 2 (3)(d)) in the Yakima River basin in the 2009-10 water year. It is very likely that we will use it in 2010-11.

The City of Roslyn is likely to be the first beneficiary of the carry-over provision. They have acquired two water rights that they intend to convey to the trust water program to mitigate for out-of-priority use of their 1908 water right when the U.S. Bureau of Reclamation (USBR) imposes pro-rationing. We expect a portion to be partially assigned to the Ecology-USBR Storage and Delivery contract, subject to contract limits and conditions. This will provide water for USBR to hold in the Cle Elum reservoir equal to the impact of Roslyn's diversion on the Cle Elum River from September through March, when USBR sets flow targets for fish spawning and incubation.

Other water users that are likely to benefit from this new authority include:

- Post-1905 Yakima basin domestic water users above Easton and in the Cle Elum basin, who are subject to curtailment when USBR pro-rations water among the May 10, 1905 rights.
- Prospective Kittitas County ground water users above Easton and in the Cle Elum basin.

## **Walla Walla River Basin Water Banking Provisions**

Another piece of legislation related to water banking passed in the 2009 session. The Second Substitute House Bill (2SHB) 1580 authorizes Ecology, partnering with local leaders, to pilot an innovative water management approach in the Walla Walla River basin. It allows local irrigators greater flexibility in using their water as long as they agree to keep some water in the stream to help fish recovery. If it is not extended, this legislation sunsets in 2019.

Under this new law, Ecology is authorized to create a Water Management Board, which will replace the local watershed planning unit. The law identifies the membership, authority, duties, and responsibilities of the board. Ecology is required to review and approve water management plans jointly with this board. Ecology will also provide assistance on:

- Managing banked water.
- Developing guidelines for review and approval of pilot plans.
- Developing a conflict resolution process.
- Monitoring implementation of the pilot plans.

The law also provides protection from relinquishment to water users that commit to providing specified and approved stream flow augmentation through an approved water management plan or agreements to not divert.

Ecology recognizes that water banking will be part of this pilot effort, although differing from the rest of the state by being authorized under a different statute. We believe that where provisions of the statewide water banking law and the new Walla Walla law (SB 5800) overlap, the Walla Walla provisions will prevail.

# Water Banking for the Yakima River Basin

Ecology, together with the U.S. Bureau of Reclamation (USBR), formed a work group to help develop recommendations for forming a water bank in the Yakima River basin. The work group included a wide representation of stakeholders. Ecology's website contains a list of stakeholders and minutes from the work group meetings.<sup>4</sup>

The work group met regularly in 2003 to design a Yakima River basin water bank. They found that even those who had been working on water transfers were unclear on the exact meaning of the term "water bank." It took the committee several months to come to agreement, and the final definition was very broad.

Yakima Banking Definition: The work group determined, for the purposes of the group, that *any* way that water was held for future use was considered water banking. This included:

- Temporary leases and permanent purchases of water rights.
- The storage of water behind dams that the USBR operates.
- Acquisition activities of those using the state trust statutes including Ecology, the Washington Water Trust (WWT), the Washington Rivers Conservancy, USBR and the private sector.

The work group viewed the state trust program as the "vault" that the bank will use to hold water rights

## Implementing Yakima Work Group Recommendations

A report was completed which outlined possible future water banking activities in the Yakima River basin and other work group decisions.<sup>5</sup> The work group envisioned a Yakima Water Exchange, implemented by two groups:

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<sup>4</sup> For committee minutes go to <http://www.ecy.wa.gov/programs/wr/instream-flows/wacq.html> and click on Yakima River Basin Water Bank Project 2003, which is located near the bottom of the column at the right, then click on "meetings" which is located at upper left hand side.

<sup>5</sup> The report: Water Exchange in the Yakima Basin, October 6, 2003, is available at <http://www.ecy.wa.gov/programs/wr/instream-flows/wacq.html> Click on: Yakima River Basin Water Bank Project 2003, which is located near the bottom of the column at the right, then find the link to Water Bank Report Version 5.1 Final Draft (PDF) .

- A technical group based on the general make up of the Yakima Basin Water Enhancement Program’s Water Transfer Work Group. It would provide the technical support necessary to expedite temporary and permanent water right transfers.
- An executive council to guide organizational decisions.

The Water Transfer Work Group (WTWG) is a voluntary team of agencies and water users that meet to provide technical review of proposed water right transfers in the Yakima River basin. The WTWG is solidly in place and has been active since the 2001 drought. Meeting at least once a month, it serves all of the technical review functions described in the work group’s report. The WTWG process guides applicants to the types of water right changes and transfers that the state can quickly and easily approve.<sup>6</sup>

Water banking in the Yakima River basin using the trust water rights program has advanced since 2004, but in a limited fashion. Ecology has been utilizing water banking in the Yakima Basin to provide water where there are shortages during drought years<sup>7</sup> and to increase instream flows in key stream reaches.

The Yakima Water Exchange (YWE) has not yet been fully created. For example, an executive council has not yet been formed. It is not realistic for the YWE to be fully implemented until a private or public “market maker” with funding steps forward as a water seller on an ongoing basis. Key regulatory obstacles to marketing water rights have been identified and are well understood in the Yakima River basin. The transaction costs to transfer small quantities of water can be staggering. Banks can minimize transaction costs by grouping their purchases and sales. We believe other perceived obstacles will be overcome as prospective buyers and sellers are able to see “tried and true” examples of success.

One example of where water banking and the YWE could flourish is in providing a means to meet residential water needs. Ecology’s 2007 report to the Legislature in response to Senate Bill 6861 (“Focus on Finding Water Use Solutions for Camps and Cabin Owners”<sup>8</sup>) describes an example of how this can work.

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<sup>6</sup> A description of the Water Transfer Working Group review process, the criteria they use, their meeting agendas, minutes, and project descriptions is available at: <http://www.ecy.wa.gov/programs/wr/ywtwg/ywtwg.html>

<sup>7</sup> The 2004 water banking report to the legislature described the post 1905 banking effort where this was done.

<sup>8</sup> This report is available at: <http://www.ecy.wa.gov/biblio/0611016.html>

# Memorandum of Understanding between Ecology and USBR

Ecology and the U.S. Bureau of Reclamation (USBR) have approved a memorandum of understanding<sup>9</sup> to govern joint management of trust water rights in the Yakima River basin. Questions remain as to ongoing funding and staffing of the YWE, although Ecology in partnership with Washington Water Trust and Washington Rivers Conservancy, has applied to USBR's Water for America grant program to fund start-up of the Yakima Water Exchange.

## Yakima Basin Reverse Auctions

The year 2008 was the third year that the Department of Ecology has run a reverse auction for water acquisition in the Yakima River basin. Reverse auctions start the process of defining a market in a specific area and help determine prices. Reverse auctions are different from typical auctions in that they are run by the buyer, rather than the seller. The prospective buyer announces its intention to lease or purchase water rights and requests that potential sellers submit bids. The goal of the reverse auction is to increase water right market activity, which may result in:

- Increased water available for those who may not have other water supply options.
- A clearer idea of prices for water rights in the area.
- Increased activity in the local sale and lease of water rights.

To operate a reverse auction, Ecology announces interest in receiving bids from water right holders who are willing to sell or lease their water rights. The bids must be from those holding senior water rights currently used for irrigation. Bidders must decide what they think the water right is worth, and submit an offer. Ecology sets criteria for which bids will be accepted. Criteria include location, priority date, price, and the "value of the stream affected." Once the deadline has passed, Ecology uses the criteria to rate and select offers.

In the 2005 reverse auction, Ecology accepted five offers, resulting in leases for a total of 4764.6 acre feet of water.

## 2007 Reverse Auction

Ecology held a second reverse auction in early 2007. Ecology intended to use this auction to provide a portfolio of leases, dry-year options, and purchases for improving tributary stream and lower Yakima River flows. The goal was to benefit water quality and fish. Unlike the 2005 auction, we designed the 2007 auction as a sealed-bid, multiple-round auction.

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<sup>9</sup> [http://www.ecy.wa.gov/programs/wr/cro/images/pdfs/exchangecontract\\_012909.pdf](http://www.ecy.wa.gov/programs/wr/cro/images/pdfs/exchangecontract_012909.pdf)

Ecology had \$500,000 available<sup>10</sup> to lease or buy water rights. However, no sales or leases resulted from the reverse auction.

In November of 2007, the Department of Ecology commissioned Strategic Research Associates, working on behalf of Anchor Environmental, to convene two focus group sessions with irrigation water right holders within Kittitas County. The intent was to find out why the reverse auction had failed and what Ecology could do in the future to improve participation in auction projects.

Of the 24 people that took part in the focus groups, 23 remembered receiving notice of the auction. One person responded to the auction notice, but later chose not to complete the process. Everyone who received notice said they had made a conscious decision to not take part. The principal reason given by both groups was that they did not feel the reverse auction gave them the tools to establish a fair market price for their water rights. They also felt that Ecology's use of a reverse auction was a symptom of a hidden agenda. Ecology was seen to be anti-agriculture, and the goal of the program was suspect.

Participants offered three suggestions:

- Hold more community meetings where the program's host (preferable a disinterested party who could help with price setting) could field questions and explain the process in detail.
- Put a reporting process in place, easily accessible to potential sellers and leasers.
- Provide more details in correspondence to water right holders on the goals on the projects, as well as aspects of the leasing and selling processes.

## **2008 Reverse Auction**

The Washington Rivers Conservancy facilitated a reverse auction in partnership with Ecology, USBR, the Yakama Nation, and WDFW, to restore stream flows in Manastash Creek. This was the first reverse auction that was successful in producing permanent purchases of water rights. (Ecology's 2005 reverse auction in the Yakima River Basin produced leases) All of the water rights purchased were in Manastash Creek, which is a tributary of the Yakima River.

The reverse auction was held in February and March of 2008. Water right holders were invited to voluntarily auction a portion or all of their water rights for permanent transfer to the state's Trust Water Rights Program to be protected for instream flow. In total, nine bids were submitted, and five water rights were purchased. The purchased rights will improve flows in the creek by approximately 3.077 cubic feet per second and 937 acre-feet per year.

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<sup>10</sup> Funds for both reverse auctions were appropriated for Watershed Plan Implementation and Flow Achievement in Section 136 subsection 10 of the Supplemental Capital Budget for Ecology. For the 2007 reverse auction, the Bonneville Power Administration committed \$125,000 to the project through the Columbia Basin Water Transactions Program, which is administered by the National Fish and Wildlife Foundation.



# Manastash Water Acquisition Auction Funds

	Ecology Water Acquisition Watershed Planning Funds	Ecology Yakima Drought Mitigation Funds	Total Ecology Appropriated Funds	National Fish and Wildlife Foundation - BPA Funds	Total Costs
High Valley Ranch	\$ 261,289.00	\$ 261,289.00	\$ 522,578.00	\$ 321,652.00	\$ 844,230.00
Graf	\$ 8,461.50	\$ 8,461.50	\$ 16,923.00	\$ 10,417.00	\$ 27,340.00
Miller	\$ 10,992.00	\$ 10,992.00	\$ 21,984.00	\$ 13,532.00	\$ 35,516.00
Allen	\$ 13,539.00	\$ 13,539.00	\$ 27,078.00	\$ 16,666.00	\$ 43,744.00
English and Repsher	\$ 5,565.00	\$ 5,565.00	\$ 11,130.00	\$ 9,375.00	\$ 20,505.00
Total	\$ 299,846.50	\$ 299,846.50	\$ 599,693.00	\$ 371,642.00	\$ 971,335.00

# Water Banking in Other Areas of Washington State

## Watershed Groups

Many regions of the state have expressed considerable interest in the possibility of using water banking. A large number of local watershed planning groups (planning under Chapter 90.82 RCW) are examining the potential of water banking as one of many options to address water supply issues. Several planning groups have included water acquisition and water banking as options in their watershed planning documents:

- The Wenatchee Watershed Management Plan (WRIA 45), in particular, contains detailed recommendations for water banking in their watershed.<sup>11</sup> The plan identified several subbasins in the arid lower portion of the watershed where water banking might help to provide water where there is insufficient water to reliably meet future domestic or municipal water needs.
- Water banking is an element in the approved watershed plan for WRIA 30 (Klickitat). This element has strong support from the watershed committee.
- The Bertrand sub-basin of the Nooksack watershed (WRIA 1) is working on a cooperative, locally-managed water management program based on the achievement of instream flow targets. It will be implemented with contracts between water users and the Bertrand Watershed Improvement District (WID). It will function like a bank in that contracts will likely be provisioned to provide incentives for existing water rights holders and thus encourage their participation.
- The Dungeness watershed committee (WRIA 18) is working on language to establish a water bank in rule as a mechanism to address mitigation needs. Two reports on water banking have been completed: a feasibility study, and a strategy. The design for the bank is in progress, and will be the basis for mitigation required by the instream flow rule.
- An instream flow rule was adopted for the Walla Walla Basin (WRIA 32) in August of 2007 requiring mitigation for new outdoor uses. The Washington Water Trust (WWT), Ecology, and Walla Walla County worked to develop a mitigation plan revolving around the purchase of water, which will be transferred to the State Trust Water Program and held in a water exchange. Homebuilders would then be able to pay a set fee to the water exchange (cost of their portion of water acquired to mitigate) to allow them to use well water for use outdoors for gardening, watering and swimming pools.

In order to facilitate the start up of the Walla Walla Water Exchange, the WWT acquired two ground water rights, and a third purchase is pending. So far, one mitigation certificate has been purchased. WWT will administer the water exchange during this start up phase.

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<sup>11</sup>[http://www.co.chelan.wa.us/nr/nr\\_wen\\_watershed.htm](http://www.co.chelan.wa.us/nr/nr_wen_watershed.htm)

- The Lower Columbia Fish Recovery Board (lead agency of the watershed planning groups for WRIAs 25, 26, 27, and 28) is also very interested in creating a water banking system for the lower Columbia area.
- The WRIA 31 plan was approved with recommendations for water banking. There is significant interest in banking both surface and ground water.

Watersheds that have specifically mentioned water banking in their plans or otherwise expressed an interest are:

- WRIA 1 (Nooksack)
- WRIA 11 (Nisqually)
- WRIA 13 (Deschutes)
- WRIA 17 (Quilcene/Snow)
- WRIA 18 (Elwha/Dungeness)
- WRIA 22/23 (Chehalis)
- WRIAs 25/26 (Grays-Elochoman/Cowlitz)
- WRIAs 27/28 (Lewis/Salmon-Washougal)
- WRIA 30 (Klickitat)
- WRIA 31 (Rock/Glade)
- WRIA 32 (Walla Walla)
- WRIA 34 (Palouse)
- WRIA 35 (Middle Snake)
- WRIA 45 (Wenatchee)
- WRIA 46 (Entiat)
- WRIA 59 (Colville).

## **Columbia River Water Management Program**

On February 14, 2006, the Washington State Legislature passed House Bill 2860 (Chapter 90.90 RCW) creating a new Columbia River Basin Water Management Program. The bill directed Ecology to aggressively pursue development of water supplies to benefit both instream and out-of-stream uses through storage, conservation, and voluntary regional water management agreements. The bill also required that Ecology complete a two-part report on:

- The Columbia River's water supply.
- A forecast of future water supply and demand requirements.

On November 16, 2006, Ecology released the first report, which we have updated annually. Written in two sections, the report includes a water-supply inventory and a long-term water

supply and demand forecast. It also identifies conservation and storage projects that the state might use to meet future water needs.

The reports specifically mention water banking as a potential tool for managing water:

*“Water marketing, the purchase of existing water rights for allocation to new uses, along with water banking have been proposed as an approach to water management in the Columbia River Basin. Water marketing and water banking could reallocate existing water rights to new uses...*

*The legislation did not authorize water banking in the Columbia River Basin, but did not preclude Ecology from pursuing marketing options in the future. Ecology has established a pilot water bank project in the Yakima River Basin and that approach could be expanded in the future.”<sup>12</sup>*

The report also mentions the development of proposals for full and partial season water banking as a tool for solving problems and assisting conservation efforts for water users in the Columbia Basin counties of Grant, Adams, and Franklin.<sup>13</sup>

The Columbia River Water Management Program recommends water banking activities including acquiring water through purchase and conservation to meet needs both in streams and out-of-streams, and use of potential new storage facilities to hold water for future use.

The 2006 legislation authorizes Ecology to use money from the \$200 million Columbia River Account to acquire water rights. It also directs Ecology to inventory conservation projects, and identifies funding to implement the best projects. Ecology is to place net water saving from such projects in trust in proportion to the state’s financial contribution to the project.<sup>14</sup> The legislation set up mechanisms to assign the conserved water that has been placed in trust to other water uses and users through new permits.

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<sup>12</sup> Draft Programmatic Environmental Impact Statement for the Columbia River Water Management Program, Sec. 2.4.3, Water Marketing/Water Banking, p. 2-22 [http://www.ecy.wa.gov/programs/wr/cwp/draft\\_eis.html](http://www.ecy.wa.gov/programs/wr/cwp/draft_eis.html)

<sup>13</sup> Ibid, Sec. 2.1.2.2, Conservation Component p. 2-10

<sup>14</sup> See RCW 90.90.010(4).

# Examining Water Banking Programs in Other States

Recognizing the concerns related to the concept of water banking, Ecology set out to see how this water management tool was used in other states. We examined the water banking programs in all of the Western states and published a summary report in July 2004 (see Appendix). The report identified water banking as a method that is still developing, but has had some success. It is interesting to note that, regional banks that are run at a single or multiple watershed level were found to be more active than statewide banks.

Of particular interest to Ecology is a regional water bank in Oregon, the Central Oregon Water Bank. This bank brings together local irrigation districts, conservation interests and municipalities and is run by a private non-profit organization, the Deschutes River Conservancy.<sup>15</sup> The bank facilitates short-term and permanent reallocation of water among agricultural, municipal, and environmental uses. This includes providing groundwater mitigation credits as part of an Oregon State conjunctive management program in the basin.

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<sup>15</sup> Information about the water banking activities of the Deschutes Resources Conservancy may be found at the following link: [http://www.deschutesrc.org/What\\_We\\_Do/Water\\_Banking/default.aspx](http://www.deschutesrc.org/What_We_Do/Water_Banking/default.aspx)

# Recommendations for Water Banking in Washington State

Many areas of the state are interested in using water banking to address new water supply needs or to protect instream flows. It will take some time to develop markets and create water banks, and there will be challenges, including those related to stakeholder concerns about water banking. Still, there are clearly potential benefits from being able to efficiently trade water, especially in times of shortage.

Despite the new legislation, Ecology recognizes challenges remain in implementing water banking or making best use of water banking opportunities. Legal challenges could require rule or statute amendments. The Department of Ecology's recommendations address:

- Banking at the watershed level.
- Providing priority processing for trust water rights.
- Allowing dedicated accounts.
- Valuating and purchasing land and water rights together in some cases.
- Mitigating the economic impacts of inter-basin water transfers.

## Banking at the Watershed Level

Water banks in Washington should be created at the watershed level, or in some cases the multiple watershed level. We have found water banks to be easier to administer at the watershed level because the "rules" that govern water distribution are usually uniform within watersheds. This is due to many factors, including:

- Adopted instream flow rules.
- Federal reclamation projects, such as those in the Yakima or the Columbia Basins.

## Priority Processing

One of the key impediments to the efficient exchange of water through water banking is the time it takes to process a change application to utilize a previously banked water right. This is in part because Ecology is required to process change applications in order of receipt. There are long lines of applications for changing water rights in many areas of our state. The length of the line ahead of the change application to move a water right from the bank effects the time needed to legally move the water.

Currently water right changes that provide a substantial environmental benefit can receive expedited processing under the “Hillis rule.”<sup>16</sup> However, the rule does not allow expedited processing for the transfer of banked water for mitigation or to address agricultural shortages.

Amending the Hillis rule by adding mitigation as criteria for priority processing would greatly facilitate the banking process and make it more responsive to market pressures. This would allow priority processing for:

- Water right transfers used to deposit to, or remove water from the bank for mitigation.
- Mitigated permits relying on water rights in the bank.

## **Dedicated Account**

Ecology is authorized to use water banking to mitigate for new water uses and meet future water supply needs. The statute allows Ecology to use water banking to provide a source of water rights and make them available to third parties on a temporary or permanent basis. Individuals, utilities, or local governments must pay back the state if they receive water purchased with state funds. If Ecology had specific authority to place the revenue from sales of water into a dedicated account, the funds would be available to secure new sources of water.

## **Valuing Land and Water Together**

In the Yakima River basin, a large portion of the available water is managed by the USBR. USBR leases and purchases both water and land for environmental mitigation. Ecology partners with USBR on water leases and purchases in the basin, and sponsors much of the trading activity. Both agencies are important participants in creating an active water market. However, USBR is hindered by federal acquisition regulations that place strict limits on obtaining separate valuations of land and water. This has been an impediment to water trading in the basin. Federal regulations regarding land and water acquisition would need to be amended to alleviate this problem.

The federal restrictions fail to recognize that separating the sale of the land and the appurtenant water can yield a combined value that exceeds the appraised value of the land and water right together. Federal regulations do not allow the sum of the parts to exceed the value of the whole, and thus tend to undervalue water. Federal land appraisers are using the federal acquisition regulations to conduct water valuations, whereas expert water valuation specialists in the private sector are using less restrictive valuation methods to more accurately determine the value of water. This has put the USBR at a competitive disadvantage in the Yakima River basin market.

Federal regulations regarding land and water acquisition would need to be amended to alleviate this problem, perhaps by exempting water right purchases from certain land appraisal

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<sup>16</sup> The Hillis Rule, RCW 173-152-050(3)

restrictions. USBR is working in coordination with the Yakima Basin Water Enhancement Program's Conservation Advisory Group to try to get the federal regulations corrected.

## **Purchasing Land and Water Together**

It would be helpful, in some cases, for Ecology to have the ability to purchase land and water together as a package. This is particularly true where the land would serve important public needs, such as providing habitat benefits for critical salmon stocks. This is also true in cases where the sale of a critical water right is dependent on purchase of both land and water.

Many landowners are uncomfortable separating their water right from their land. In the current market, separation of the two can be an advantage or disadvantage depending on the local economy. Landowners are concerned about the effect the loss of the water right could have on the value and future use of the land.

It is also more difficult to determine market value of water separated from the land it is attached to. For this reason, the ability to purchase the land and water together provides an advantage to the purchaser.

While USBR may purchase land and water together, the legislature has previously limited Ecology to purchases of water. This is one of the reasons the two agencies have partnered on some acquisitions. In some instances, especially when timing is a factor, it would be helpful for Ecology to be able to purchase land and water together without needing to partner with another agency. As in previous instances when Ecology has partnered with other agencies to purchase the water portion of a land purchase, if the option were available for Ecology to purchase land and water together, Ecology would transfer any purchased land to a land trust organization to manage.

## **Mitigating Local Economic Effects of Water Transfers**

In response to concerns about the economic effects of out-of-basin water right transfers, Washington's Legislature appropriated funds for a study. Ecology contracted with Lawrence J. MacDonnell to assess the current situation, research how other states have addressed the issue, and develop recommendations. The resulting report to the Legislature, "Protecting Local Economies,"<sup>17</sup> published in November 2008, discusses legislative options to protect rural communities in Northeast Washington from disproportionate economic, agricultural, and environmental impacts when upstream water rights are purchased and transferred to a downstream watershed or county.

The report concluded that water right transfers can benefit the state's economy while preserving the environment, but that much can be done to reduce their potential adverse effects on local

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<sup>17</sup> Can be viewed at: [http://www.ecy.wa.gov/programs/wr/wrac/images/pdf/wa\\_local\\_econ\\_web.pdf](http://www.ecy.wa.gov/programs/wr/wrac/images/pdf/wa_local_econ_web.pdf).



communities. One way to maintain local control over regional water rights is forming rotational pools that structure water transfers to reduce their potential adverse effects on local communities. The report gave examples of two groups in other states that have organized to collectively manage their water rights. What these groups are doing is a form of water banking:

- The Metropolitan Water District of Southern California has entered into an agreement with the Palo Verde Irrigation District for a long-term water supply based on temporarily fallowing no more than 20 percent of the lands within the district at any time. To implement the agreement, lands are only temporarily taken out of irrigation on a rotating basis. The payments made to the irrigators to forego irrigation are largely used in the local economy.
- In the lower Arkansas Valley of Colorado, shareholders in the many mutual ditch companies in the area are working to pool their rights and, using rotation fallowing, create a supply of water that would be available for use elsewhere in the basin. Compensation is given to those temporarily foregoing use, and part of the funds go to improving irrigation facilities, including on-field practices. A water conservancy district, a form of local agency with general taxing and bonding authority, is orchestrating the effort, and a term has been coined for the program – “Superditch.”

The report stated that such proactive efforts are essential if local areas are to continue to derive benefits from the water once transferred outside the area.

“Water uses will inevitably change over time as new demands emerge and existing users decide to stop making their uses. Some of these uses will be within the same local area, but some will not. It is important for the state’s economy that water be available to support emerging beneficial needs, wherever they exist. Ultimately, if local areas want to retain the benefits of the water presently used they will have to develop ways to make some of this water available to others in return for revenues that can be reinvested in the local area.”<sup>18</sup>

Washington should investigate use of agricultural rotational pools as a banking tool to protect local economies. State, federal, and local governments; water trust organizations; agricultural groups; and other stakeholders should work together to encourage water right holders to form groups that can respond in a coordinated way to requests for water.

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<sup>18</sup> “Protecting Local Economies,” MacDonnell, p 21.

# Conclusion

The ability to use the Trust Water Rights Program to create and protect trust water rights for instream flow purposes provides the key mechanism to incrementally increase stream flows for fish, wildlife, and other in-stream values. The new water banking legislation amends the trust water statute to broaden the scope of the program, and will encourage the use of water banking as a tool to manage water in many areas of the state.

# Appendix:

## Report on Water Banks in the Western States

Ecology contracted with Clay Landry and Andrea Larsen-Hayden of WestWater Research, to organize and help develop a report on water banking. The report is based on research provided by Ecology's Peggy Clifford, with editing by Ecology's Christine Corrigan. Published in July of 2004, the report is entitled "Analysis of Water Banks in the Western States," by Peggy Clifford, Clay Landry, and Andrea Larsen-Hayden. It is available on Ecology's website at <http://www.ecy.wa.gov/programs/wr/instream-flows/wtrbank.html>

The report provides an analysis of water banking legislation, policies, and programs in 12 western states:

- Arizona
- California
- Colorado
- Idaho
- Montana
- Nevada
- New Mexico
- Oregon
- Texas
- Utah
- Washington
- Wyoming.

A primary purpose is to identify banking programs and structures that promote and enhance environmental trades. The analysis examines each state individually, beginning with the legislative history of the development of the banking programs. The report also provides detailed descriptions of banking rules and levels of activity, and maps of the areas served in each state.

This report provides useful information for groups who are deciding whether a water bank might be a useful water management tool for their region, . The review of existing water banking programs includes an assessment of program pricing structures and transaction contracts. The analysis generated a set of questions that should be addressed, and some guidelines to consider, when creating a water bank.