

Protecting water supplies for people, farms and fish: goals and accomplishments 2014-15

The Water Resources Program (WRP) in 2014-15 is making gains in processing water rights, protecting instream flows, developing new water supplies and enforcing water resource regulations across the state.

In brief:

Improved customer service

Thanks to the integration of Lean efficiencies in the work of the WRP, the program is paring down the number of pending water right applications statewide. For the third consecutive fiscal year we have exceeded 500 water right decisions.

Other improvements in WRP customer service are coming from the new certified water right examiners program, and the completion of almost paperless processing of well-drilling and decommissioning notices.

Office of Columbia River successes continue with launch of Yakima Integrated Water Plan

Office of Columbia River (OCR) successfully launched the Yakima Basin Integrated Water Management Plan in 2013, and work is nearing completion on the Manastash Creek project to conserve water for irrigation and stream flows.

OCR has developed 376,000 acre-feet in new water supplies since the program's inception in 2006. The program will be seeking additional funding for projects that will bring another 200,000 acre-feet of new water to Eastern Washington in coming decades.

Legislative funding to solve water supply problems

In western Washington, WRP is working aggressively to find long-term solutions to water supply problems in the Dungeness and Skagit basins. The Legislature provided funding for the Dungeness, as it has for work in the Skagit Basin, to develop large and small mitigation projects to offset current and future water uses. Ecology and local partners are advancing projects in both watersheds to provide mitigation water and restore flows.

On Oct. 3, 2013, the Washington State Supreme Court overturned a 2006 amendment to the Skagit River Instream Flow Rule which provided a legal source of water supply for approximately 450 homes and businesses using wells for their water. Ecology is aggressively pursuing mitigation solutions to provide water supplies for affected water users in the Skagit basin.



Photo: WA State Conservation Commission

Our state's agricultural production brings in over \$10 billion a year. Helping ensure there is adequate water to support farms is a WRP priority.

WRP continues to work on stream flow protection in the state. The Dungeness Instream Flow Rule (adopted 2013) has allowed development to continue in the Dungeness basin. Rule making is under way in the Spokane River Basin to protect the river and the state’s interests in that watershed in the event of interstate legal conflict over water.

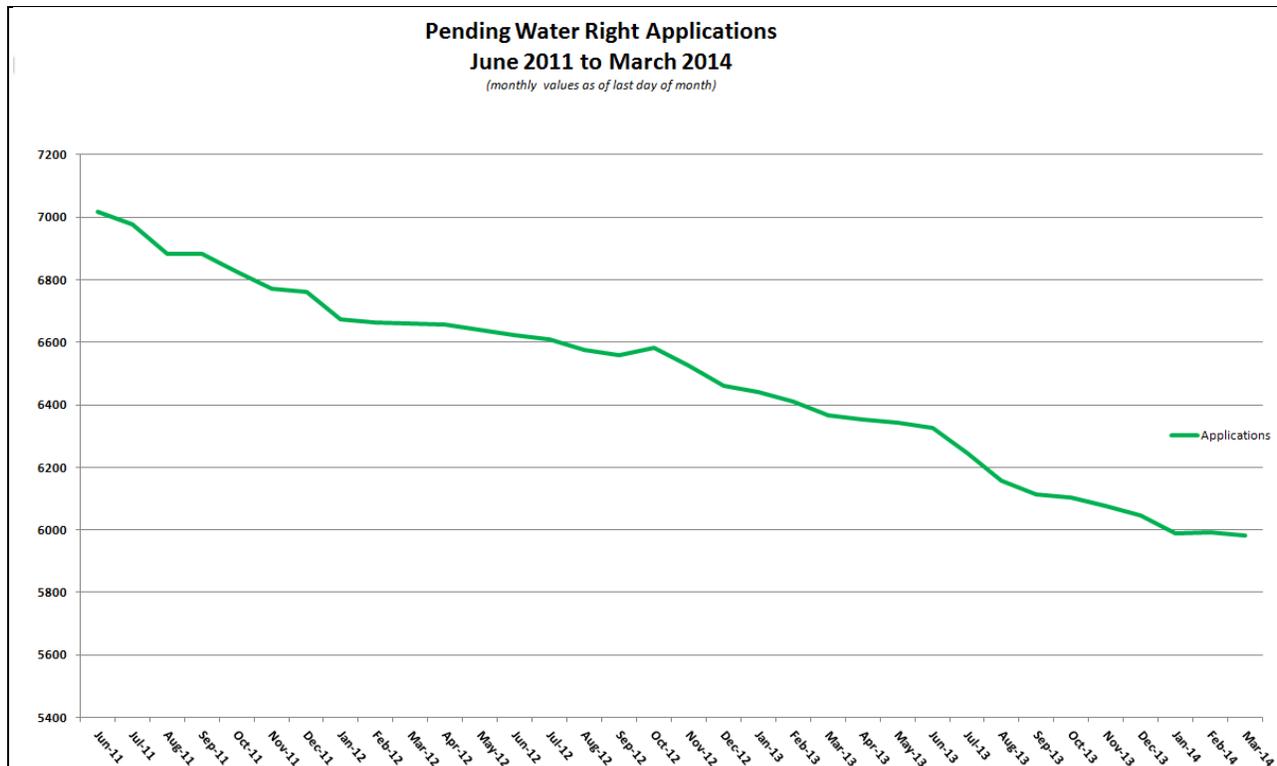
In more detail:

Reaching and exceeding target for processing water rights

Ecology has exceeded the Legislature’s goal of 500 water right decisions during fiscal year 2013-14.

The Legislature’s approval of a slight increase in the WRP operating budget for fiscal year 2013-15 has been critical to this success. The program is operating with 126 FTEs in 2014-15, down from a program high of 165 FTEs at the start of 2009-11.

Working closely with the Boeing Corp. and applying Lean concepts, the WRP has made major strides in its water right processing. From July 1, 2011 to March 30, 2014, the WRP reduced pending water right applications from over 7,000 to 5,983. The latter figure includes the 1,139 new applications received in that period. (Without the new applications, the number of pending applications would be down to 4,844.)



Water projects benefit the economy, protect stream flows

Ecology's water managers are committed to ensuring adequate water supplies for current and future uses. This means providing water for economic development while sustaining stream flows for fish and wildlife habitat. Some of the water projects being supported by Ecology with approvals and/or funding in fiscal year 2013-14 include:

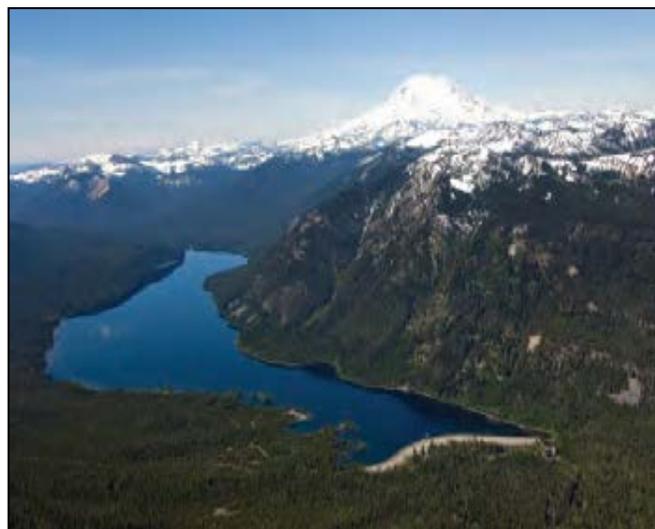
- Thirteen grants awarded to 12 jurisdictions and water management partners to help improve local and regional water supplies in basins with watershed grants. The grants totaling \$7.9 million will improve water delivery infrastructure, fund surface or groundwater storage feasibility studies and acquire senior water rights in water-short basins.
- Construction of 90,000 feet of pipes to bring Yakima River water to prime wine grape growing land on Red Mountain near Benton City. The \$10.5 million project is expected to yield \$9.2 million in economic benefits annually, create over 100 jobs and add 11,005 acre-feet of water to a chronically low-flowing stretch of the Yakima River.
- Acquisition of water rights from the Big Lake Water Association, a public water system near Mount Vernon. These water rights will provide a legally-secure water supply for existing water users in the area and provide water supply for new homes, while protecting tributary stream flows in the Skagit River watershed.

Manastash Creek project: First step in Yakima Integrated Water Management

Manastash Creek, a tributary of the Yakima River in central Washington, provides irrigation water to approximately 4,500 acres of farmland.

The conversion of 3.2 miles of an unlined irrigation canal to a pressured pipeline for delivery of water to lower Manastash Creek will help farmers use water more efficiently. Fish will benefit by the addition of 1,300 acre-feet of water to a stretch of the creek that goes dry in the summer.

Construction of the pipeline is scheduled for completion in the spring of 2014. The cost is being shared between Ecology, the U.S. Bureau of Reclamation, Kittitas Reclamation District and Manastash Creek water users.



Yakima River Basin

The Manastash pipeline is the first construction project of the 30-year Yakima Basin Integrated Water Resource Management Plan.

The plan is designed to meet future water needs for farmers, fish and communities in the Yakima Basin. In fiscal year 2013-14 the plan is designed to complete a slate of conservation and habitat improvement projects, and fund feasibility and design studies on major new water supply and fish passage projects, including:

- A drought relief pumping plan at Kachess Reservoir.
- Raising the pool at Cle Elum Reservoir and adding fish passage.
- Storing water at Wymer and increasing storage capacity at Bumping Reservoir.

The Yakima plan may eventually cost as much as \$3.8 billion over 30 years but that total will be shared by state, local and federal partners. An initial investment of \$45 million by the state for 15 early action projects is expected to yield nearly \$90.7 million in economic benefits. For more on those projects and other benefits of the integrated plan, go to <http://www.ecy.wa.gov/programs/wr/cwp/YBIP.html>

Dungeness funds to improve stream flows, provide water for development

The 2013 Legislature approved \$2.05 million to develop projects and acquire water rights to enhance stream flows, as wells provide mitigation water for rural development in the Dungeness watershed on the Olympic Peninsula.

The Dungeness water management rule requires mitigation of any new groundwater withdrawals. The mitigation requirement, however, is not impairing development in the watershed. Since adoption of the rule in January 2013, more than 40 water mitigation certificates have been issued, allowing new construction and remodeling to move forward in the basin.

In 2014 contracts will be written for, and/or construction will begin on, a final list of projects determined by the local partners who worked with Ecology on drafting and adopting the Dungeness rule.



Dungeness River at low flow

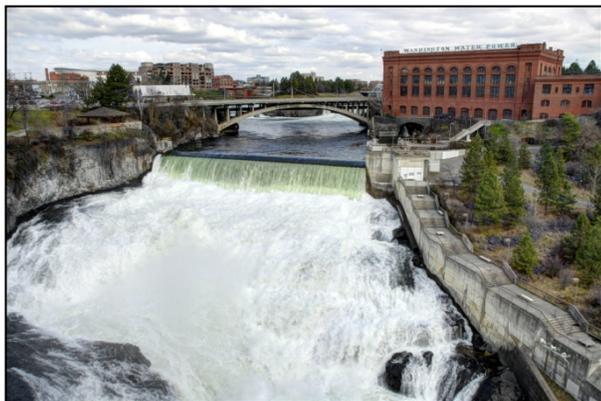
Development of mitigation programs, water right acquisition in Skagit basin

Ecology is working with local governments, tribes, water utilities and landowners to develop sustainable water supply solutions in the Skagit basin after the Washington State Supreme Court overturned the 2006 amendment to the 2001 Skagit River Instream Flow Rule (adopted April 14, 2001).

On Oct. 3, 2013 the court ruled that Ecology exceeded its authority establishing water reservations for domestic use in the amendment to the Skagit Rule. The water reservations provided a legal source of water for homes and businesses to use when the Skagit River falls below the instream flow levels. The court's decision made water uses started after the adoption of the 2001 rule subject to curtailment when the instream flows are not met, which occurs frequently throughout the year.

To mitigate water uses that began between April 14, 2001 and Oct. 3, 2013, Ecology is actively pursuing a range of mitigation projects to offset domestic water uses. The projects include acquiring existing water rights and reallocating this water to well users, investing in existing public water systems to provide water supply, and capturing water during the wet season and releasing water during periods of low stream flows.

Rule making under way to protect flows in the Spokane River



Spokane River

Ecology has proposed an instream flow rule to preserve sufficient water in the Spokane River to protect instream resources such as fish, wildlife, recreational uses, water quality and livestock watering.

The rule is also a first step in establishing Washington's interests in the Spokane Basin as a shared resource with Idaho. Having an instream flow rule in place will help defend Washington's interests in the Spokane River and the Spokane Valley Rathdrum Prairie Aquifer in the event of an interstate legal conflict over water.

Ecology is working toward adoption of an instream flow rule by the end of 2014 or early 2015.

Ensuring compliance with water law protects state's water resources

In 2013 and 2014, Ecology took actions around the state to ensure compliance with Washington state water law.

When Ecology receives reports of illegal water use, our first option is not to prosecute or penalize property owners but to help them come into compliance with water resource regulations.

Several landowners in Whatcom County have been using water from the Nooksack River to irrigate approximately 800 acres, without adequate water right permits. Ecology is working with them to gain authorization for their water use in a coordinated permitting process. The permitting process will help landowners obtain "interruptible" water supplies, meaning diversions of water can occur only when flows in the Nooksack River are at or exceed instream flow levels. If approved, these permits will enable out-of-stream water use while protecting critical flows in the Nooksack River.

In Grant County, Ecology fined a Columbia Basin irrigator \$59,443 for illegally irrigating cropland with artificially-stored groundwater from the federal Columbia Basin Project. In total, more than 100 acre-feet of water have been pumped and applied outside the authorized location since 2012. The violation occurred in Frenchman Hills near Royal City.

In the summer of 2012, Ecology offered technical assistance to correct the violation. But the irrigation operations continued even after Ecology issued an order to stop irrigation. Ecology has agreed to excuse \$19,443 if the irrigator pays \$40,000, does no more illegal irrigation and meets all the terms of the water use permit.

Dam safety

The Dam Safety Office (DSO) received national recognition by the American Society of Civil Engineers (ASCE) in 2013. The ASCE's "2013 Report Card for Washington's Infrastructure" gave our dams the highest grade of the nine infrastructure areas studied and evaluated. The DSO received a "B", the only grade above a "C" for Washington. And our "B" for dam safety looks to be higher than any other rated state – America's overall GPA for dams was a "D".



DSO engineer on an inspection

The excellent performance of the DSO staff continues into this year, despite being stretched to the maximum staff-wise. Business has gone on pretty much as usual, although because of staffing issues the DSO is a bit behind in their regularly scheduled inspections. Regulated dams are categorized by downstream hazard risk, and those with the highest hazard risks are inspected every five years.

- For 2014, there are 100 inspections scheduled, and 24 have already been conducted.
- In 2015 there are 66 inspections scheduled.

Periodic inspections are just one part of DSO work. New construction is also a

major focus. The DSO monitors the construction of new dams and modifications to existing ones. In 2014, there have already been more than 12 construction applications received.

In the 2013 report, the ASCE cautioned: "Continued funding of dam safety programs is essential to maintain or improve upon the current level of dam safety in Washington." One important type of funding would be for private and public dam repair. The DSO inspects and writes reports on what needs to be repaired, but dam owners do not always have the money needed to make the necessary corrections. This puts other homes and property potentially in jeopardy and becomes a statewide safety issue.

Implementation of certified water right examiners program

The Certified Water Right Examiner (CWRE) program is underway. The Legislature created the CWRE program, directing Ecology to certify qualified individuals as water right examiners to conduct proof examinations of perfected (fully developed) water right permits and change authorizations. This expedites the final step for certifying perfected water rights. It is a good example of how public and private partnerships can benefit the citizens of Washington.

Ecology adopted the CWRE rule (WAC 175-165) in 2012 which established a framework for implementing the program. An initial round of applications and testing is completed, and there is now a list of certified water right examiners posted online. It was posted in August 2013, soon after a revision to the rule took effect.

Ecology has begun notifying water users with fully-developed water rights under permit that the next step in certifying their right is to hire a certified water right examiner.

Water Resource IT and Well Construction

Water Resources' IT section, working closely with our Well Construction + Licensing Business Team, completed work that resulted in the almost completely paperless processing of many types of well-drilling and decommissioning notices. For example in 2013, of 4,681 resource protection wells notices, only 4 were submitted on paper. This calculates to just about 0% paper! Roll-outs started in August 2008, and through the end of 2013 some 53,800 notices have been completed and processed electronically for drilling or decommissioning wells. Ecology staff was saved the time of entering data from 53,000 notices, and well-drillers have a more streamlined business practice.



Ecology hydrogeologist inspecting a well

On the heels of the electronic notices success, IT /Well Construction is close to going live with electronic well log (reports) submission. It is expected this will enable over 70% of well-logs to be submitted and processed electronically, a real boost in efficiency both internally and externally. Now in the final stages of testing, we expect this application to go live in the spring/summer this year.

The IT section is also tackling the big job of redeveloping our water rights tracking system. The existing system is old and error-prone, and a more modern application is needed. The new system will be more easily updatable, better able to respond to users' needs, and easier for making corrections. There will also be some new functionality. We expect this to go live in the spring of 2015.

Odessa Groundwater Replacement Program

Office of Columbia River (OCR) has been working since 2004 to fulfill a promise the state took up in an MOU that was signed between the U.S. Bureau of Reclamation (BOR), three Columbia Basin Irrigation Districts and the State of Washington. One element of the MOU was to cooperatively conduct the Odessa Subarea Special Study. Ecology and BOR jointly issued the Odessa Subarea Special Study Environmental Impact Statement in August 2012, which laid out the environmental impacts of replacing declining groundwater users in the Odessa subarea with Columbia Basin Project surface water.

In March of 2014, Ecology issued a secondary use permit to BOR to allow 164,000 acre-feet (ac-ft) of water to be delivered to 70,000 acres of farmland in Adams, Grant, Franklin and Lincoln counties within the boundaries of the Columbia Basin Project. In addition, OCR has secured 30,000 ac-ft of water supply through its Coordinated Conservation Program with the three Columbia Basin Irrigation

Districts, and another 30,000 ac-ft of water from the Lake Roosevelt Incremental Storage Releases Program. In all, approximately 90,000 acres of Odessa Subarea lands will be switched from declining groundwater to surface water.

Getting the replacement surface water to these lands requires a number of infrastructure improvements including the installation of the Weber Siphon Complex in 2012, expanding the East Low Canal in 2013 and additional siphon installation in 2014. BOR and East Columbia Basin Irrigation District signed a water service contract in March 2014 to deliver some of this water to farms as early as this year. These efforts fulfill a top priority of OCR to find alternatives to groundwater on those same Odessa subarea lands, which also support \$200 million of irrigated crops and 4,500 jobs annually.

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