



2006 Report to the Legislature

Potential Water Solutions for Domestic Surface Water Users

Kelsey Sinclair
Department of Ecology
Water Resources Program, Central Regional Office
15 West Yakima Avenue, Suite 200
Yakima, WA 98902

December 2006

Publication No. 06-11-044

This report is available on the Department of Ecology website at:
<http://www.ecy.wa.gov/biblio/0611044.html>

For additional copies of this publication, please contact:

Water Resources Program Publications
P.O. Box 47600
Olympia, WA 98504-7600
E-mail: WRPublications@ecy.wa.gov
Phone: (360) 407-6600

Refer to publication number 06-11-044

If you need this publication in an alternate format, please call the Water Resources Program at (360) 407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call (877) 833-6341.

EXECUTIVE SUMMARY

Hundreds of surface water users in the Yakima Basin are under court order to cease all water use, including their in-house use, during dry years. Many of the water users being told to shut off are camps and cabin owners, including both seasonal and permanent residences, that have been using surface water since the 1930's or earlier. These individuals and camp representatives understand that future shut-offs are inevitable and have asked the State Legislature for help. The Legislature responded by passing Senate Bill 6861 directing the Department of Ecology (Ecology) to report on *“the issues surrounding competing users of surface water in areas where domestic water use has been curtailed by a court order and to suggest legislation or other solutions for resolving conflicts over limited water resources.”*

The worries over water for camps and cabin owners began in 2001 when a court order was entered in Yakima County Superior Court (the Court), requiring junior water right holders to shut off while the US Bureau of Reclamation (Reclamation) was rationing proratable water users. See the distribution of junior water right holders in Figure 1 below.

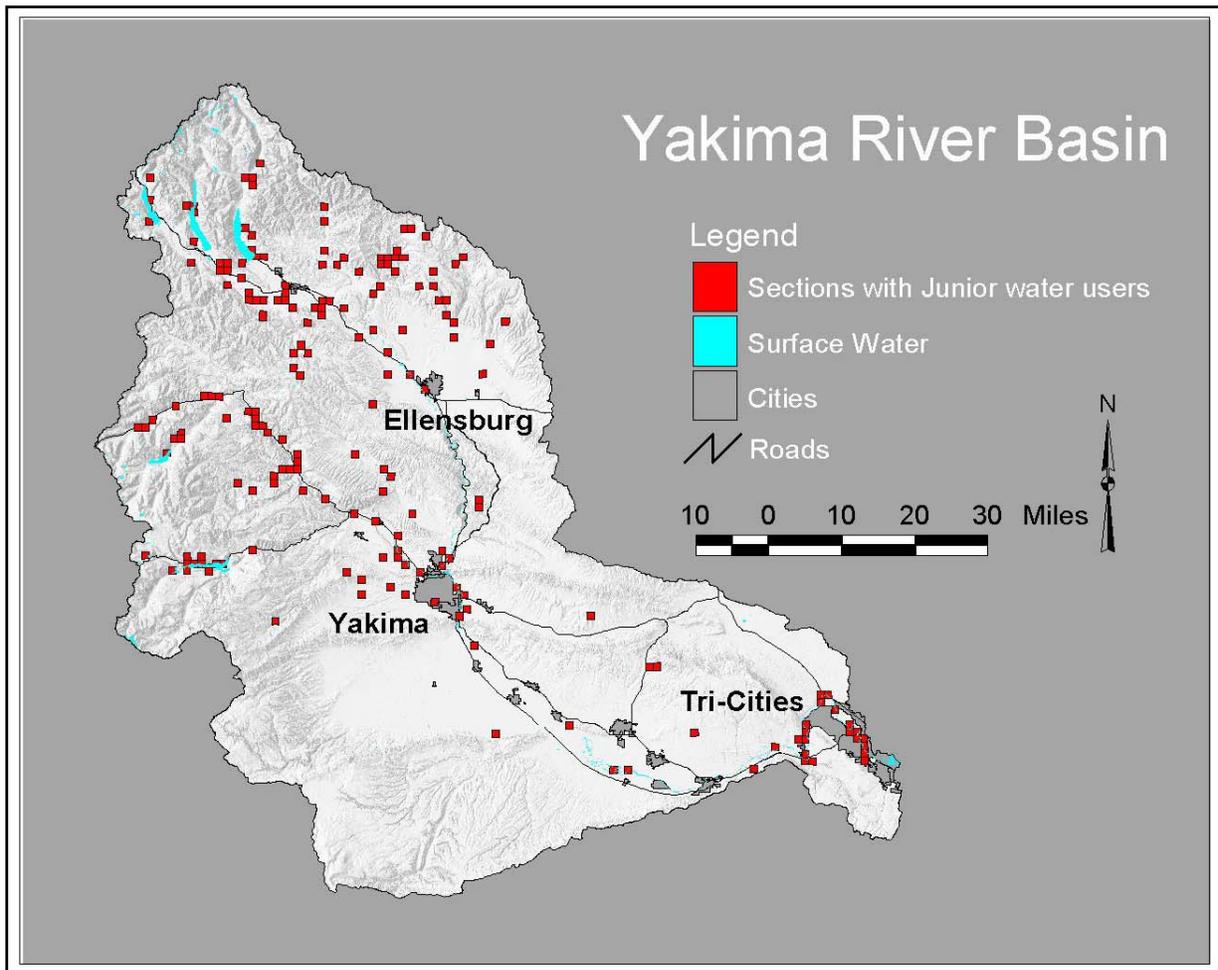


Figure 1: This map of the Yakima River Basin includes all the sections highlighted in red that contain junior surface water right holders. Their distribution is mainly in the higher elevations of the eastern Cascades.

The order only pertained to the 2001 irrigation season, and junior water users that rely on surface water for their in-house use were spared from curtailment. However things changed when severe drought conditions occurred again in 2004. The Court's ruling in 2004 stated that *all* junior surface water users (including domestic users) were ordered to shut-off any time Reclamation rations proratable water users in the future, not just during the 2004 irrigation season.

Proratables are water users that developed water rights associated with Reclamation's withdrawal of all unappropriated surface water in the Yakima Basin on May 10, 1905. Reclamation's withdrawal of water reserved their right to develop reservoirs and extensive water delivery systems across the Yakima Basin. Reclamation rations proratables when it determines there is not enough water to satisfy senior water rights (those with priority dates before 1905). Once rationing is announced, junior water right holders (those with priority dates after 1905) are notified that they cannot divert water.

In response to Senate Bill 6861, Ecology conducted a survey to identify the number of water users that rely on surface water, how they use water (in-house and/or outside irrigation), and how much water they use. Public outreach for the survey included meetings with camps and cabin owners, press releases, radio interviews, newspaper advertisements, an interactive website, and a mass mailing of the survey.

Ecology received 285 completed surveys from water users with and without water rights. Using information obtained from the surveys, information from the Court on confirmed post-1905 water right holders, and information from Ecology's efforts to mitigate for out-of-priority use during the 2005 drought, Ecology estimates that a maximum of 200 acre-feet per year of water is needed to mitigate or compensate for out-of-priority domestic water use. This estimate includes about 100 acre-feet for systems serving small towns and other Class A municipal group systems, with the remainder for smaller users.

Ecology has provided Legislature with the following possible options to address the needs of domestic surface water users. Of course the Legislature is not limited to the options presented here and may choose a combination of options, or something completely unique.

- Option 1: a form of water banking. This idea is based on an understanding that Ecology and Reclamation would work together to manage mitigation credits for purchased water to compensate for out-of-priority water use. Hypothetically, the Legislature may choose to fund the purchase of water and operational costs, or make an initial investment to establish a water bank that could be paid back by the water users.
- Option 2: well drilling. Currently, ground water is exempt from permitting for single and group domestic uses less than 5,000 gallons per day. Individuals seeking a more reliable water source have the option to drill a well; however ground water may also eventually be subject to curtailment.
- Option 3: small surface water exemption. The legislature could provide a small surface water exemption similar to the ground water exemption. A prospective exemption would provide a legal basis for those without rights to divert water in abundant water years, but all exempt and post-1905 water users would still be

curtailed in dry years. A retrospective surface water exemption would be highly controversial and likely challenged in court by senior water users.

- Option 4: taking no action. If no action is taken, Ecology will still be responsible for a compliance and enforcement program to protect existing senior water rights in times of drought. Monitoring all out-of-priority water users, especially those in remote areas is very expensive.

Ecology recommends Option 1, a form of water banking, as the most viable option based on expense to water users and taxpayers and its potential to help the most water users. Water banking has the most potential to resolve a wide variety of future disputes over water rights with more certainty for the affected cabin owners. While water banking is based on a complex agreement between Reclamation and Ecology, much of the planning and negotiations have been completed.

Water banking in the Yakima Basin could be fully funded with an initial investment of approximately \$300,000 based on an estimated purchase price of \$1,500 per acre-foot for 200 acre-feet of water rights. This sum could be repaid as water users enroll in a program to purchase mitigation credits for their out-of-priority water use. The cost to individual water users will vary, but should be affordable on a per cabin / residence basis. For example, an average city lot with irrigation in Eastern Washington uses approximately 400 gallons per day, or about 0.44 ac-ft / year. At \$1,500 per acre-foot, this would equate to a cost of \$672. Most of the water users surveyed are seasonal cabins without irrigation, so mitigation costs for these users could be on the order of \$150.