

Upper Kittitas Ground Water Rule

The Department of Ecology (Ecology) adopted a rule for managing groundwater resources in Upper Kittitas County, effective January 22, 2011. The formal adoption process included a public hearing and other opportunities for public comments. (See map on page 7 for area of Upper Kittitas County served by the rule.)

Q: Why are new groundwater withdrawals a concern in Upper Kittitas County?

A: Currently, new unmitigated groundwater withdrawals are halted until more is known about the aquifers in the upper county and how they interact with surface water tributaries and the Yakima River.

Groundwater aquifers feed the Yakima River and its tributaries year round. Pumping from those aquifers diminishes stream flows relied upon by senior surface water-right users, and reduces legally required flows for fish. Groundwater withdrawals in Upper Kittitas County may intercept these water supplies and prevent the water from reaching users downstream that rely on this water for their livelihoods.

Information is lacking about groundwater resources in the upper areas of the county where development relying on permit-exempt wells (defined in text box on page 5) is occurring. This lack of data hampers Ecology's ability to make sound water management decisions. A study of these aquifers is underway to help provide information needed to make informed groundwater management decisions in the area.

Mitigation required for all new groundwater uses

Allowing new unmitigated withdrawals that likely deplete an already over-committed water supply is unfair to senior water right holders, harmful to the water-dependent economy and fish runs, and bad public policy. Protecting these resources preserves the \$1.5 billion agricultural economy in Kittitas, Yakima and Benton counties (information at: http://agr.wa.gov/AgInWA/Crop_Maps.aspx, Washington Department of Agriculture). It also protects those who have a first right to the water (senior water rights).

If you are not in an area currently serviced by a water purveyor, the best assurance for securing a new year-round water use is to obtain coverage under a senior water right, commonly referred to here as *mitigation*. Development may proceed where new water withdrawals are mitigated, and granted approval by Ecology in the form of a "water-budget-neutral" (WBN) certificate (discussed on pages 2+3).

MORE INFORMATION

The Upper Kittitas Ground Water Rule (Chapter 173-539A WAC) became effective in January 2011. Implementation of the rule is intended to prevent further depletion of groundwater resources. However, the effectiveness of the rule may not be known with certainty for some time.

Mitigation is a way to prevent impacts to existing water rights and stream flows and still allow for new uses. This is typically done by obtaining coverage under a senior water right.

Contact information

Stuart Luttrell
Central Regional Office
1250 W. Alder St.
Union Gap WA 98903
Phone: 509-249-6298
Email:
stuart.luttrell@ecy.wa.gov

For more information on water resources in Washington, visit our website at:
<http://www.ecy.wa.gov/programs/wr/wrhome.html>

Rule text:
<https://fortress.wa.gov/ecy/publications/publications/173539a.pdf>

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Water supplies approved by this process will remain intact during years of drought when unmitigated water uses may be limited or completely curtailed. New developments whose water use are supported by mitigation and a WBN certificate will be of much greater value than those without.

Kittitas County and Yakima River basin stakeholders are pursuing ideas for alternative approaches to provide domestic water supplies. These approaches will take time to develop and will ultimately need approval from Yakima River basin stakeholders to be operational.

Q: How may the rule apply to me?

A: The rule closes portions of Upper Kittitas County (see map on page 7) to all new groundwater withdrawals pending results of a groundwater study. The study is on schedule to be completed in 2013. There are three exceptions to the rule, described in WAC 173-539A-040 (refer to rule for exact text). The exceptions are:

- Uses determined to be Water Budget Neutral (WBN). WBN is a determination by Ecology that the mitigation amount (from senior water rights) is equal to or greater than the consumptive¹ amount of the proposed new use of groundwater. The senior water right(s) is placed into the state's Trust Water Rights Program.
- Uses for a structure for which a building permit was vested prior to July 16, 2009.
- Uses for a parcel that is part of an existing group use which began prior to July 16, 2009. (This exception is limited to groups that utilize the permit-exemption under RCW 90.44.050, and to a time frame of "five years of the date water was first beneficially used on any parcel in the group.")

Q: How can I protect my investment and develop my property under this rule?

A: The simplest thing is to connect up to an existing water purveyor, which will provide water for new year-round uses. If this is not possible, then the best insurance policy for new water users is to obtain mitigation under a senior water right (pre-May 10, 1905) to offset your proposed use.

Additionally, a Water Budget Neutral (WBN) certificate from Ecology is required to confirm that the mitigation is adequate. Most requests for new uses will fall under the groundwater permit-exemption (defined in text box on page 5), in which case you must submit an application for WBN directly to Ecology.

You can obtain mitigation under a senior water right in two ways: through a water bank, or on your own.

Water banks: You may obtain a share of a permanent senior water right from one of several water banks serving Upper Kittitas County, and apply for a certificate of "water-budget neutrality" with Ecology (see next page). Water rights obtained through water banking programs are put into trust and the water remains

¹ A consumptive water use is one that reduces the amount of water in the water source. You can estimate the consumptive portion of your proposed water use by using our on-line "Consumptive Water Use Calculator" at the bottom of our Upper Kittitas Water Exchange webpage: <http://www.ecy.wa.gov/programs/wr/cro/ukwtrchng.html>

in the stream to offset any groundwater pumping associated with your property. (For available water banks and other water bank information, see: <http://www.ecy.wa.gov/programs/wr/cro/wtrxchng.html>)

On your own: You also may change and transfer the use of an existing water right to a new property through an application process with Ecology or the local Kittitas County Conservancy Board. Once you have found a senior water right(s), then apply to Ecology for a WBN determination.

A *water-budget neutral determination* certifies your withdrawal will not harm the “Total Water Supply Available” for basin irrigators, senior water users including cities and communities, the Yakama Nation fisheries enhancements, and stream flows. Obtaining a senior water right with a priority date (effective date) that predates May 10, 1905 for mitigation, supported by a water-budget-neutral determination by Ecology, protects your groundwater withdrawals from curtailment in times of water shortage. This adds tremendous value to your property and protects you from court orders and potential litigation from more senior water users. Unmitigated groundwater users are at risk of both expensive litigation and curtailment of their water use.

To track each water bank’s performance: http://www.ecy.wa.gov/programs/wr/cro/wb_trac.html

To follow WBN decisions: http://www.ecy.wa.gov/programs/wr/cro/kittitas_wbn.html

Q: What is the status of the groundwater study in the Upper County?

A: The United States Geological Survey (USGS) and Ecology signed an agreement on November 29, 2010 to study groundwater in the aquifers of Upper Kittitas County. The goals of the study are to:

- (1) Define the hydrogeology of the study area.
- (2) Provide information on groundwater occurrence and availability.
- (3) Describe the potential extent of groundwater and surface water continuity.
- (4) Determine the potential for impairment resulting from groundwater withdrawals.

As of July 2013, the study is on schedule to be completed by the end of the year. Some key elements – many of which are completed -- are to:

- Determine streamflow gains and losses at 44 locations. (Published in the 2011 Annual Water Data Report at <http://wdr.water.usgs.gov/wy2011/search.jsp>).
- Measure water-levels and inventory 196 wells, and establish a monthly water-level monitoring network. (Published in "Groundwater levels for selected wells in Upper Kittitas County" <http://pubs.usgs.gov/ds/649/>).
- Sample and analyze 196 wells and 40 stream locations for geochemical signatures to learn more about groundwater pathways and time-of-travel. (Published in “[Chemical and isotopic data collected from groundwater, surface-water, and atmospheric precipitation sites in Upper Kittitas County, Washington, 2010–12](#)” U.S. Geological Survey Data Series 751.)
- Develop methods to estimate permit-exempt well water use.
- Construct cross sections that depict the subsurface geologic units and groundwater aquifers.

Q: What is the legal basis for Ecology's rule halting new groundwater appropriations?

A: The agency has the authority to halt new appropriations of groundwater, including withdrawals under the permit exemption, when it lacks adequate information to support sound water management decisions. The withdrawal of new appropriations may remain in place until sufficient information is available; refer to RCW 90.54.050 (2).

Ecology has halted new groundwater withdrawals that aren't offset, or mitigated, by an existing senior water right because of:

- Increased development of new groundwater uses in Upper Kittitas County.
- Concerns related to total water supply and drought in the Yakima Basin.
- Uncertainty about groundwater aquifers in the upper county.

Q: Why is the rule limited to Upper Kittitas County?

A: Ecology's rule seeks to address a specific and immediate situation where intense land use development is occurring high in the watershed. From 2003-2007, Kittitas County created thousands of lots in subdivisions on former railroad and forest land that historically didn't carry water rights. Development of these lands impacts the headwaters of the Yakima River, sensitive areas with critical habitat for resident and anadromous fish. Flow reductions in many streams may harm fish and fish habitat, and affect downstream senior water right users.

When considering land-use applications, the county is required to perform an environmental review under the State Environmental Policy Act (SEPA) and make sure water is available to support new developments under the state's Land Use Subdivision law and the Growth Management Act (GMA).

As part of that SEPA review, Ecology submitted comments to the county raising concerns about the potential environmental impacts to the watershed from new, unmitigated water uses. Ecology has consistently advised the county that large developments were not eligible to rely on the permit exemption to establish new groundwater uses, pointing to the state's Ground Water Code (RCW 90.44.050) and a 2002 State Supreme Court decision (*Campbell & Gwinn*) that interpreted the permit-exemption for group domestic uses. In the 2011 decision from *Kittitas County v. Eastern Washington Growth Management Hearings Board*, the Supreme Court reaffirmed that counties must follow GMA requirements to protect water quality and water quantity when making land use decisions.

Q: What initially prompted the agency to implement a rule?

A: In 2007, Ecology received a petition seeking the unconditional withdrawal from further use of all unappropriated (that is, not in use through a water right) groundwater in Kittitas County until enough is known about potential effects on senior water rights and stream flows from the development of new groundwater uses. Ecology consulted with the appropriate legislative committees on the petition and proposed its withdrawal.

Ecology proposed a rule in January 2009 that would have allowed for the development of some limited new groundwater uses. Subsequently, an opinion from the Attorney General's office concluded that Ecology lacked the legal authority to allow some limited new groundwater uses. However, the opinion confirmed Ecology's legal authority to withdraw a water source from all new water uses unless the use was mitigated. Given Ecology's concern about the pressure on the system from the development of new water uses, particularly at the headwaters of the basin, Ecology exercised its authority to withdraw Upper Kittitas groundwater from all new withdrawals unless mitigated. An emergency rule was filed in July 2009, and the final rule became effective in January 2011. For information on the rule making process: http://www.ecy.wa.gov/programs/wr/cro/kittitas_wp.html

Q: How does the groundwater permit exemption fit into Ecology's action?

A: Ecology's current rule regulates all new uses of groundwater, permitted and permit-exempt. However, because new development of groundwater in recent years has occurred primarily under the legal authority of the permit exemption, the "on the ground" effect of the withdrawal is to curtail such development unless backed, or mitigated, by senior water rights.

Where a basin can no longer support new water uses, Ecology is authorized to ban the development of new permitted and permit-exempt groundwater uses.

Groundwater permit exemption (RCW 90.44.050): Under state law, groundwater pumping is allowed for certain uses without first obtaining a water permit. These "permit-exempt" uses are limited to a maximum of 5,000 gallons per day for single or group domestic use; 5,000 gallons per day for industrial use; up to ½ acre of non-commercial lawn and garden watering; and for stock watering.

New permit-exempt groundwater uses are still subject to the doctrine of prior appropriation – first in time has first in right. A court or senior right holder may take action to restrict a junior use if water is being taken out of turn. Mitigation and a WBN determination protects your water use from being interrupted.

Q: Isn't groundwater a concern in the entire Yakima Basin?

A: Because groundwater and surface water resources are interconnected, water managers are concerned about both surface water and groundwater supplies for the entire Yakima Basin.

New groundwater-right permits haven't been issued in the basin in nearly 20 years. In the early 1990s, the Yakama Nation challenged the issuance of new groundwater permits to a number of orchardists in the Moxee Valley. The case established the threat groundwater pumping may have on surface water supplies. In the wake of this case, the State, U.S. Bureau of Reclamation and the Yakama Nation agreed to manage water resources conservatively in the Yakima River Basin. In 1999, Ecology imposed an administrative moratorium on issuing groundwater permits for new consumptive uses. The moratorium did not apply to permit-exempt wells.

At the same time, the parties contracted with USGS to conduct an extensive Yakima Basin groundwater study and develop a model demonstrating how groundwater moves from aquifer to aquifer and how it interacts with the Yakima River. The model will continue to provide a mechanism for determining when, where and how much groundwater pumping impacts surface water. This important tool is now available to make scientific water management decisions in the Yakima Basin.

Q: What do the results of the Yakima Basin groundwater study say?

A: The final comprehensive report and computer model were released in 2011 with major conclusions that groundwater and surface water in the Yakima Basin are directly connected. It also concludes that the Yakima Basin water is over-appropriated (that is, more water has been distributed on paper in the form of water rights than actually exists in the river). The report, Numerical simulation of groundwater flow for the Yakima River basin aquifer system, Washington (U.S. Geological Survey Scientific Investigations Report 2011-5155), and multiple supporting documents are available online at:

<http://wa.water.usgs.gov/projects/yakimagw/publications.htm>.

The results of the comprehensive groundwater study confirm a substantial amount of water is lost to the river because of groundwater pumping and use, and in most places there is no more water available for consumptive use. The report estimates, on average, groundwater pumping reduces flows by 200 cubic feet per second (cfs) by the time the Yakima River drains into the Columbia River. The impacts are significant when compared to federally-mandated target stream flows at Sunnyside and Prosser dams, which range from 300 to 600 cfs depending on the amount of runoff the Yakima basin generates each year.

Q: What does the future look like?

A: The sobering numbers have prompted water managers throughout the basin to add groundwater to the mix of issues to be addressed in a greater basin-wide effort. Recent legislation provides the authorization and funding to begin work on the Yakima Basin Integrated Water Resource Management Plan (YBIP) to solve the basin's water problems. Additional storage to supplement existing surface water shortfalls and to account for current and future growth in the basin is a key component of the YBIP. Information on the effort is available online at: http://www.ecy.wa.gov/programs/wr/cwp/cr_yak_storage.html.

Until additional water storage is available, the simplest way to get water for a new use is to connect to an existing water purveyor. If this is not possible, then the best insurance policy is for water users to obtain mitigation under a senior water right to offset the proposed use. This can be achieved by participating in a water banking program or transferring a senior existing water right to a new project, and then securing a WBN determination from Ecology. These steps will provide assurance that your water supplies will remain intact during years of drought when water may be rationed or curtailed to other users, hence adding immeasurable value to your property.

Q: What is the back story on water in the Yakima River basin?

A: To put all this in context, it is important to understand the history of water in the Yakima River Basin and the basic tenet of Western Water Law, where "the first in time has first rights."

Surface water not fully appropriated by May 10, 1905 was claimed by the U.S. Bureau of Reclamation to support its Yakima Basin agricultural irrigation project, authorized by Congress. The Yakima Basin Project relies on surface water stored in five Reclamation reservoirs and the recharge from snowmelt and groundwater to supply water to its thousands of irrigation customers. This water supply supports the \$1.5 billion agricultural industry encompassing Kittitas, Yakima and Benton counties. The economic benefits of these farms are threatened when water supplies run short.

In addition, the Yakama Nation has time immemorial rights connected to their usual and accustomed hunting and fishing grounds, and rights related to stream flows supporting those fisheries. Stream flows must be maintained at a level to support fish, as ordered by state and federal courts and as mandated by Congressional act.

The Yakima River basin rights have been adjudicated and confirmed in Superior Court under the priority system: those with the oldest water rights, predating 1905, are considered senior water rights. Those dating after 1905 are junior and may be limited or curtailed in low water years or during drought. Junior water users include all exempt-well uses started after May 10, 1905.

Q: What is the area covered by the rule?

A: Refer to the map below. The Upper Kittitas County rule boundaries are outlined with a dark line.

