Focus on Water Availability



Water Resources Program

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Cedar-Sammamish Watershed, WRIA 8

This focus sheet provides information on the availability of water for new uses in the Cedar-Sammamish Watershed. This information provides a starting point for potential water users in determining the best strategies for securing water for a future project or proposal in this area.

The Cedar Sammamish Watershed, also known as Water Resource Inventory Area 8 (WRIA 8), is situated in southern Puget Sound and comprises the northwestern and part of central King county, including Seattle and its adjacent suburban areas. On its west side it is bounded by Puget Sound and its east side includes portions of the Cascade Mountain range. This watershed has the greatest urban development and population density of any watershed in Washington State.

This watershed includes the Cedar River which originates in the Cascade Mountains and the Sammamish River, sometimes called "the Slough" which connects the two largest bodies of water, Lake Washington and Lake Sammamish. The watershed includes various smaller creeks such as Swamp, Bear, Evans and North creeks.

The upper part of the Cedar River is the source for much of the drinking water for the greater Seattle area and includes the Chester Morse Lake which serves as a water storage reservoir.

Average precipitation is 30-35 inches per year. Most of this precipitation arrives during the winter months when water demands are the lowest, and only a fraction becomes available for human and economic uses. During the summer, the snowpack is gone; there is little rain so low stream flows are dependent on groundwater inflow. This means that groundwater and surface water are least available when water demands are the highest.

Most water in the Cedar-Sammamish watershed is already legally spoken for. Increasing demands for water from ongoing population growth, declining groundwater levels and the impacts of climate change have put Washington's water supplies at risk. The Cedar-Sammamish Watershed increasingly lacks water when and where it is needed, particularly during the summer months.



Definitions

Instream flow: A stream flow protected in a rule. These rules specify the amount of water needed in a particular place for a defined time, and typically follow seasonal variations. They are the flow levels needed in the river to protect and preserve instream resources and uses.

Mitigation plan: A scientifically-sound plan intended to avoid impairment to existing water rights or capturing water from a closed source.

Non-consumptive use: A use of water that does not diminish the quantity or quality of water in the water source.

Permit-exempt well: The state Ground Water Code allows for certain uses of small quantities of groundwater without obtaining a permit from Ecology. (RCW 90.44.050)

Seawater intrusion: The movement of salt water into freshwater aquifers.

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Factors affecting water availability

Instream Resources Protection Program rule

WRIA 8 has an Instream Resources Protection Program rule (WAC 173-508) to protect senior water rights, maintain a healthy ecosystem and to meet future water management objectives. Such rules are required by state law (RCW 90.54).

Instream flows on the Cedar River were established in the rule. Therefore new future withdrawals (surface water as well as groundwater connected to surface water) will be subject to interruption when the instream flow levels are not met.

To allow the Army Corps of Engineers to maintain water levels in Lake Washington and Lake Union and to allow sufficient water for the operation of the fish ladder and smolt slide, the rule prohibits new water withdrawals from all lakes and streams that feed into Lake Washington above the Hiram M. Chittenden Locks. Any groundwater withdrawals that would negatively affect surface waters in this area would not be approved without mitigation of its effects. This rule does not include the Cedar River.

Obtaining a new non-interruptible (year-round) water right in this area will likely be a very difficult, and expensive process due to potential adverse impacts on these protected streams and rivers. It is likely that applicants will need to mitigate to secure a non-interruptible supply.

Coastal areas of Puget Sound

Any water withdrawals located in the coastal areas of Puget Sound are evaluated for the risk of seawater intrusion into existing fresh groundwater supplies. Coastal applicants may need to develop an adequate mitigation plan to address this risk.

Water currently available for new uses

There is water available for single residence domestic in-house use, and for stock watering except as related to feedlots. Water for non-consumptive uses (such as power generation) is still available, pending approval from the Department of Ecology.

Any applicant for new non-interruptible water will most likely be required to hire consultants to carry out technical studies and develop mitigation plans to offset impacts to stream flows. Additionally applicants will in all probability require the services of an attorney to defend the proposed project to concerned stakeholders and/or existing senior water right holders. *None of these steps will guarantee the application will be approved.*

Pending water right applications in this watershed

Washington water law is based on the "prior appropriation" system, often called "first in time, first in right." Applications for water from the same source must be processed in the order they are received. (There are certain exceptions, see "Additional options for processing water right applications" below.)

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Ecology asks anyone who needs a water right (new, change, or transfer) to submit the pre-application consultation form and meet with us to review your water supply needs and project proposal.

- Apply for a New Water Right http://www.ecy.wa.gov/programs/wr/rights/newrights.html
- Apply to Change or Transfer a Water Right or Claim http://www.ecy.wa.gov/programs/wr/rights/change_transfer_use.html

The map in this document shows some of the factors that will be considered when evaluating water right permit applications. Here are some additional information sources to assist you with your research:

- Locate and research water rights on land parcels anywhere in the state (Water Resource Explorer) http://www.ecy.wa.gov/programs/wr/info/webmap.html
- Pending Water Right Applications by County http://www.ecy.wa.gov/programs/wr/rights/tracking-apps.html
- Subscribe to a water right application RSS feed for a county or WRIA http://www.ecy.wa.gov/programs/wr/rights/wr_app_rss.html
- WRIA map showing the total number of water right claims, certificates, permits and applications http://www.ecy.wa.gov/programs/wr/rights/Images/pdf/waterright_wria_opt.pdf
- Search and view well reports using a variety of search tools http://apps.ecy.wa.gov/welllog/

Additional options for processing water right applications

Connecting to an established water supplier for your new used is often the fastest and simplest option for obtaining new water

The groundwater permit exemption allows certain users of small quantities of groundwater (most commonly, single residential well owners) to construct wells and develop their water supplies without obtaining a water right permit from Ecology. For more information about the groundwater permit exemption, refer to www.ecy.wa.gov/pubs/fwr92104.pdf.

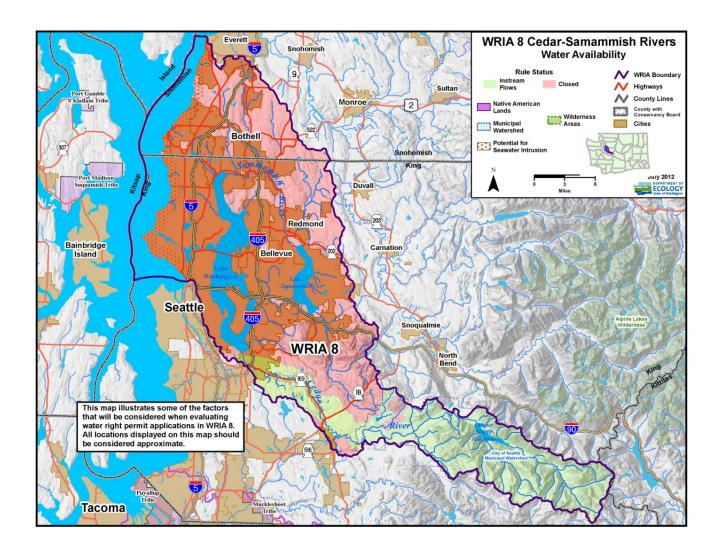
The permit exemption may not be available to prospective water users in certain areas that have been closed to further appropriation because there is limited or no water available, see <u>173-508 WAC</u> or check with Ecology staff at the regional office for more information.

Additional options for more expedited processing of new or change applications include. Processing your application through the Cost Reimbursement Program, www.ecy.wa.gov/pubs/0511016.pdf. The applicant will likely have to propose mitigation to offset the impacts of their use to surface water.

For more information on these and other options, refer to "Alternatives for Water Right Application Processing" www.ecy.wa.gov/pubs/1111067.pdf.

For more information

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