

Washington Water Fact Sheet

Split down the middle by the snowy Cascade Mountains, Washington state tends to have wetter weather on the western side and be drier to the east. While urban centers such as Seattle and Olympia drive water demand on the western side of the state, the heavily agricultural eastern part of the state requires water for irrigation, as well as sustaining expanding cities such as Spokane. Agriculture is the single biggest water user in the state, with more than 380,000 acres irrigated by ground water.



Washington's water issues are also deeply tied to protecting the salmon for which the state is famous. Home of the Grand Coulee dam, Washington is the leading hydroelectric power producer in the nation. Hydroelectric power accounts for nearly three-fourths of the state's electricity generation, and requires that river levels be high enough to enable its production.

Water Sources

The eastern and western sides of the state rely on different primary water sources. The eastern portion of the state largely relies on aquifers for its water supply. A 2009 two-year groundwater mapping study found that aquifer levels in that region are dropping faster than they can naturally recharge, which may lead some wells to run dry.

The western side of the state mainly relies on surface water for drinking supplies. During the

dry summer months, when water usage is at its peak, the region becomes heavily dependent on the state's melting snow pack to maintain its surface water reserves. Shifts in both the timing and the volume of snowmelt have recently led to more frequent summer water shortages in western Washington.

Climate Concerns

Based on analysis of climate change trends in the area, meteorologists are predicting increased rain and decreased snow in western Washington, leading to reduced water supply from snowmelt. This will hit the state particularly hard during the dry summer months. Another prediction calls for Washington crop yields to decline by 25 percent by the end of the century, and tree fruit yields to be approximately halved by the 2080s, depending upon their level of dependence on irrigation.

Keeping Washington in Water

Washington has implemented a number of measures to protect and preserve its water sources. The state's Department of Ecology monitors river levels and river water usage in order to maintain an adequate water level for wildlife while still providing for human needs.

In 2003, the Washington legislature established statewide water-efficiency requirements. Municipal water suppliers are now setting goals and reporting annually on their water-efficiency efforts. The legislature has also supported using reclaimed water, which is water that has been used once and can be reused for toilet flushing, irrigation, or other uses. Today there are 20 reclaimed water facilities in operation statewide.

The state Department of Transportation has also implemented landscape water conservation practices, resulting in a water savings of 36 million gallons in 2005 compared to 2004.

Local entities such as Seattle Public Utilities encourage customers to conserve through public awareness campaigns, incentivized pricing for consumers who use less water, and consumer rebates for appliances and fixtures that

are water- and energy-efficient. Consumers can take advantage of rebates for WaterSense labeled and other water-efficient products that are offered through programs such as the Saving Water Partnership and the Cascade Water Alliance (see below).

Thanks to measures such as these, while the Seattle area population steadily grew by 16 percent between 1990 and 2008, water usage dropped by 26 percent.

There are still more opportunities for consumer water savings in Washington. In fact, if just one out of 10 households in the state replaced its older, inefficient toilets with WaterSense labeled models, it would save about 2.6 billion gallons of water and \$16 million in water bills annually. That's more than enough water to supply every household in Olympia, Washington, for a year!

If every household in Washington replaced its showerheads with WaterSense labeled models, more than five billion gallons of water a year would be saved, which translates into more than \$30 million in avoided water bills and nearly \$60 million in avoided energy costs to heat the water.

Partnerships Power Water Savings in Washington

In 2000, Seattle Public Utilities and 17 other local utilities formed the **Saving Water Partnership (SWP)** to promote efficient water use in Seattle and King County, Washington. In 2007, SWP incorporated WaterSense labeled products and outreach into its local water-efficiency campaign through public service announcements, outreach to plumbers, and public events.

To demonstrate the flushing power of WaterSense labeled toilets, SWP staged "The Great Flush-Off" in Seattle, where representatives from the Partnership and EPA flushed ping pong balls and potatoes. These efforts resulted in increased customer traffic and inquiries about WaterSense labeled toilets at participating retailers, as well as increased replacement of old, water-guzzling toilets through the SWP's multi-family residence toilet replacement program.

SWP also sponsors Savvy Gardener classes to promote native plants that require minimal irrigation and offers rebates to residential and business customers for water-efficient toilets, clothes washers, and other products. As a result of all these water-saving efforts, SWP earned the WaterSense Partner of the Year Award in 2008.

The **Cascade Water Alliance**, a nonprofit organization of municipal entities that serve the Puget Sound region, gave \$100 rebates for more than 3,000 WaterSense labeled toilets and offered free recycling of old toilets in 2009. The effort gained traction during WaterSense's first Fix a Leak Week, when Cascade mailed toilet leak detection dye kits to 100,000 households.

