

## Quilcene-Snow Watershed, WRIA 17

This focus sheet provides information on the availability of water for new uses in the Quilcene-Snow 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.

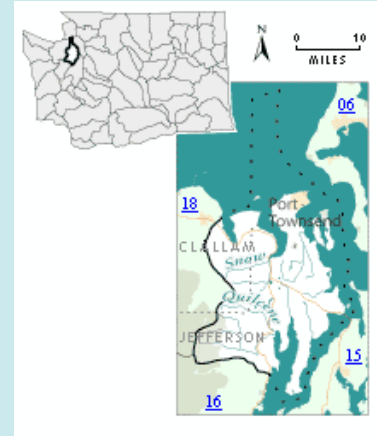
The Quilcene-Snow Watershed, also known as Water Resource Inventory Area 17 (WRIA 17), is situated in the rain shadow of the Olympic Mountains in northwest Washington. This watershed includes the Big Quilcene and Little Quilcene rivers and Snow Creek, which originate in the Olympic Mountains, and various smaller creeks on the Quimper and Toandos peninsulas and in the Chimacum Valley area.

Annual precipitation ranges from 15 to 30 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. Little of the Quilcene-Snow watershed benefits from snow pack so during the summer when there is little rain naturally, low stream flows are dependent on groundwater inflow. This means that groundwater and surface water are least available when water demands are the highest.

### Factors affecting water availability

Much of the water in the Quilcene-Snow Watershed has already been spoken for. Increased demands from population growth, declining summer and early fall streamflow levels, and impacts from climate change add to the challenge of finding new water supplies in WRIA 17. Additionally, since river and stream levels are needed to ensure adequate water quality and fish migration, there is limited water available for new uses.

Chapter 173-517 WAC [www.ecy.wa.gov/pubs/wac173517.pdf](http://www.ecy.wa.gov/pubs/wac173517.pdf) is the instream flow rule for the Quilcene-Snow watershed, including the Big Quilcene River, Little Quilcene River, Snow, Chimacum, Salmon, Ludlow, Thorndyke, Tarboo, Donovan, Leland, Howe, Piddling, and Spencer creeks. The instream flow rule was adopted in 2009.



### 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:** measures intended to avoid impairment to existing water rights or provide offsets to surface water depletion.

**Permit-exempt groundwater use:** The state Groundwater Code allows for certain uses of small quantities of groundwater without obtaining a permit from Ecology. (RCW 99.44.050)

**Subbasin:** a smaller drainage basin, such as to a tributary stream, which together make up a WRIA. Subbasins are generally named for the principle creek or other surface water that runoff flows to.

This rule established instream flows on these rivers and streams, and closed or seasonally closed the same subbasins to new uses. The rule established reserves of water for future use in these subbasins with specific conditions of use:

- Restricting any permit-exempt groundwater use in several subbasins to a conservation standard of no more than 500 gallons per day.
- Limiting use of the reserve in Chimacum subbasin to domestic (indoor) use only.
- Allowing some expanded use of the ground water exemption for commercial agriculture in three sub-basins.
- Allowing processing of new water rights for municipal, agricultural or industrial use in three sub-basins.

### **Seawater intrusion near Puget Sound, Hood Canal and the Strait of Juan de Fuca**

The rule did not close coastal management areas in this watershed, however, groundwater in some areas near Hood Canal, Dabob Bay, Admiralty Inlet, Discovery Bay, and on Marrowstone and Indian islands has the potential for seawater intrusion.

The Jamestown S’Klallam, Port Gamble S’Klallam, Lower Elwha Klallam and Skokomish Indian Tribes are very concerned about maintaining flows and fish habitat in the watershed and water right applications and mitigation plans are routinely sent to the Tribes for their review.

### **Water supply available for new uses**

There is water set aside in reserves for future uses in this watershed. The reserves in three subbasins make some water available for new water rights. In the remaining eight subbasins, water is reserved for permit-exempt groundwater uses only. The groundwater permit exemption allows 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](http://www.ecy.wa.gov/pubs/fwr92104.pdf).

**There are restrictions on permit-exempt well use in this watershed**, as established in the instream flow rule. Please review the Quilcene-Snow Rule for additional information.

There are no closures or reserves in the coastal management areas.

In most areas, applicants seeking new water appropriations will likely need to provide mitigation to offset the impacts their use of water will have on surface water bodies or other water users.

Additional options for finding a water supply include:

- Connecting to an established water supplier. This is the fastest and simplest option.
- Processing an application through the Cost Reimbursement Program.  
[www.ecy.wa.gov/pubs/0511016.pdf](http://www.ecy.wa.gov/pubs/0511016.pdf).

For more information on these and other options, refer to “Alternatives for Water Right Application Processing” [www.ecy.wa.gov/pubs/1111067.pdf](http://www.ecy.wa.gov/pubs/1111067.pdf).

**Number of pending applications in this watershed as of February 2011: 49**

Type of Water Source	
Surface Water	18
Groundwater	31

Purposes of use requested:	
Commercial/industrial supply	3
Domestic supply	19
Fire protection and domestic supply	2
Irrigation	9
Irrigation and domestic supply	3
Irrigation and fish propagation	2
Mining and domestic supply	1
Municipal supply	4
Power	1
Stock watering and domestic supply	1
Stock watering and irrigation	3
Wildlife propagation and irrigation	1

**For more information**

Ecology Southwest Regional Office  
 300 Desmond Drive  
 Lacey, WA 98503  
 360-407-6300

**Ecology’s Web site on water right applications and water availability:**

<http://www.ecy.wa.gov/programs/wr/rights/wrpendapp.html>

*If you need this document in a version for the visually impaired, call the Water Resources Program at 360-407-6872. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341*



