

At Home in the Quilcene-Snow Watershed

No matter
where
you live on the
Olympic
Peninsula,
you are also a
resident of a
watershed.

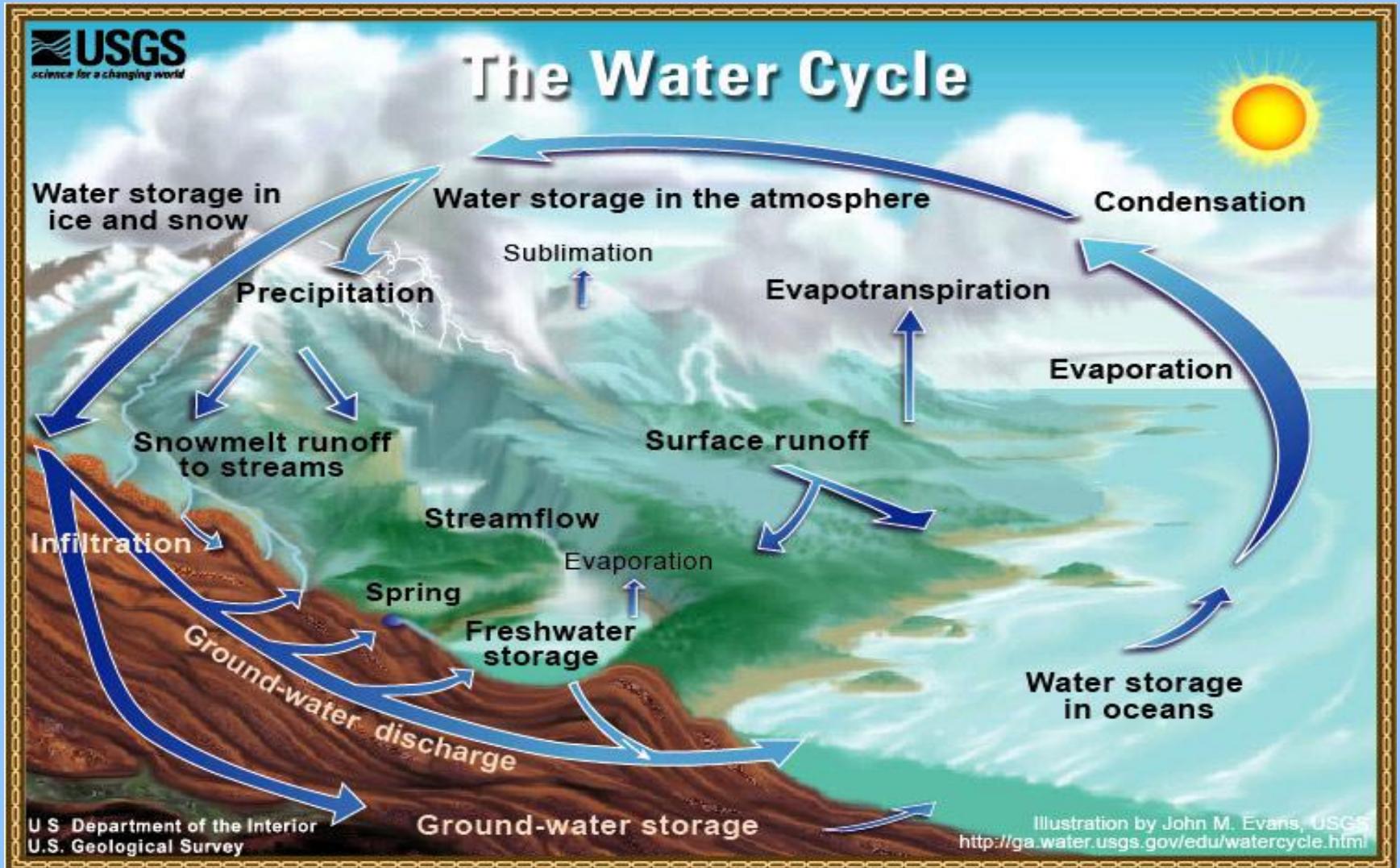
EJWC

Education Committee



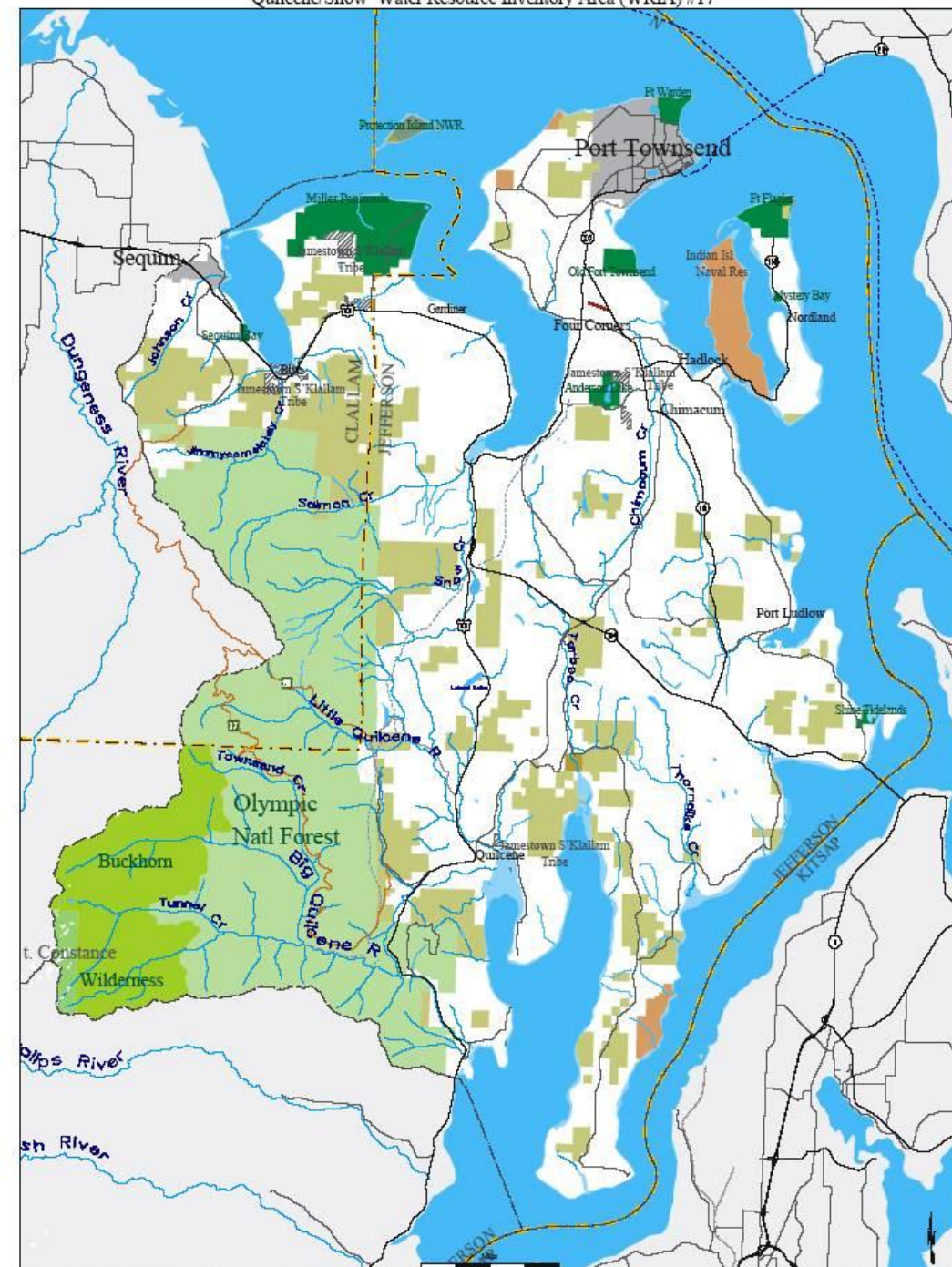


Water is Endlessly Recycled



Quilcene-Snow Watershed

What is a watershed?



Quilcene-Snow Watershed

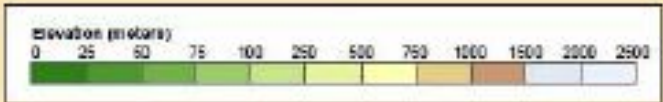
10 Sub-Basins

West Sequim Bay
Miller
Salmon-Snow
Quimper
Chimacum

Indian-Marrowstone
Ludlow
Dabob-Thorndyke
Little Quilcene
Big Quilcene



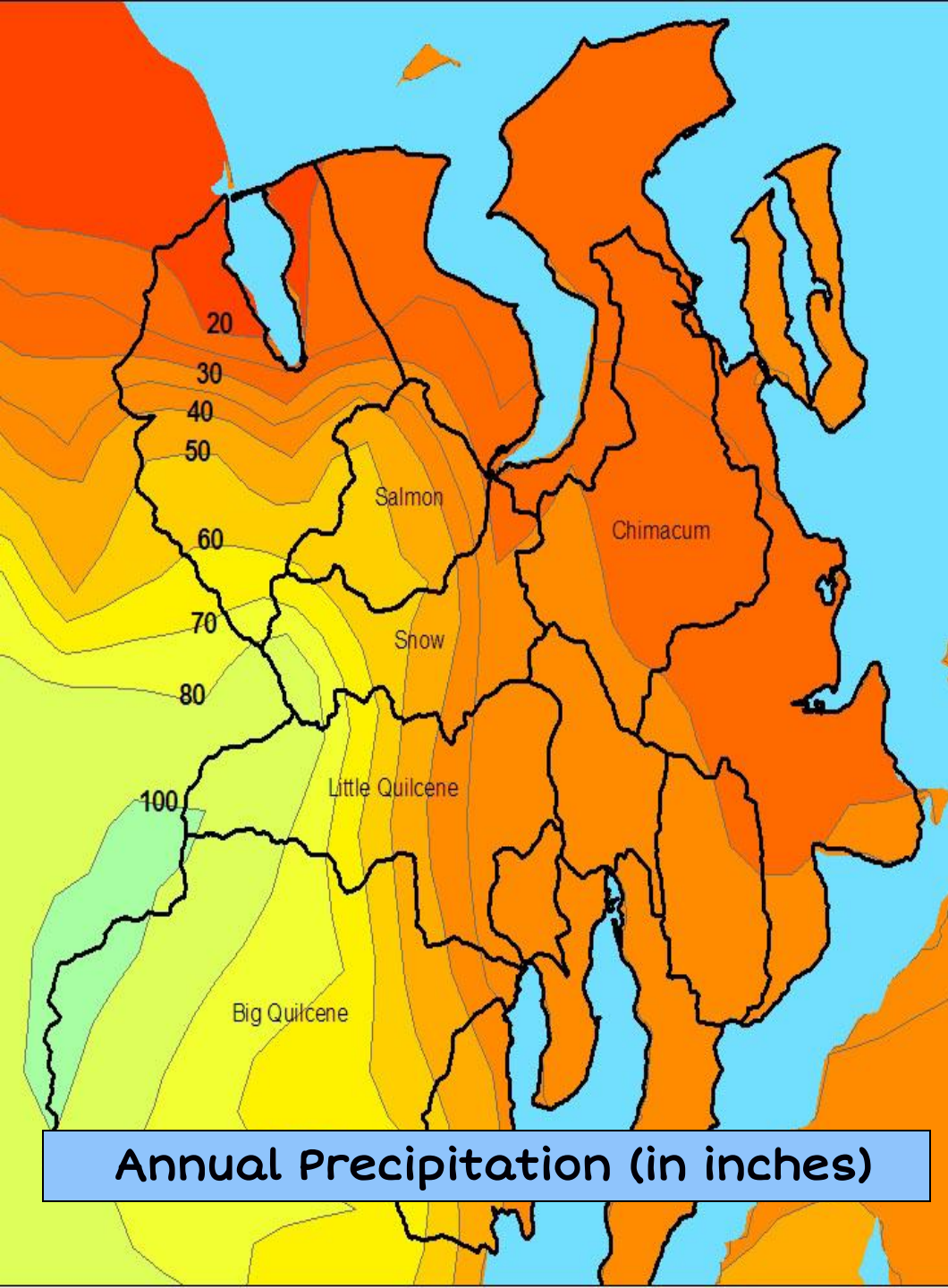
WRIA 17 Subbasins



Map prepared by HydroLogic Services Company, December 2005

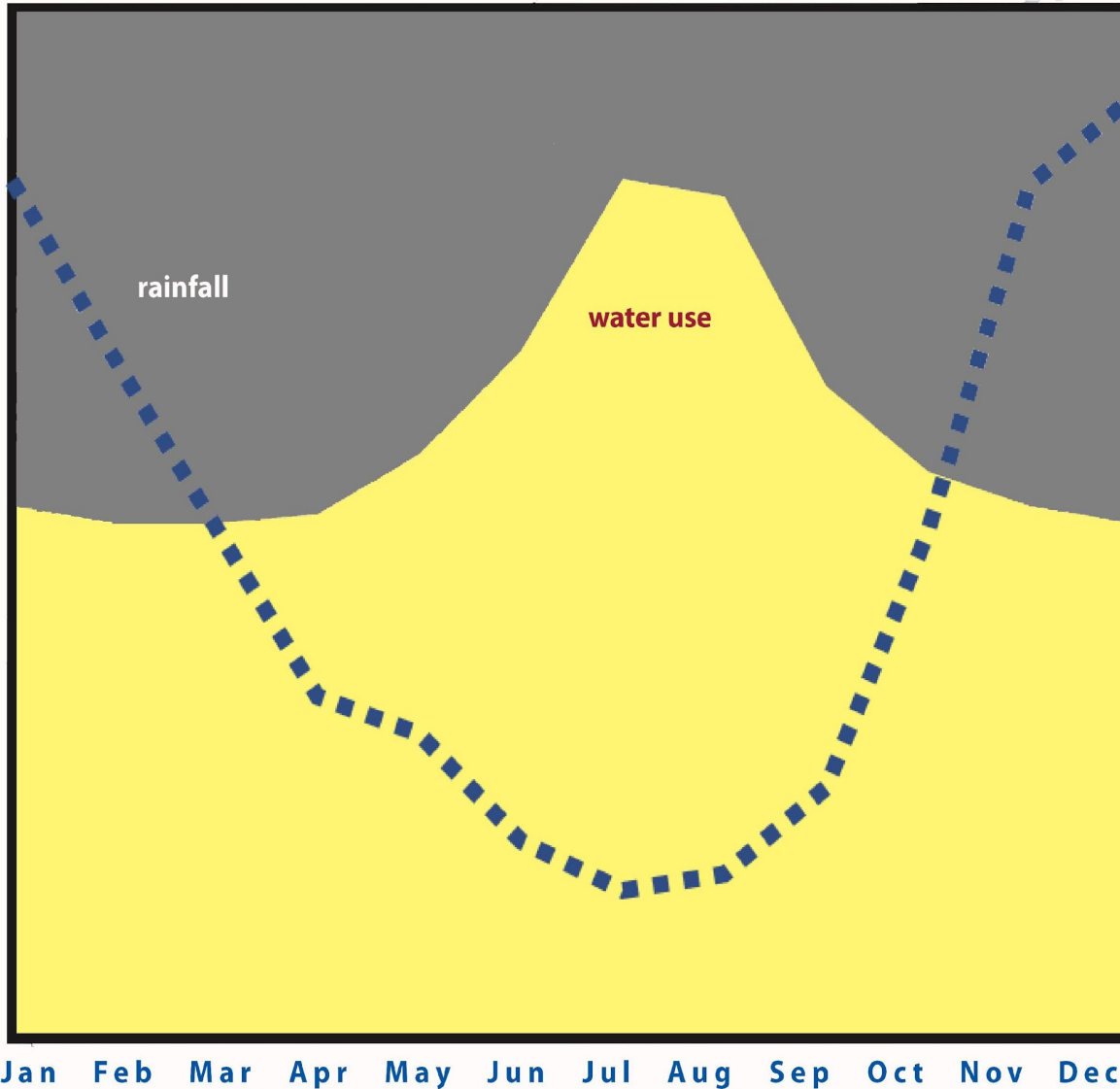
Precipitation in Quilcene-Snow Watershed

Important for
Water Recharge



Annual Precipitation (in inches)

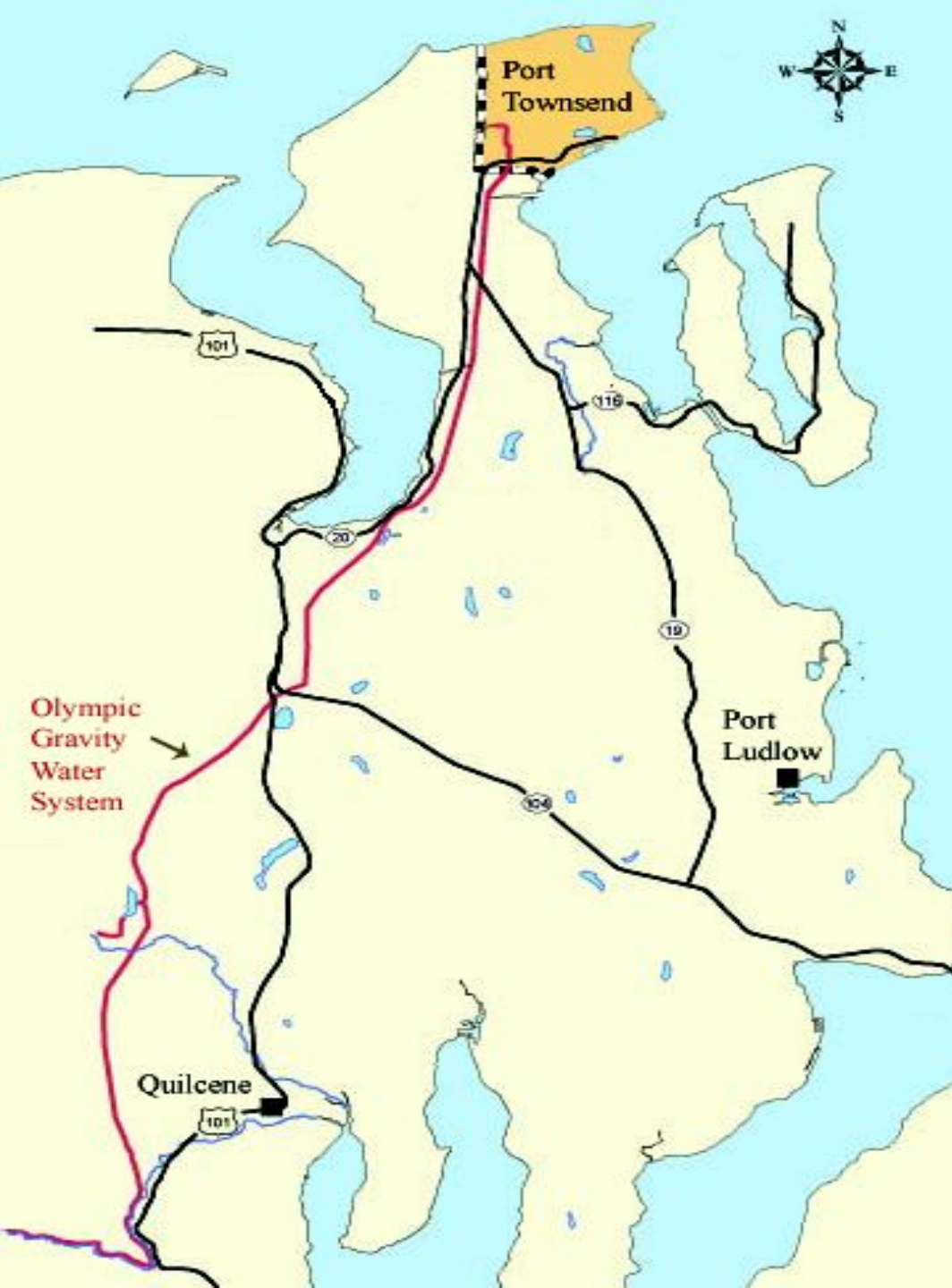
Water Use vs Rainfall



Highest water demands occur during driest summer months

Port Townsend Water System

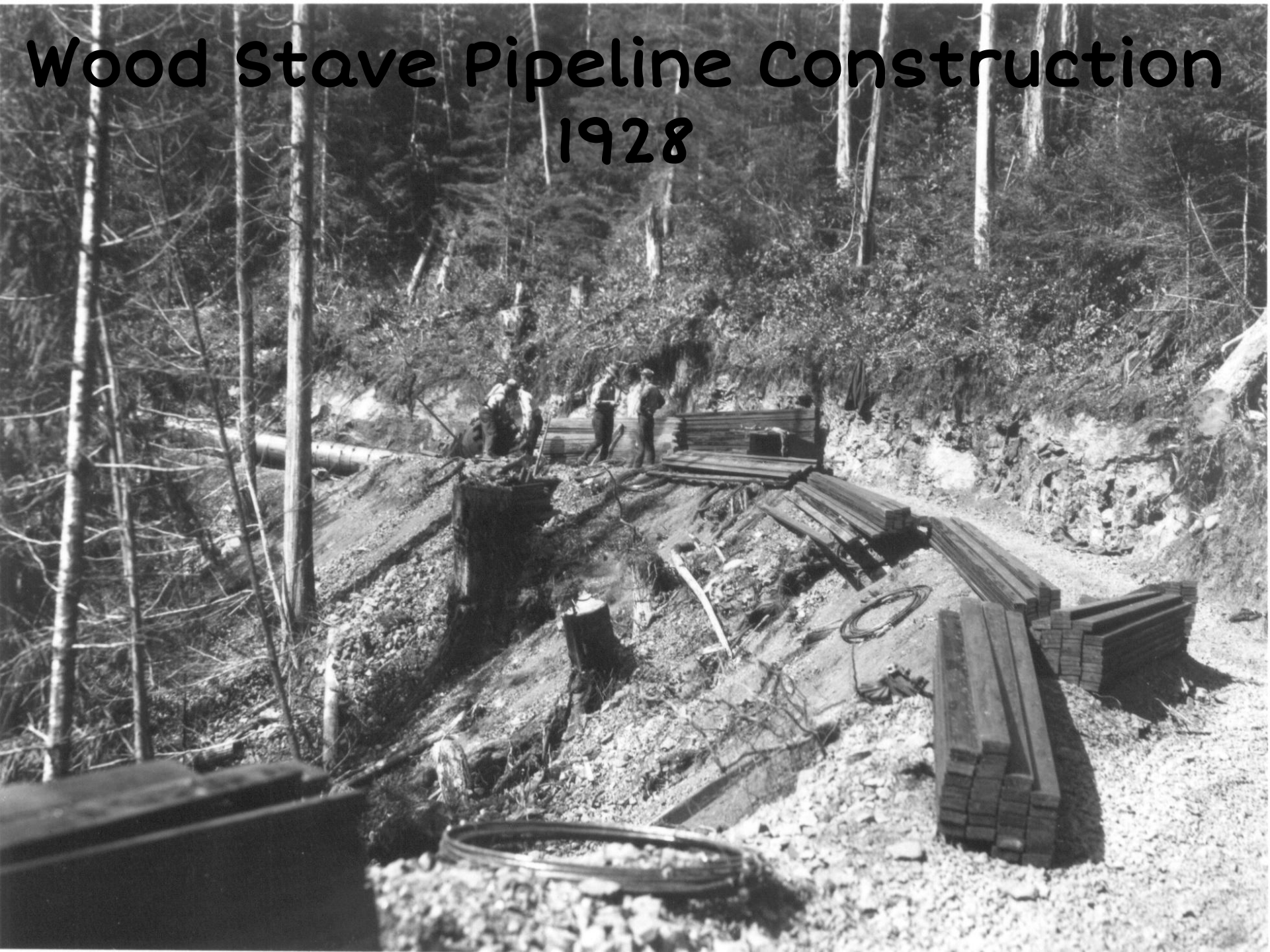




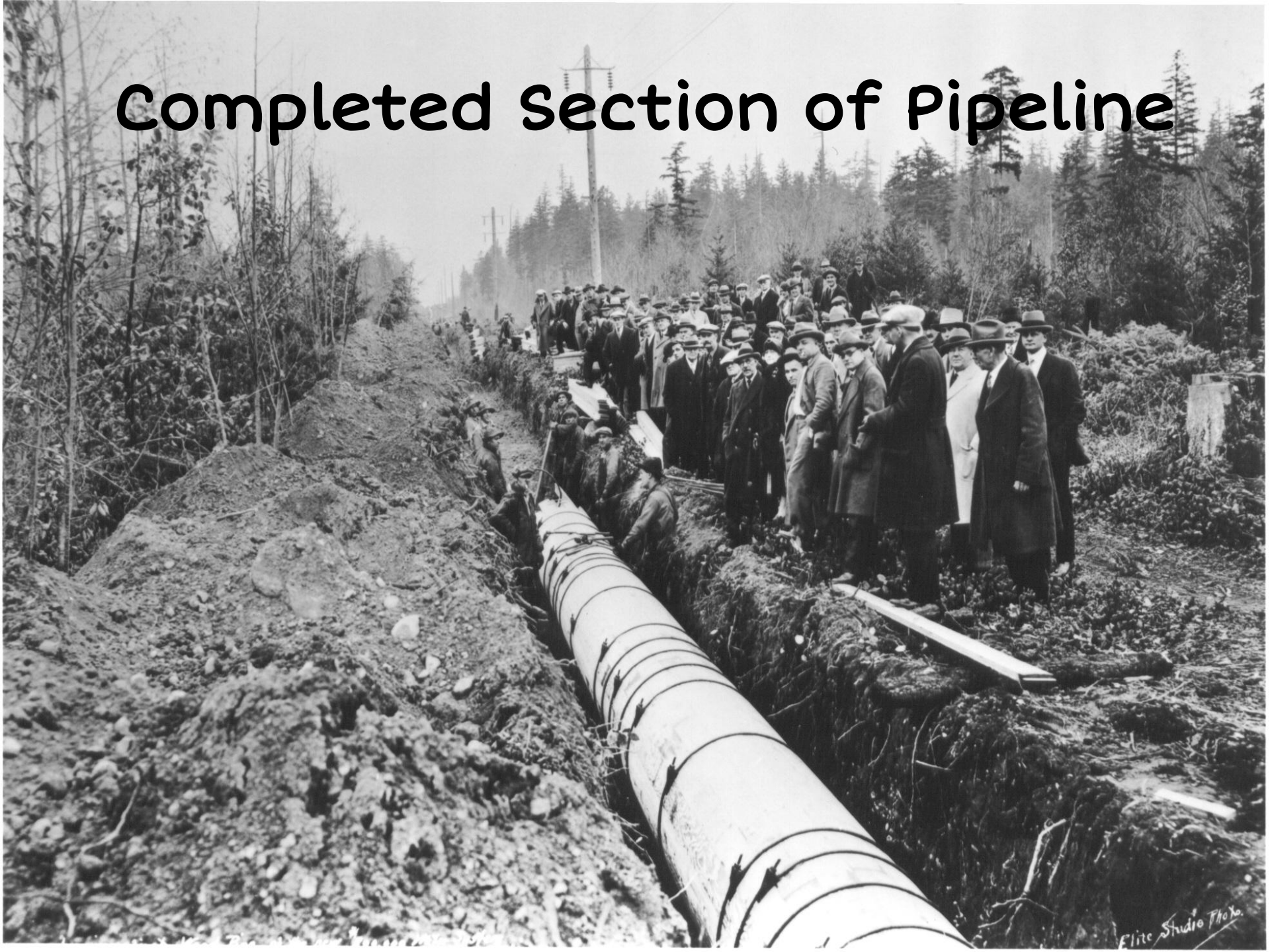
City of Port Townsend

Olympic Gravity Water System (OGWS)

Wood Stave Pipeline Construction 1928



Completed Section of Pipeline



Elite Studio Photo



Port Townsend Water System

28.5 miles
from Big and
Little
Quilcene Rivers

Big Quilcene River Diversion

- 30 cfs water right – 27 cfs voluntary instream flow
 - Average annual diversion 17.3 – 18.4 cfs, normal operating diversion 23-24 cfs.
- Timber crib diversion constructed in 1928



- Gravity operated system with 28.5 mile pipeline to Port Townsend

Little Quilcene River Diversion

- 9.56 cfs water right – 6 cfs instream flow requirement
 - Average annual diversion 2.2-3.5 cfs. Diversions vary depending on reservoir level.
- Gravity operated system with 1.5 mile pipeline to Lords Lake



- Timber crib diversion constructed 1956, reconstructed in 1995

Lords Lake Reservoir



City Lake Reservoir



Operational Guidelines

- City / Forest Service Cooperative Agreement
- Safe Drinking Water Act: Surface Water Treatment Rule (SWTR)
 - Unfiltered surface water
 - Watershed control
 - Disinfection requirements
 - Turbidity/coliform limits
- City of Port Townsend / Port Townsend Paper Company Contract

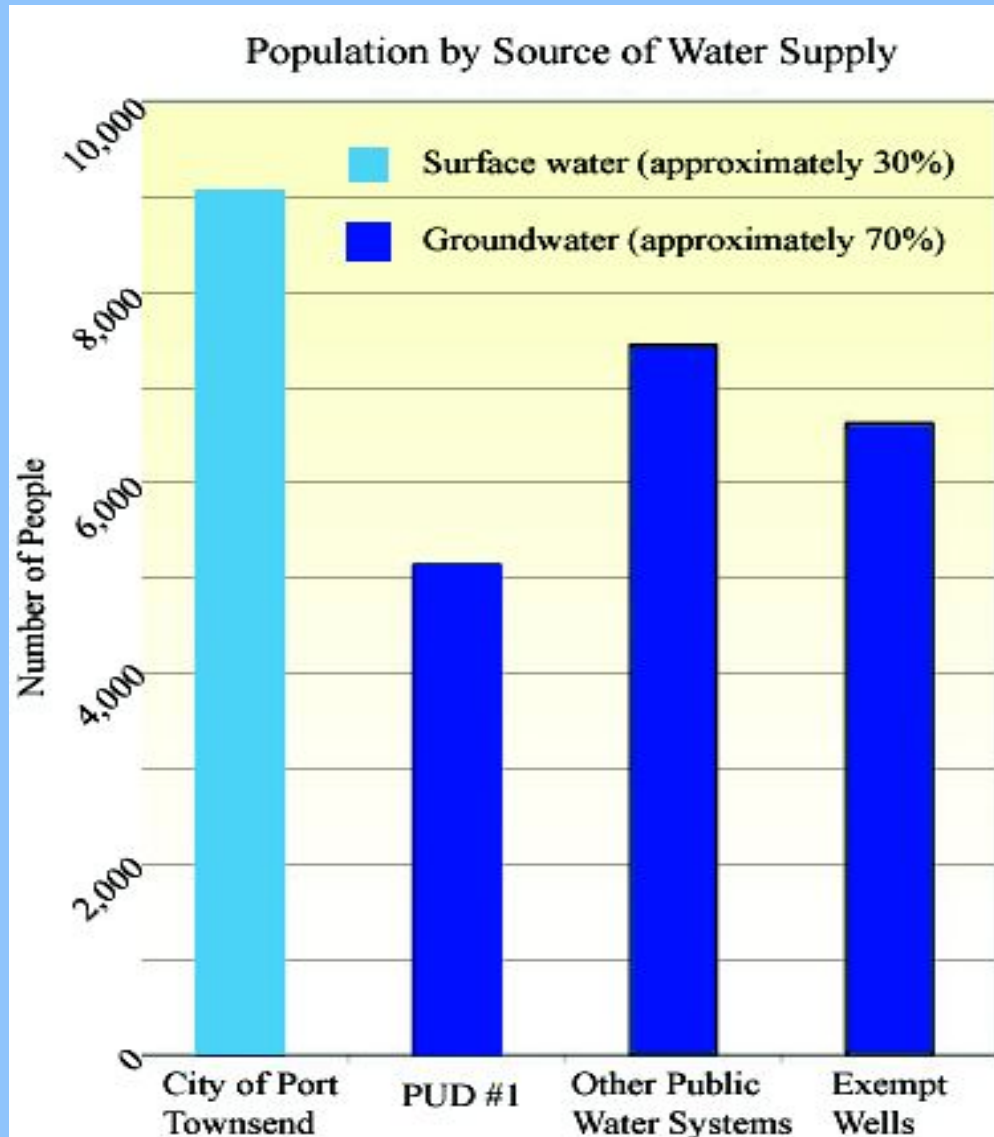
Port Townsend Paper Corporation

- Port Townsend Paper Corporation has a contract with the City of Port Townsend to operate and maintain the water diversions, reservoirs and transmission pipeline.
- Mill processes use ~12 million gallons of fresh water per day. Most is reused several times as 110-150 million gallons is needed for the daily production of paper.

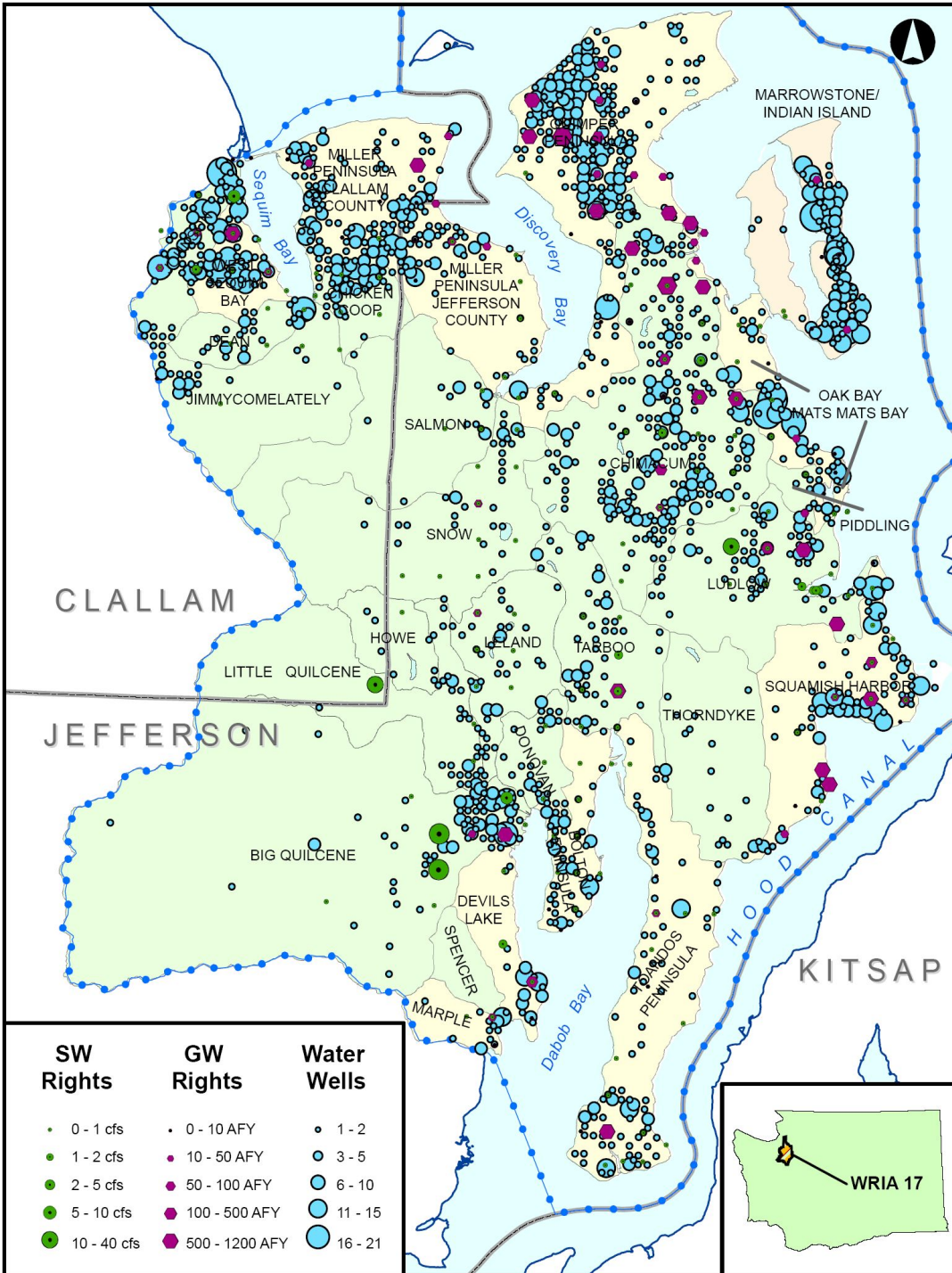


- Through ongoing process improvements over the last 12 years, the mill has been able to reduce the water used per ton of paper produced by almost 50%.

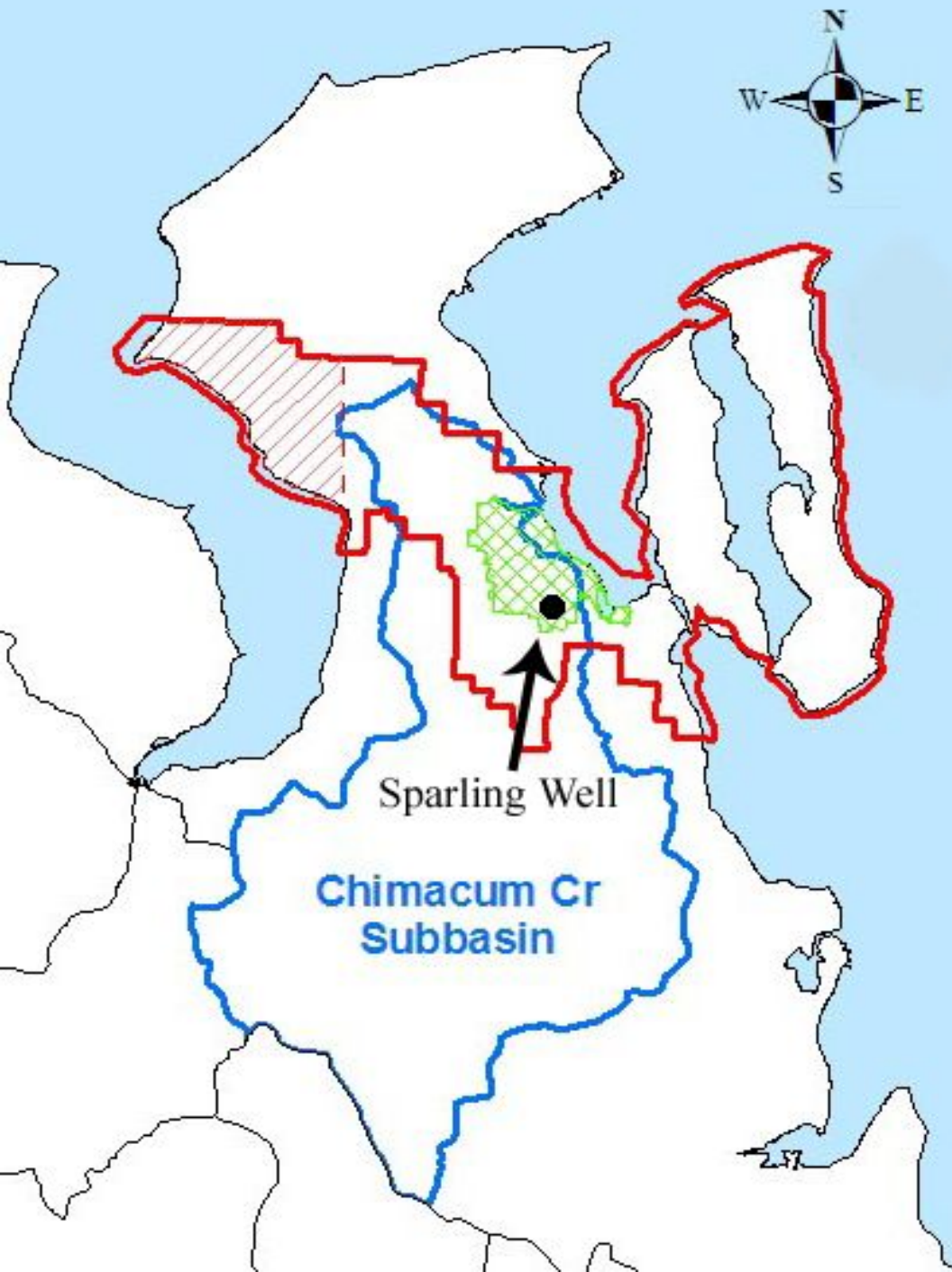
Sources of Water Supply






Wells and Water Rights in Quilcene-Snow Watershed



PUD #1 Service Area



Legend

-  PUD Service Area*
-  Tri-Area UGA
-  PUD Service Area Served by City of Pt. Townsend Water

Who has right to withdraw water?

Waters of Washington State

- Collectively belong to the public
- Not owned by any one individual or group
- Common resource managed by Department of Ecology

“First in
time,
first in
right”



1998 Washington State Watershed Planning Act

Washington State

- 62 WRIAs
- 16 Salmon Critical WRIAs

Jefferson County

- Located in 5 WRIAs
- Quilcene-Snow is WRIA 17
- WRIA 17 is Salmon Critical



1998 Washington State Watershed Planning Act

Planning Unit Members

- Local governments
- Tribes
- Interest groups
- Citizens

Grant Funding

- Determine status of water resources in watershed
- Develop plan
 - Address water quality
 - Address water accessibility
 - Recommend actions
- Implement plan

WRIA 17 Planning Unit

Governmental

City of Port Townsend
Jefferson County
Port Gamble S'Klallam Tribe
PUD #1 of Jefferson County
Skokomish Tribe
WA State Department
of Ecology

Ex-Officio Members

Jefferson County Planning
Commission
PSP Hood Canal Action Area
PSP Strait of Juan de Fuca
Action Area
WSU Jefferson County
Extension

Non-Governmental

Chimacum Grange
Jefferson County Conservation
District
Jefferson County Home Builders
Association
Jefferson County Realtors
Association
Marrowstone Island Groundwater
Committee
North Olympic Counties Farm Bureau
North Olympic Salmon Coalition
Olympic Environmental Council
Port of Port Townsend
Port Townsend Paper Mill

A photograph of a waterfall in a dense forest. The water is white and frothy as it falls over rocks. In the foreground, a large, moss-covered log lies across the water. The background is filled with green trees and foliage.

**Solving shared problems
together
on behalf of a shared place
is the essence of democracy.**

Kemmis, 2001