“Water efficient gardening” simply means designing your gardens and landscaping in a way that makes more efficient use of water resources.

Outdoor water use on lawns and gardens is where the largest amount of household water is wasted.

We want to help you learn some design methods and water use strategies that will help you maintain a beautiful landscape while requiring less work and using less water.
Climate on the North Olympic Peninsula

PORT ANGELES, WASHINGTON  (456624)
Period of Record: 8/1/1933 to 11/30/2007

Average Total Monthly Precipitation

SEQUIM, WASHINGTON  (457538)
Period of Record: 6/1/1916 to 9/30/1980

Average Total Monthly Precipitation
Discussion about how we use different areas of the landscape
Designing areas according to climate and water requirements of plants that will thrive in that climate
Right Plant, Right Place
Natural landscapes vs. combining native plants with cultivated species
Lawn alternatives
Water management and storage options
How much of your landscape can be viewed from inside the house?

How much time do you spend recreating outside in your yard? For example, playing ball with your grandchildren or playing with the dog.

Do you need a lawn area for children or pets to play on? Would you be happy with no lawn at all?

Do you do a lot of entertaining outside?

Do you garden as a hobby and need an area where you can actually “get dirty”?
Limit annual flowers that require more water and fertilizer to the areas of the garden that are viewed on a daily basis such as from a livingroom window or entry walkway.

Patios and entertainment areas of the yard can benefit from planting color in containers of varying size and shape to add interest while confining high water use plants.

Large landscape areas that are seldom “lived in” can be planted with low maintenance, low water use natives and drought tolerant species.
What are the climate zones in the landscape?

- It can be very helpful to observe and take notes on the sunny, windy and shady areas of the yard during peak water use months May–Sept.
- Does a deciduous tree provide shade for most of the day or just a couple hours in the morning?
- Is there a spot that receives steady prevailing winds?
- South facing against the house or outbuilding?
- Sunny all morning, shady all afternoon? Vice versa?
Soils in Clallam County can vary widely. Large areas of the Sequim/Dungeness valley consist largely of rock and sand with poor water holding capacity. Large areas of Port Angeles are comprised of glacial till or heavy clay with too much water holding capacity. Dry clay can be difficult to accept water and creates runoff.

Which type of soil do you have?
Soil Samples
Clallam Conservation District has an excellent soil testing program for only $18 per sample tested.

Soil tests can tell you pH, nitrate–nitrogen, phosphate, potassium, magnesium, calcium, sodium, organic matter content levels, and cation exchange capacity.

The Conservation Dist. can also help you determine the type of soil you have and will work with you on water management strategies for your type of soil.
Success in your water efficient garden depends heavily on choosing the right plant for the right place. Plants that are planted in the wrong place struggle to survive and are much more susceptible to pests and disease. Plants chosen should be compatible with the type of soil they are planted in, the amount of sun/shade they receive and the watering requirements of other plants around them.
For Example......

- You *wouldn’t* plant an Arbutus menziesii (Pacific Madrone) in a heavy clay soil
- You *wouldn’t* plant lavender in an area that has heavy soil and is poorly drained
- You *wouldn’t* plant reeds and sedges in dry shade
- You *could* plant Madrone in sharp sandy/rocky soil
- You *could* plant lavender in well drained, low fertility soil
- You *could* plant reeds and sedges in low, poorly drained areas
Also important is.....

If you have an area of the garden where you want to have plants that require more water, be sure to group other water loving plants into that area.

For example:

If there are flower beds with roses and annuals outside your big livingroom window, be sure that any other shrubs, small trees etc that will be in the same watering area, have the same water requirements.
A natural landscape consists of the same plants that surround your property in the undeveloped areas. You can leave what already exists alone and plant to fill in what was removed previously due to construction or prior property owners.

It is important to observe and note the types of trees in the area and plants growing in the surrounding understory. Take notes!

Establishment of new introduced plants will require irrigation for the first 1–3 years and little or no irrigation after that time.
Water efficient landscaping can incorporate drought tolerant horticulture plants with native species. Many native species in the Pacific Northwest have showy blooms and interesting colors and foliage, even in the winter months. Most native plants, when happy and healthy, have strong resistance to pests and disease and can be virtually maintenance free.
Common Native Plants—Trees

Shore Pine

Western Yew

Western Flowering Dogwood

Western Hemlock

Cascara

All photos courtesy of Washington Native Plant Society and Starflower Foundation
Common Native Plants—Shrubs

Evergreen Huckleberry

Pacific Wax Myrtle

Tall Oregon Grape

Salal

Serviceberry

All photos courtesy of Washington Native Plant Society and Starflower Foundation.
Common Native Plants—Ferns

Lady Fern

Sword Fern

Bracken Fern

Deer Fern

All photos courtesy of Washington Native Plant Society and Starflower Foundation
Common Native Plants—Ground Covers

Kinnickinnick

Sea Thrift

All photos courtesy of Washington Native Plant Society and Starflower Foundation

White Brodiaea

Broadleaf Stonecrop

Lowbush Penstemon
Lawn Alternatives
Patios, decks and pathways:

Photography taken by Steven Guthe
Lawn Alternatives
Mulched or densely planted shrub beds:
Lawn Alternatives

All photos courtesy of Pacific Northwest Palm and Exotic Plant Society and their members

Seattle, Washington
All photos courtesy of Pacific Northwest Palm and Exotic Plant Society and their members

Gillies Bay, Texada Island, British Columbia
Photos Courtesy of Brian and Rosemary Seymour
Soil in the rain garden may be augmented with sand to increase rate of infiltration.
Rain gardens are a highly functional, environmentally beneficial alternative to traditional garden landscaping. The design possibilities are almost limitless!
Lawn Alternatives—Raingardens
Lawn Alternatives—Raingardens
Knowing how much water your landscape really needs is crucial to water efficient gardening.

New plantings will require irrigation for the first 2–3 summers until plants are well established.

Planting trees and woody perennials in the fall after the rains begin will ensure strong root establishment and will require much less supplemental water through the first dry season.
Overhead watering is the least effective method of watering, especially for non-lawn areas of the garden. It leaves water on foliage which encourages fungal type plant diseases.

Large amounts of water can evaporate before ever making contact with the soil.

Difficult to control the amount of water that is given to different areas of the garden.
Emitter type watering systems can be set up to water only specific plants in the landscape like trees, shrubs and herbaceous perennials.

Drip hose/tape systems can be laid out throughout the garden areas and deliver water to the general area around the hose. Can be covered with coarse mulch for appearance.

Small sprinklers set on timers can water general areas. Use the timer each time you water rather than setting it to come on at a designated time.

Mulch wherever possible with 2–4 inches of coarse mulch such as wood chips. Keep mulch back 2 inches from the base of plants.
Storing water accumulated over the rainy months is an option, however without storage vessels of adequate size or number water can be used up quickly.

When collecting water in rain barrels, be sure to install a screen on the top to prevent debris from entering the barrels.

Elevating barrels will increase the gravity flow pressure.

Multiple barrels can be set up using a gutter downspout diverter.

Occasionally adding a small amount of chlorine bleach to the barrels will prevent algae from growing.
Water Storage Options—Rainbarrels
Water Storage—Cisterns

- A cistern can be installed to handle larger amounts of water storage.
- Excellent choice to store water from the roof runoff of larger buildings.
- Cisterns can be stored above or below ground.
- Use continuous guttering.
- Electric submersible pump can be used to provide adequate water pressure.
- Be sure to filter out debris to prevent clogging of the pump.
Water Storage—Cisterns
10,000 gallon community cistern
Partially buried
Increasingly, water is becoming a hotpoint issue in many communities, even here in the rainy Northwest.

As populations swell on the Olympic Peninsula with the retirement of “baby boomers”, restrictions on water use will only increase.

Careful planning and thoughtful landscape design *now* will help save money, time and effort in the future.

Traditional input intensive landscaping can be replaced with beautiful, self sustaining landscaping that will virtually care for itself.