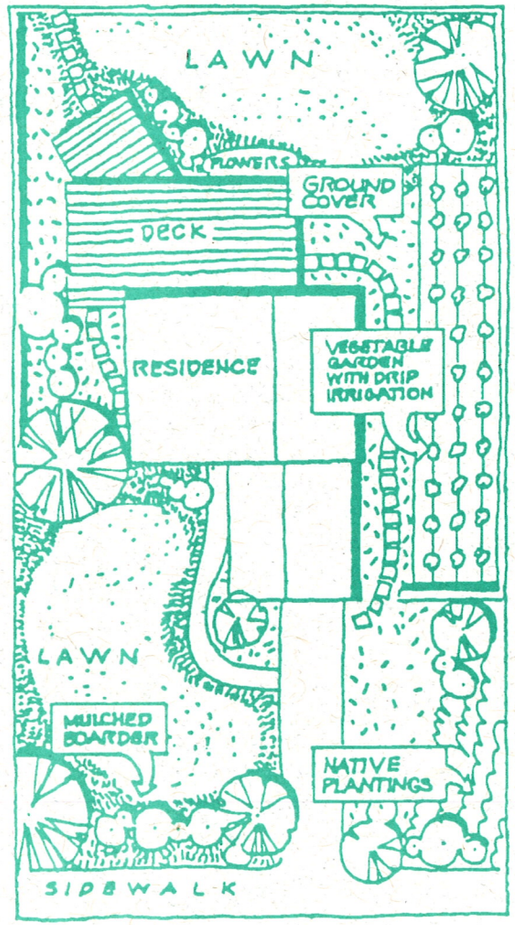
WATER EFFICIENT GARDENING

Successful water-saving gardening is simple if you follow the seven fundamentals of water efficient landscaping. Through effective planning and design, soil improvement, appropriate use of turf, efficient irrigation, use of mulches, a well-informed selection of plants that require little water, and a good maintenance program you can achieve a significant savings of water, money, and time.

The actual amount of water you save will vary with the amount and timing of natural precipitation and temperature, but for most people a 50 percent savings is very possible. Just fine-tuning your irrigation practices and equipment can produce savings of 20 to 30 percent. Another bonus is that your garden will be more resistant to environmental stress, therefore less likely to suffer if you are periodically unable to care for it.

The way you design your site can make a big difference in your water use. Landscape experts recommend that plants with like water needs be grouped together so that they are irrigated with the same amount of water. Those that take a great deal of water are separated from those that take less. Typically a yard can be zoned with a small turf area as a water intensive zone and the balance of the site divided into moderate, low, and very low water-use zones. A different watering schedule is developed for each zone. It helps to match your zones with the conditions of your site. If possible, put plants requiring lots of water in the wettest areas and those with limited water needs in the naturally hot and dry areas.

If you are establishing a new yard, you will find it easy to incorporate water efficiency into your planning. Consult a good water-saving gardening guide, a nursery or landscaping professional, or the county Cooperative Extension office for assistance. For people with established yards, consider gradually changing your landscaping. Look for places that are hard to water or maintain, that never look attractive, or often appear to be suffering from drought. Work on those first. The information in this brochure will give you some ideas to get started.



LOW WATER USE FLOWERS

(List of plants suitable for water-efficient landscaping continued from inside.)

Annuals

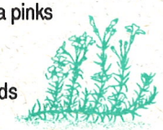
African daisies
Annual phlox
California poppy
Cape weed
Coneflowers
Coreoposis
Dusty miller
Flax
Geraniums
Globe amaranth
Marguerite
Moss rose
Nasturtiums
Poppies
Sages
Sea lavenders
Spider flower
Strawflower
Sweet alyssum
Sweet William
Verbenas
Vinca rosea
Wallflowers

Biennials

Chinese forget-me-not
Coneflowers
Evening primroses
Hollyhock
Sweet William

Perennials

Baby's breath
Bearded & Pacific Coast Iris
Belladonna lily
Blanket flowers
Blue & yellow-eyed grasses
California fuchsias
Coneflowers
Coreoposis
Cosmos
Daffodils
Daylilies
Epimediums
Evening primroses
False indigo
Fountain grass
Ground pink
Horehound
Jerusalem sage
Matilija poppy
Pampas grass
Poppies
Red hot poker
Sages
Sea lavenders
Stonecrops
Thrifts, sea pinks
Thymes
Verbenas
Wormwoods
Yarrows
Yuccas


Phlox (ground pink)

FOR MORE INFORMATION

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(206) 385-7212

Master Gardeners
W.S.U. Cooperative Extension
2nd floor Post Office Building
Port Townsend, WA 98368
(206) 385-9158

Making the most of a limited resource

a customer's guide to efficient use of water. . . in Landscaping and Gardening

Port Townsend Public Works

FUNDAMENTALS OF WATER-EFFICIENT LANDSCAPING

Design

Every landscape contains potential problem areas which can be made less troublesome with a more efficient design. Narrow areas, steep slopes, and hot, sunny exposures are some examples. In designing landscapes, plan carefully to prevent the creation of such areas.

Decks and patios increase enjoyment of your yard as well as decrease the amount of water it needs. A bonus is that water tends to run off these structures into planted areas.

Slopes allow water to run off before it can soak in and benefit plants. The steeper the slope, the greater the problem. If your site has steep slopes, consider terracing. Avoid making steep landscaping mounds (berms) of soil because water runs off too quickly, increasing the need for irrigation.

Soil Improvement

Providing the best soil for your plants is the most important of the seven fundamentals. An ideal soil is a mixture of sand, organic matter, and clay that crumbles easily.

The best way to make your garden take and hold water is old-fashioned tilling and working in generous amounts of organic matter. Good choices include compost, sawdust, and decomposed manure.

Lawns need soil modified from 6 to 8 inches deep; annuals, 8 to 10 inches, and perennials and shrubs, 18 to 24 inches deep.

Lawn

For a water saving lawn appropriate to our climate, select one of the following species: Turftype Perennial Ryegrass, Hard Fescue, Creeping Red, Chewings, Colonial Bentgrass, and Turftype Tall Fescue.

Lay sod or plant grass seed in the fall when the roots can easily establish themselves without extensive waterings.

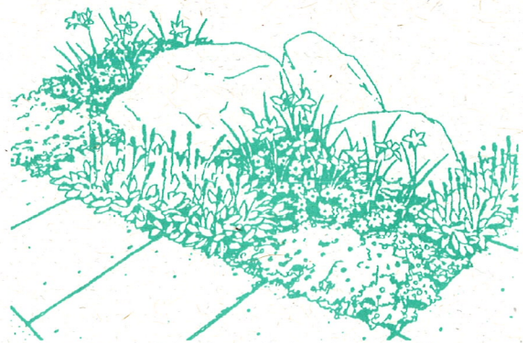
Irrigation

Make sure your basic garden and irrigation designs are fully integrated. Sketch the plan of your garden, labeling areas that need special attention and think about which method would best serve each space. The irrigation system you choose should provide water at or near the rate at which your soil will absorb it and only as frequently as the plants really need water.

Mulch

Mulch is a perfect water-control device for your garden. Mulch helps keep the heat of the sun from causing evaporation and controls weeds. Mulches also control erosion around the base of plants and, if organic, can improve the quality of the soil as well. They help prevent soil from compacting, allowing moisture to move easily to the plant roots. It can also make your garden neater and more attractive. Do not use solid sheets of plastic which do not allow air and moisture into the soil.

To obtain the maximum benefit, you should apply thick layers of mulch in more areas, such as shrub beds and perennial borders; and relate the type of mulch to the requirements of various areas of the landscape.



Perhaps the best "mulch" of all is a very drought-tolerant ground cover, which will perform all the functions of other mulches and lend beauty, color, and interest as well.

Maintenance

Good maintenance produces a more water efficient lawn and garden.

Fertilizing encourages plant and grass growth and increases watering needs. Apply fertilizers when the soil is moist. Do not fertilize during a drought or when the soil is dry.

Removing weeds is important since weeds compete with other plants and grass for soil nutrients, light, and water. Mulching and hand weeding are the best ways to control weeds.

Severe pruning increases lush growth which demands more water. Heavy pruning in the spring should be avoided. Light pruning during July and August may diminish water loss through leaves. Heavy pruning in July and August may stimulate new growth which demands more water and may also be less hardy.

Thatching the lawn removes the built-up layer of leaves, roots, and stems between the soil and grass blades. If not removed, thatch causes water to run off and not penetrate into the soil. Thatching can be done with a power rake or manual thatch rake.

Aerating the lawn lets water soak into the ground easily and reach the root zone more efficiently. To aerate, use a pronged hand tool or power aerator to remove plugs of soil from the grass. Plugs should be broken up and distributed over the lawn's surface.

LOW WATER USE TREES & SHRUBS

In selecting plants for a water-saving garden, the challenge is to work in harmony with high and low temperatures, soil types, available sunlight, humidity, and—most important—natural precipitation. Contact your county Cooperative Extension office for a more extensive list of low water use plants.

Trees

Pines, Oaks, Maple, Cedar, & Walnut species
American smoketree
Arizona cypress
Bigtooth maple
Black locust
Box elder
California buckeye
Cherry laurel
Chinese chestnut
Chinese elm
Common fig
Curl-leaf mountain mahogany
English holly
European mountain ash
Garry oak
Ginkgo
Golden rain-tree
Green ash cultivars
Hackberry species
Hawthorn species
Japanese Angelica tree
Japanese pagoda tree
Japanese zelkova
Juniper species
Laurel species
Madrone
Mulberry
Oregon myrtle
Osage orange
Sassafras
Silktree
Snow gum
Tanoak
Thornless honey locust
Tree-of-Heaven
Western dogwood
Western redbud

Shrubs, Vines & Ground Covers

Alder buckthorn
Barberry species
Beauty bush
Broom species
California coffeeberry
Camellia
Ceanothus species
Chokeberry, Red
Common butterfly bush
Cotoneaster species
Currant species
Euonymus species
European smoketree
Evergreen clematis
Firethorn species
Flowering quince species
Forsythia
Fraser photinia
Germanders
Honeysuckle species
Huckleberry species
Juniper species
Kinnikinik
Lavender species
Lilacs
Mahonia species
Manzanita species
Ninebark species
Red osier dogwood
Salal
Snowberry species
Spiraea species
Sumac
Viburnums
Western mock orange
Wisterias

(Continued on back panel)