



WISE WATERING OF LANDSCAPES

By Dean Donaldson, Farm Advisor

Many people over-water landscape plants by watering too frequently and by not adjusting watering frequency with the season. The simplified guidelines below can help you apply the right amount of water at correct intervals. These guidelines use the 'water budget' concept and make use of recent California field research. It is intended as a guide for educational purposes only and may not fit all situations.

Adjust water application to seasonal plant water demand. Plants use water to cool leaves and in converting the sun's energy. Sun exposure and plant water use varies with season. The guide on the reverse of this page details typical plant water use from April through October in the Napa County area. Wise watering, especially for high maintenance turfgrass and flower beds, requires adjustment of automatic timers to seasonal demand.

Group plants into 'water use zones' according to plant size and type. Plant species vary in their water needs. However, plant size and rooting depth are more important considerations. To simplify, landscapes can be divided into four example water budget groups. You can measure sprinkler output by catching water in a tin can.

Group 1. Turfgrass and flower beds. These have relatively shallow roots and require frequent, shallow watering. Apply a minimum of $\frac{3}{4}$ inch of water (measuring using a tin can) each time. Adjust the number of days between each watering as suggested in the table on the back of this page. Start watering after rains stop, usually in late March.

Group 2. Fruit trees are perennial flowers. These have roots that use water from the top two to three feet of soil. Home gardeners require these to look luxuriant and yield large fruits, so they require more water than their counterparts in category 3, below. Give fruit trees and perennials regular watering every two weeks with a minimum soaking of 3 inches (measured using a tin can) of water. Start watering in early May.

Group 3. Established background shrubs. These plants need to stay looking nice, but should not produce much growth each year. Roots grow in top 3 feet, so water monthly with a minimum of 3 inches of water. This watering schedule should produce healthy plants requiring a minimum of attention. Start watering in late May.

Group 4. Old established shade trees. Older trees have extensive, broad root systems, but still require regular watering to maintain a dense canopy of leaves. Water the entire area shaded by the trees twice per year. Apply at least 4 inches of water in mid-June and repeat in mid-August. These watering are timed to provide maximum benefits and insect resistance to the trees. Remember, native oak trees do not normally require watering unless impacted by reflected heat from roofs or pavement. Keep all water at least 10 feet away from the trunks of native oak trees.

Additional Reading:

Lawn Watering Requirements Along California's Central Coast, UC ANR leaflet 21432, 1988.

Irrigation Scheduling: A Guide for Efficient On-Farm Water Management, UC ANR Publication #21454, 1989.

Soil and Water Management for the Home Gardener, UC ANR leaflet 2258, 1995.

A GUIDE TO HOME WATERING

	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER
AVERAGE CLIMATE DEMAND (ET/WEEK)	3/4"	1"	1 1/4"	1 1/2"	1 1/4"	1"	1/2"
Turf & Flower Beds (3/4")	Weekly	Every 5 days	Every 4 days	2 times per week	Every 4 days	Every 5 days	Every 10 days
Established Fruit/Nut Trees & Perennial Flowers (3" to 4")	Deep Soak to 3 feet Every other week					Stop all water September 15 to avoid Collar Rot	
Established Shrubs (3" to 4")	Deep Soak monthly to wet 3 feet soil depth						
Established Shade Trees (4" to 6")	Deep Soak to 3 feet Mid-June			every other month		Deep Soak to 3 feet August	
Established Native Oaks	----- No Water Advised (under normal conditions) -----						

NOTE: Microclimate influences may require more frequent irrigation. Days when dry north wind or temperature over 100°F require extra water, adjust water schedule to match demand.

Water 1" deep applied to the surface rewets approximately to 1 foot deep in loam or clay/loam soil. Alternative water sources such as shallow water table, seeps, and septic leach fields may supply significant amounts of water.

This guide is based on average consumption use by turf and landscape plants. It assumes the water applied all goes into the soil and it is available to the plant roots. Water applied which runs off the surface into the street is wasted and non-available to the landscape plants.