

APPENDIX K

WATERING TECHNIQUES AND WATER CONSERVATION

Young and newly-planted shrubs and trees are especially vulnerable to drought, particularly during the first five years, as they have not yet established deep root systems. Water 1-2" once or twice a week, depending on weather conditions. Watering trees and shrubs should be done SLOWLY with a soaker hose or a regular hose with a small opening at a slow trickle.

Here are some additional water conservation tips; most are from a County brochure on "How to Make a Little Water go a Longgggg Way":

A four-person household can easily use 500 gallons of water per day just cooking, bathing, and flushing. As our urban population continues to increase, water conservation will become increasingly important. This means it is essential that everyone learn effective water conservation techniques. For best results, plan water conservation in advance when gardens are being established. Plant drought-resistant plants. An estimated 50 to 70 percent of garden and lawn water is wasted through mismanagement of one of our most precious resources: water.

Three Big Water Wasters to *Avoid*:

1. **Frequent Shallow Watering:** This practice is not only wasteful, it is also harmful, because it hastens the destruction of lawns, plants and shrubs, by encouraging a shallow root system. A shallow root system makes lawns and plants vulnerable to insects, sun scorching, and moisture loss. Lawns and plants have a better chance to survive with less frequent, deep watering that encourages the establishment of a deep root system.
2. **Flood Watering with a Hose:** Watering with a large hose is a wasteful watering practice. A 5/8" hose empties 3.5 gallons a minute, or 200 gallons an hour. Watering with a bucket, a watering can, a small hose or a soaker hose saves more water than any other conservation practice, and applies a gentle force that doesn't cause erosion or damage plants.
3. **Mulching with Peat Moss:** Peat moss holds about nine times its weight in water, which means it has to be soaking wet before water finally reaches the soil. Use other types of mulch, such as leaf mulch, straw, woodchips, grass clippings, sawdust, plastic, or commercial garden blankets.

The realities of replacement may be the key determining factor in choosing your watering priorities. For example, a lawn can be restored relatively easily if it does not come back after a drought. However, a mature tree or shrub cannot be quickly (or inexpensively) replaced so lawns are often the wisest choice to leave for last. Deep-rooted lawns generally can manage about 10 days to two weeks without water. Apply water only once a week directly to the soil, slowly, until it penetrates to at least 5-6" deep. Set the sprinkler with a container under it and use no more than 1" of water. Water only in the early morning or evening. While the lawns are under stress, walk on them as little as possible. Don't try to keep lawns well watered and green — this attempt puts the greatest strain of all upon municipal outside water resources.

Well-established lawns will survive a period of drought. They naturally become brown and dormant during dry spells or drought, but most will come back. Marking your watering schedule on your calendar can help you remember when you watered what and how much. If you do choose to water the lawn in front of your home, please do so responsibly by monitoring your hose. Don't turn it on then go run errands; set a timer as a reminder.

Vegetables require more water than flowers. One way to conserve water and still enjoy the harvest is mulching. Always cultivate before watering so the soil is porous enough to absorb water; otherwise, the water will cause a hard surface crust that prevents water and air from circulating. The most critical period of growth, when adequate water is essential, is just after blossoming when the fruit is beginning to form. Furrow watering is especially efficient for vegetable gardens; make connecting trenches several inches deep between rows of plants and irrigate slowly. Providing 1-2" of water once a week to a depth of 4-6" usually lasts a week or more. A soaker hose takes about 2 hours to ooze 1" of water along its length.

Common sense conserves water. Don't water without reason! Heed the daily forecast; if rain is predicted, wait and see if it does rain before you water. Use a rain gauge or set out an empty container to measure rainfall; a 3/4" rain is good for about 10 days. Know when to water — watch for wilting, heavy leaf fall or changed leaf appearance. Sample soil moisture: dig down 6"-18" for a sample; if soil will not form a ball it is too dry to provide water to plants, and it is too wet if it does form a ball. In-between is just right. Perpetually soggy soil eliminates aeration, depriving plants of necessary oxygen. Put a trigger control on your hose to apply water only where it is needed (particularly when washing your car), but turn it off at the faucet when not in use.

Don't throw away leaky hoses; add more holes and use for efficient slow-soaking irrigation of flowers, vegetables, trees and shrubs. Position sprinklers carefully so water is not wasted on the street, sidewalk, driveway, or other areas where it's not needed. An oscillating circular-spray sprinkler may put too much water in one particular place; an adjustable linear-spray gives you more water-delivery control.

These are just some of the ways you can help conserve water outside. If you are an avid gardener consult one of the thousands of gardening books that are available for more information on proper watering techniques.

To conserve water in your home, consider the following ideas: while you're running the water to get it hot, save it in a milk jug then use that water for any variety of uses; if you have lots of fruits and vegetables to wash, do it with a brush in a pan of water then give each a quick final rinse; shave at the sink and don't let the water run while you shave or brush your teeth; run the dishwasher and laundry with full loads or energy-saving cycles only; when you turn the water on, start with a trickle and increase only as necessary; use water-saving toilets and showerheads; cut your shower short by a minute or two; repair all leaky faucets and toilets; and teach your children to conserve water.