For Publication June 27, 2015

Best Management Practices for Irrigation

Homeowners can take several simple steps to conserve water and maintain healthy landscapes and gardens. The following are recommended best management practices for irrigating landscape, garden, and lawn areas efficiently and effectively.

Create Hydrozones: Place plants with similar water requirements together in an irrigation zone (an area watered by the same valve and controller station) to allow them to be watered on the same schedule.

Apply the Right Amount of Water: Over watering plants is more common than under watering plants - research on the water needs of plants shows that many plants are over irrigated by 20% to 40% or more. Clay soil, which hold relatively high amounts of water and dries out slowly, is particularly prone to overwatering.

Water Plants Deeply and Infrequently: Always wet the soil of established plants to just beyond the depth of their rooting system and allow the soil to partially dry between irrigations. Since actual rooting depth depends on many factors, it is best to sample soil around a given plant to estimate the exact depth of its root system.

Water Early in the Morning: Watering early in the morning under less windy and relatively cool conditions can greatly reduce evaporative water loss and disruption of sprinkler uniformity.

Avoid Deep Percolation and Runoff: Deep percolation wastes water due to significant water movement below the root zones of plants. To prevent runoff in heavy soil, apply water at low rates for as long as possible before runoff occurs.

Apply Water Uniformly: An even application of water over a planted area reduces water loss and improves plant health.

Adjust Irrigation and Reset Irrigation Controllers as Weather and Seasons Change: Irrigation needs of plants change with seasons and generally require lower amounts of water in the late fall, winter, and early spring than in summer. There is also substantial water waste when automatic watering systems are left on during rainy weather.

Provide Regular Maintenance of Irrigation Systems: Check irrigation systems regularly for physical and operational problems. A simple walk through of an area during an irrigation event can uncover possible problems.

Apply Mulch: Garden and ornamental plantings benefit from a layer of organic matter (mulch) 2 to 4 inches deep on top of the soil surface. Mulching is one of the most beneficial things a homeowner can do to maintain the health of ornamental plantings. Mulches reduce water evaporation from the soil, minimize weed competition, and can improve soil structure.

Amend Soil Extremely High in Sand or Clay: Soil high in clay, amended with organic matter, will absorb and conduct a greater amount of water more quickly than if left unamended. Sandy soils amended with organic matter holds more water than if unamended, requiring less frequent irrigations.

Submitted by: John Shovein, Program Coordinator, UC Master Gardeners of Glenn County