University of Hawai'i Master Gardener Program



# Water Conservation Tips for the Home Garden

based on Landscape Irrigation Conservation Best Management Practices Landscape Industry Council of Hawaii

### Water Conservation at Planting

**Incorporate compost into soils at planting.** Using compost conserves water by improving water absorption and the water holding capacity of the soil. When added to sandy soils compost acts as a sponge to help retain water that would otherwise drain down below the reach of plant roots. When added to clay soils, compost makes the soil more porous, making it drain more efficiently. Use 2 inches of mulch on the soils surface too.



Consider adding water storage features to your prop-

**erty**, such as rain gardens, infiltration beds, rain barrels, swales, and basins, that allow water to collect and soak into the ground on site. Links to Information about these features can be found below.

**Plant and preserve existing native shrubs and trees** and non-invasive vegetation that are adapted to the natural rainfall in your area to minimize the need for irrigation in these areas. Determine your local rainfall at the <u>Rainfall Atlas of Hawaii</u>. Visit your local xeriscape garden (like <u>Halawa Xeriscape Garden</u> on Oahu) for ideas.

### **Post-planting Water Conservation**

#### Actively manage water

**use** by choosing the number of days and the length of time you water to match your site's soil conditions and seasonal weather changes.

**Four times a year,** adjust your watering schedule:

- summer (dry season),
- winter (rainy season), and
- transition periods (fall and spring).

#### TYPICAL SEASONAL IRRIGATION SCHEDULE FOR HAWAII

Season	Irrigation Run Time	Days per Week
Summer (June to Aug.)	15 minutes	Every other day
<b>Transition Periods</b> (Fall: Sept. to Nov. and Spring: Mar. to May}	7 minutes	Every other day
<b>Winter</b> (Dec. to Feb.)	5 minutes	Twice per week

Run times shown for spray head zones. Robr zones should be double run times shown.

**"Deep water" your plants** by using longer, less frequent watering times to improve deep rooting and increase drought resistance. Avoid short daily watering, except for sandy soils.

Schedule night or early morning (5 p.m. to 9 a.m.) watering for established plantings to reduce the amount of water evaporating from the soil surface. In areas where ponding, compaction, or runoff occurs, set 2-3 short run time cycles.

**Mulch helps retain soil moisture.** Mulch with wood chips around base of trees and shrub beds and refresh as necessary to maintain a minimum of two inches. Do not allow mulch to contact the base of trunk.

Allow grass to grow taller in summer months to conserve water and encourage deep rooting. Use higher mowing height but same mowing schedule. Mowing heights should stay within the recommended mowing height for each species of grass.

Aerate lawns when compaction occurs. If possible, topdress with a thin layer of compost or sand. Dethatch or verticut heavily thatching grasses.







## For More Information

Backyard Composting http://www.ctahr.hawaii.edu/oc/freepubs/pdf/HG-41.pdf

Landscape Irrigation Conservation Best Management Practices (Landscape Industry Council of Hawaii) <a href="http://www.boardofwatersupply.com/files/LICH%20Irrigation%20FINAL%2020120620.pdf">http://www.boardofwatersupply.com/files/LICH%20Irrigation%20FINAL%2020120620.pdf</a>

Native Plants Hawaii http://nativeplants.hawaii.edu/

Mulching for healthier landscape plants http://www.ctahr.hawaii.edu/oc/freepubs/pdf/L-3.pdf

Oahu Planting Guide (Honolulu Board of Water Supply) http://www.hbws.org/cssweb/display.cfm?sid=1360

Plant Pono: Making Good Planting Decisions for the 'Aina http://www.plantpono.org/

Rainfall Atlas of Hawaii http://rainfall.geography.hawaii.edu/

Rain Barrel Catchment (Honolulu Board of Water Supply) http://www.boardofwatersupply.com/cssweb/display.cfm?sid=2091

Rain Gardens (Hui o Koolaupoko) http://www.huihawaii.org/rain-gardens.html

Rain Garden Manual (Hui o Koolaupoko)

http://www.huihawaii.org/uploads/1/6/6/3/16632890/raingardenmanual-web-res-smaller.pdf