



Public Works Department Landscape Maintenance Division Policies and Procedures

WATER MANAGEMENT PROGRAM

REVISED 3/17/09

PURPOSE: To apply the least amount of water necessary to maintain healthy plant material.

POLICY: City Landscape staff will use smart controller technology, crop coefficients, weather data, and field observations to accurately water the landscape.

PROCEDURES:

1. Controllers

- All irrigation controllers starting January 1, 2010 shall conform to California AB 1881 standards.
- The current approved stand alone controllers for use in the City are the Hydropointe WeatherTrak ET and the Aqua Conserve controller.
- The current approved central computerized control irrigation systems for use in the City are the Rainbird Maxicom, Hydropointe WeatherTrak ET Pro 2 and Calsense. All central controllers will adhere to Federal Communications Commission (FCC) regulations and only use approved licensed frequencies.

2. Controller Programming

- City staff will set the irrigation controller schedules based upon plant type, soil type, sprinkler type, crop coefficient, slope and sun exposure.
- Irrigation should not exceed the Irvine Ranch Water District (IRWD) water allocation.
- Daily monitoring of central computerized irrigation systems shall be performed by City staff to respond to alerts and system failures.

- Weekly landscape inspections will be performed by City and contract staff to correct deficient or excessive water use.
- City staff shall use the cycle and soak feature to increase the efficient use of water while limiting the environmental impacts associated with water runoff.
- Daily evapotranspiration data will be provided by the City Landscape Master Specialist.

3. Scheduling

- City staff will irrigate trees, shrubs and turf to the depth of their rootzone and then let the soil dry out to 50% of field capacity before further irrigation.
- The top of the soil should dry out between irrigations to reduce disease and weed seed germination while increasing the amount of oxygen in the soil.
- The ideal ratio of soil, water and oxygen should be maintained at a 2:1:1 ratio, respectively, for optimum plant health.

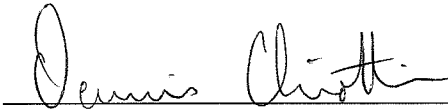
4. Maintenance

- All components of the irrigation system will be checked from the valves to the sprinkler heads every 14 days by the landscape maintenance contractor. Any malfunctions or leaks shall be repaired same day.
- Contractor will check and clean basket strainers as needed.
- Once a year, all master valves and flow sensors shall be checked and reset to the manufactures' specifications by the landscape maintenance contractor along with pressure regulators set to the approved landscape irrigation design specification.
- Any failure on the contractor to repair irrigation problems within 72 hours shall lead to liquidated damages.

5. Water Use

- IRWD will provide the City with reclaimed and domestic water for landscape irrigation purposes.

- IRWD provides each water meter an allocation based upon evapotranspiration data, site acreage and a cool season turfgrass crop coefficient. City staff should meet the criteria for landscape water use of:
 - 10-20% below allocation for an all turf site.
 - 20-40% below allocation for a mixed use site of turf and shrubs.
 - 50%+ below allocation for an all shrub/native site.
 - City staff shall complete and submit an IRWD Landscape Irrigation Adjustment form downloaded from www.irwd.com to receive a rebate for any over allocation water penalty that was incurred from a mainline leak or stuck valve.



Dennis Chiotti, Landscape Maintenance Superintendent

3/17/09

Date