

WATER EFFICIENT LANDSCAPE DESIGN MANUAL



HOW QUICKLY DOES YOUR SOIL ABSORB WATER?

1. Dig a hole 6 inches deep by 6 inches across.
2. Fill the hole with water and let it stand for one hour to saturate the soil.
3. Refill the hole with water. Measure depth of the water with a ruler.
4. Let stand one hour. Then measure depth of the water.
5. The difference in the water level between step 3 and step 4 is the amount of water absorbed by your soil in an hour.

installed, and that all plant materials meet average WUCOLS plant factor of 0.3.

3. Upon submittal of the signed Certificate of Completion Using Prescriptive Compliance Option, the County Landscape Architect shall verify compliance prior to issuance of Water Use Authorization. Prior to any occupancy or use of the premises in reliance with a building permit, the landscaping shall be installed and certified.

SECTION 4 CERTIFICATE OF COMPLETION

A. Landscape Certificate of Completion

1. A Certificate of Completion shall be submitted as per PDS Form 407 for all those projects that have an approved Landscape Documentation Package.
2. The applicant shall provide this information to the Director of Planning & Development Services within 10 days after installation of the landscaping and irrigation system.
3. An irrigation schedule and a maintenance schedule must also be submitted. In addition, a soil management report will also be required if one was not submitted as part of the Landscape Documentation Package. See Appendix D for the Certificate of Completion form and the required documentation to be submitted, verified, and approved prior to obtaining use of the property
4. The Certificate of Completion certifies that the landscaping and irrigation system have been installed in compliance with the approved Landscape Documentation Package or Prescriptive Compliance Option Plan and that the irrigation system functions as designed and approved.

WATER EFFICIENT LANDSCAPE DESIGN MANUAL

5. The landscape architect, civil engineer or architect shall conduct periodic site visits during construction to ensure that the landscaping and irrigation system are being installed per the approved Landscape Document Package or Prescriptive Compliance Option Plan and shall certify to such as part of the Certificate of Completion requirements. Where a single family homeowner who either hired a licensed landscape contractor to install the landscaping and irrigation, or installed it themselves, the certificate shall be signed under penalty of perjury by the homeowner and the contractor, or by the homeowner if installed by them. Personal property owners who designed and installed landscape on their own property shall also be required to sign the certificate. Preliminary inspection and observations shall include, but not be limited to, mainline, lateral lines, control wires, communication wires, and sprinkler head layout. Incorporation of composting and that soils are friable shall be confirmed and that soil amendments per the required soils test have been implemented shall also be confirmed.
6. An irrigation audit report shall be submitted with the Certification of Completion that shall include, but is not limited to: inspection, system tune-up, system test with distribution uniformity, soil moisture test/observation for drip and subsurface irrigation, reporting overspray or run-off that causes overland flow and preparation of an irrigation schedule, including configuring irrigation controllers with application rate, soil types, plant factors, slope, exposure, and any other factors necessary for accurate programming.
7. The applicant shall submit two sets of the signed Landscape Certificate of Completion.

B. Irrigation Scheduling

An annual irrigation program with monthly or seasonal irrigation schedules shall be submitted with the Landscape Certificate of Completion and provide the following information:

WATER EFFICIENT LANDSCAPE DESIGN MANUAL



Broken sprinkler heads can waste water at the rate of 10 gallons per minute.

1. A description of the automatic irrigation system that will be used for the project. A diagram of the irrigation plan showing hydrozones shall be kept with the irrigation controller for subsequent management purposes. A copy shall be provided with the submittal of the Certificate of Completion to verify compliance.
2. The time period when overhead irrigation will be scheduled and confirm that overhead irrigation shall only be used during the shorter of the following two intervals; 1) between 8:00 p.m. and 10:00 a.m., or 2) any more restrictive mandated by a public water purveyor.
3. For implementation of the irrigation schedule, particular attention must be paid to irrigation run times, emission device, flow rate, and current reference evapotranspiration, so that applied water meets the Estimated Total Water Use. Total annual applied water shall be less than or equal to Maximum Applied Water Allowance (MAWA). Actual irrigation schedules shall be regulated by automatic irrigation controllers using current reference evapotranspiration data (e.g., CIMIS) or soil moisture sensor data.
4. The parameters used for setting the irrigation system controller for the following:
 - a. The plant establishment period (monthly).
 - b. The established landscape (seasonal).
 - c. Temporarily irrigated areas (monthly).
 - d. Different seasons during the year.
5. Each schedule for each station should consider all of the following that apply:
 - a. Irrigation interval (days between irrigation).

WATER EFFICIENT LANDSCAPE DESIGN MANUAL

- b. Irrigation run times (hours or minutes per irrigation event to avoid runoff).
- c. Number of cycle starts required for each irrigation event to avoid runoff.
- d. Amount of water scheduled to be applied on a monthly basis.
- e. Application rate setting, root depth setting, plant type setting, soil type, slope factor setting, shade factor setting, application rate setting, and irrigation uniformity or efficiency setting.

C. Landscape and Irrigation Maintenance and Schedule

1. A person using water under a water use authorization that the County issued pursuant to Section 2. Title 8, Division 6, Chapter 7 of the San Diego County Code of Regulatory Ordinances shall maintain the landscaping and irrigation on the property to ensure compliance with the MAWA.
2. All required plantings shall be maintained in good growing condition and whenever necessary, shall be replaced with similar plant materials to ensure continued compliance with applicable landscaping, buffering, and screening requirements.
3. All landscaping and irrigation systems shall be properly maintained for the life of the permit and per the approved irrigation and maintenance schedules.
4. Broken or malfunctioning equipment and material shall be repaired or replaced immediately with equipment and material of the same type and operating characteristics as the original.
5. All irrigation systems shall be maintained in a fully operational condition. The irrigation system must function at a minimum average efficiency factor of 0.75.



HOW TO CHECK FOR LEAKS

- **Turn off all water (including ice makers).**
- **Record the reading on your water meter and mark the position of the needle.**
- **Wait 30 minutes to one hour and check the meter.**
- **If the needle has moved or the reading**

WATER EFFICIENT LANDSCAPE DESIGN MANUAL

6. Plans shall include a statement indicating who is responsible for on-going maintenance, including runoff and overspray prevention, repairs of broken or malfunctioning irrigation equipment, replacement of dead, dying, or diseased vegetation, and continual compliance with the **project's approved water calculations.**
7. A regular maintenance schedule must be submitted as part of the Certificate of Completion and shall include, but not be limited to:
 - a. Routine inspection of the irrigation system to guard against runoff and erosion.
 - b. Adjustments and repair of the irrigation system and its components.
 - c. Aerating and dethatching turf areas.
 - d. Replenishing mulch.
 - e. Fertilizing of non-native vegetation.
 - f. Pruning, weeding and removing any obstruction to emission devices.
 - g. Brush management.
 - h. Storm water management.
 - i. Identify who will be responsible for maintenance and include emergency contact information.
8. A project applicant is encouraged to implement established landscape industry sustainable Best Practices for all landscape maintenance activities.