

CHAPTER 6
WATER CONSERVATION IN LANDSCAPING
 (Added by Ord. 93-11)
 (Amended by Ord. 2009-9)

8600. INTENT AND PURPOSES. The purpose of this Chapter is to establish standards and procedures for the design, installation, and management of water conserving landscapes in order to utilize available plant, water, and land resources to avoid excessive landscape water demands while ensuring high quality landscape design.

8601. APPLICABILITY.

- A.** These requirements shall be applicable to:
1. Installation of new and rehabilitated landscaping for industrial, commercial, office and institutional developments; parks and other public recreational areas; multi-family residential; Planned Development (PD) common areas and to road medians and corridors with a landscape area equal to or greater than 2,500 square feet.
 2. Installation of new landscaping at single family dwellings, which are developer-installed with a landscape area equal to or greater than 2,500 square feet.
 3. Installation of new landscaping at single family dwellings, which are home-owner installed, with a landscape area equal to or greater than 5,000 square feet.
- B.** These requirements shall not be applicable to:
1. Any residential project with a lot size of 7,000 square feet or less.
 2. Private open space areas in multiple family residential developments.
 3. Cemeteries
 4. Registered Historical Sites
 5. Ecological restoration projects that do not require a permanent irrigation system
 6. Mined-land reclamation projects that do not require a permanent irrigation system
 7. Any project utilizing reclaimed water

8602. DEFINITIONS. Unless the context specifically indicates otherwise, the meaning of terms used in this Chapter shall be as defined in this section.

- A. APPLIED WATER.** The portion of water supplied by the irrigation system to the landscape.
- B. AUTOMATIC IRRIGATION CONTROLLER.** An automatic timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers schedule irrigation events using either evapotranspiration (weather-based) or soil moisture data.
- C. AUTOMATIC IRRIGATION SYSTEM.** An irrigation system that can be controlled without manual manipulation and which operates on a pre-set program.
- D. CONTOUR.** A line drawn on a plan which connects all points of equal elevation above or below a known or assumed reference point.
- E. CONTROL VALVE.** A valve in an irrigation system which is manually or automatically actuated using electric or hydraulic controls.
- F. CYCLE.** The complete operation of a controller station.
- G. DESIGNER.** A person qualified to design landscape and irrigation systems, including one qualified to practice landscape architecture and/or irrigation design.
- H. DIRECTOR.** The Director of Community Development.
- I. ESTIMATED TOTAL WATER USE.** The calculation to determine the total water used for the landscaped area including water features. The estimated total water use shall not exceed the maximum applied water allowance.
- J. ET ADJUSTMENT FACTOR.** The ET adjustment factor is 0.70. It is applied to the local evapotranspiration factor to adjust for plant factors and irrigation efficiency, the two factors in determining the amount of water required to maintain a landscape area.
- K. GRADING.** Earthwork performed to alter the natural contours of an area to be planted.
- L. HYDROZONE.** A portion of the planting area having plants with similar water needs. A hydrozone may be irrigated or non-irrigated.
- M. INFILTRATION RATE.** The rate of water entry into the soil expressed as a depth of water per unit of time (e.g., inches per hour).

N. IRRIGATION SYSTEM. A complete connection of system components, including the water distribution network and the necessary irrigation equipment downstream from the backflow prevention device.

O. MAXIMUM APPLIED WATER ALLOWANCE. The annual maximum amount of water that can be applied to a landscaped area. The maximum applied water allowance is based on local evapotranspiration, the ET Adjustment Factor and the size of the landscape area.

P. PLANT FACTOR. The amount of water required to maintain the health of the plant. Low water use plants have a plant factor between 0 and 0.3, moderate water use plants have a plant factor between 0.4 and 0.6, and high water use plants have a plant factor between 0.7 and 1.0.

Q. PLANTING AREA. The parcel area less building pad(s), driveway(s), patio(s), deck(s), walkway(s) and parking area(s). Planting area includes water bodies (i.e. fountains, ponds, lakes) and natural areas.

R. PLANTING PLAN. A plan showing the location, spacing, numbers, container sizes of all plant materials including common and botanical names.

S. RECLAIMED WATER. A treated or recycled waste water of quality suitable for nonpotable uses such as landscape irrigation and water features; not intended for human consumption.

T. REHABILITATED LANDSCAPE. Any planting area in which more than 50 percent of the existing landscape material is replaced or modified from original plans as approved by the City, which is equal to or greater than 2,500 square feet and meets the provisions in Section 8601. Replacing and rehabilitating irrigation systems only is not considered rehabilitated landscape provided the same or equivalent parts are used in the replacement and there is no increase in the estimated total water use.

U. SPECIAL LANDSCAPE AREA. Any area of the landscape dedicated solely to edible plants, water features using reclaimed water, and areas dedicated to active play such as parks, sports fields, golf courses and any other area where turf provides a playing surface.

V. STATION. An area served by one valve or by a set of valves that operate simultaneously.

W. TURF. A ground cover surface of mowed grass.

8603. PROCEDURES FOR IMPLEMENTATION OF WATER CONSERVATION LANDSCAPING PROVISIONS. The City Council shall adopt a resolution which establishes the procedures for the implementation of the provisions herein. The City shall make the provisions herein and the procedures of implementation of the water conservation in landscaping ordinance available to the public.

8604. LANDSCAPE PLAN - REQUIRED. Landscape plans shall be prepared in accordance with the standards set forth herein and with the procedures developed to help implement the provisions of this chapter; said procedures are on file in the office of the Director of Community Development. Such plans shall be submitted and approved prior to the issuance of building permits to comply with the requirements of this Chapter.

8605. LANDSCAPE PERMIT - REQUIRED. A permit for the installation of all new and rehabilitated landscape is required. Prior to the issuance of the permit, a Landscape Plan Application shall be submitted and approved in accordance with this Chapter.

8606. LANDSCAPE PLAN - APPLICATION. Prior to the issuance of a landscape permit, a Landscape Plan Application shall be submitted, reviewed and approved in accordance with this Chapter. Applications for Landscape Plan approval shall be filed by the owner of the affected property or his agent, or by a public entity to which the provisions of the Chapter apply. At the time the landscape plans are submitted the applicant shall pay a fee in accordance with City Council Resolution.

8607. LANDSCAPE PLAN - APPROVAL. No Landscape Plan Application shall be approved unless the Director finds that the plan compliments the design of the project, is consistent with the provisions of this chapter and applicable landscape procedures; compatible with adjacent existing or future public landscaped areas, and with the elevations and appearances with existing structures located upon lots within the immediate vicinity of the lot which is the subject of such application.

8608. LANDSCAPE PLAN - CONTENT. Each Landscape Plan submittal requires the completion of a Landscape Documentation Package as outlined in the procedures, and shall consist of the following elements including, but not limited to the following:

A. WATER EFFICIENT LANDSCAPE WORKSHEET. Each landscape plan shall include a Water Efficient Landscape Worksheet, which shall include calculations of the project's:

1. Maximum Applied Water Allowance.
2. Estimated Total Water Use.

B. PLANTING PLAN. The planting plan shall identify location, spacing, numbers, and container sizes of all plant materials including common and botanical names, plant factor, and size of hydrozone areas. Planting plan shall be drawn to scale on project base sheets in a clear and legible fashion in accordance with the procedures established to implement the provisions of this Chapter.

C. IRRIGATION PLAN. The irrigation plan shall identify all components of the irrigation system drawn to scale on project base sheets in a clear and legible fashion in accordance with the procedures established to implement the provisions of this Chapter. Irrigation systems shall be designed and maintained in a manner that meets or exceeds an average landscape irrigation efficiency of 0.71.

D. SOILS ASSESSMENT. The landscape plan shall include an assessment of the soils which evaluates soil infiltration rate, soil texture, and agricultural suitability. Projects that do not require significant mass grading shall submit a soils assessment with the Landscape Plan prior to the commencement of work. Projects that require significant mass grading shall submit the soils assessment with the Certificate of Completion.

E. GRADING DESIGN PLAN. Grading of a project site shall be designed to minimize soil erosion, runoff and water waste. Grading plans shall be prepared in accordance with the procedures established to implement the provisions of this Chapter.

F. ANNUAL IRRIGATION SCHEDULE. Irrigation schedules shall be developed, managed and evaluated to utilize the minimum amount of water required to maintain plant health and in accordance with the procedures established to implement the provisions of this Chapter. The annual irrigation schedule shall be prepared with a minimum four-season water schedule. The irrigation schedule shall include run time and frequency of irrigation for each station and shall be posted at the site.

8609. WATER FEATURES. Decorative water features such as ponds, and waterfalls used in landscaped areas shall incorporate water recirculation systems, and shall be designed and operated to minimize water loss, and use reclaimed water if available and approved by the State of California Department of Public Health and the Los Angeles County Department of Public Health. Recreational pools and spas shall be designed to minimize water loss. All water features shall be included in the project's Estimated Total Water Use in accordance with the procedures established to implement the provisions of this Chapter.

8610. WATER METERS. Each landscape irrigation system for new developments shall be metered for water use, separately from domestic and other non-landscape uses, except for single family homes or any project with a landscaped area of less than 3,000 square feet.

8611. RECLAIMED WATER. The installation of a separate water irrigation systems from domestic water supply (dual distribution systems) shall be required for new developments to allow for the current and future use of reclaimed water, unless during the plan check process it is determined that reclaimed water meeting all health standards is not available in the foreseeable future. The reclaimed water irrigation systems shall be designated and operated in accordance with local and state codes.

8612. STORMWATER MANAGEMENT. The use of stormwater best management practices into the landscape and grading design plans, which minimize runoff and increase on-site water retention and infiltration are strongly encouraged. Applicants shall follow stormwater regulations promulgated by the city and the Regional Water Quality Control Board. Landscape features that capture rainwater such as rain gardens and cisterns are encouraged.

8613. IRRIGATION AND LANDSCAPE MAINTENANCE. Landscapes shall be maintained to ensure water use efficiency. A regular maintenance schedule shall be prepared in accordance with the procedures established to implement the provisions of this Chapter and submitted with the Certificate of Completion. The property owner shall permanently and continuously maintain all landscaping and irrigation in a neat, clean and healthy condition, including removal of litter, proper pruning, mowing of lawns, weeding, fertilizing, and watering; and replacement of diseased and/or dead plants; and repair of malfunctioning, missing irrigation system components, and maintenance of sprinkler heads to eliminate overspray. All landscape irrigation shall meet the provisions of the City of Lakewood Water Conservation Ordinance Section 7511.1 of the Lakewood Municipal Code.

8614. IRRIGATION AUDIT, IRRIGATION SURVEY AND IRRIGATION WATER USE ANALYSIS. A certified landscape irrigation auditor shall conduct an irrigation audit in accordance with the procedures established to implement the provisions of this Chapter. The results of the irrigation audit shall be submitted with the Certificate of Completion.

8615. CERTIFICATE OF COMPLETION. Upon completion of the installation of the landscaping, the designer shall certify that the landscape complies with all requirements of this Chapter. Certification shall be accomplished by completion of a Certificate of Completion on a form approved by the Director prior to final approval. Failure to submit a complete and accurate Certificate of Completion will delay final approval of the project and/or require the water utility to discontinue water service.

8616. RELATIVE WATER REQUIREMENTS OF COMMONLY USED PLANTS. The Director shall develop and maintain a list of plants that are commonly used in landscape designs with water requirement classifications of low, medium, and high to assist landscape designers to choose species of appropriate water demands to comply with this Chapter and to group species of similar water demands to facilitate efficient irrigation.

8617. EXISTING LANDSCAPES. Landscape areas installed prior to January 1, 2010 and are equal to or greater than one acre shall be required to conduct an irrigation water use audit. Such water use analysis shall be conducted by the property owner upon written notification by the City or the water utility serving the property. All landscape audits shall be conducted by a certified landscape irrigation auditor.