

**ORDINANCE NO. 859  
(AS AMENDED THROUGH 859.1)  
AN ORDINANCE OF THE COUNTY OF RIVERSIDE  
ESTABLISHING WATER-EFFICIENT LANDSCAPE REQUIREMENTS**

The Board of Supervisors of the County of Riverside Ordains as Follows:

Section 1. SHORT TITLE. This Ordinance shall be known as the "Water Efficient Landscape Requirements Ordinance".

Section 2. INTENT. It is the intent of the Board of Supervisors in adopting this Ordinance:

- A. To promote water-efficient landscaping, water use management and water conservation through the use of water-efficient landscaping, wise use of turf areas and appropriate use of irrigation technology and management;
- B. To reduce the water demands from landscapes without a decline in landscape quality or quantity;
- C. To retain flexibility and encourage creativity through appropriate design;
- D. To assure the attainment of water-efficient landscape goals by requiring that landscapes not exceed a maximum water demand of eighty percent (80%) of its reference evapotranspiration (ET<sub>o</sub>) or any lower percentage as may be required by state legislation;
- E. To eliminate water waste from overspray and/or runoff; and
- F. To achieve water conservation by raising the public awareness of the need to conserve water through education and motivation to embrace an effective water demand management program.

Section 3. APPLICABILITY.

- A. The water-efficient landscape requirements contained in this Ordinance shall be applicable to all discretionary permits and/or approvals for commercial, industrial, and residential uses, including but not limited to subdivision common areas and perimeter landscaping, except for grading permits relating to said commercial, industrial, and residential uses.
- B. In the event Covenants, Conditions and Restrictions are required by the County for any permit subject to this Ordinance, a condition shall be incorporated into any project approval prohibiting the use of water-intensive landscaping and requiring the use of low water use landscaping pursuant to the provisions of this Ordinance in connection with common area/open space landscaping. Additionally, such a condition shall also require the Covenants, Conditions and Restrictions to incorporate provisions concerning landscape irrigation system management and maintenance. This Ordinance shall not be construed as requiring landscaping of common areas or open space that is intended to remain natural.

Section 4. PLANT AND IRRIGATION REQUIREMENTS.

- A. PLANT REQUIREMENTS.
  - 1) The "Riverside County Guide to California Friendly Landscaping" (Landscaping Guide) is hereby incorporated by reference and is provided to assist the project applicant in choosing and grouping plant species with similar water demands to facilitate efficient irrigation through use of the

water budget formula contained in the Landscaping Guide. The plant list contained in the Landscaping Guide provides a classification of high, moderate, low and very low water use for each plant. In order to incorporate plant species other than those listed, the project applicant shall provide the Planning Director with information indicating the water requirements of the species. This information shall include a description of the plant, including but not limited to, its water requirements, field data, and a comparison of the plant to a similar species included in the plant list. The selection of low water use, native or drought tolerant plant species is strongly encouraged.

- 2) Plant types shall be grouped together in regards to their water, soil, sun and shade requirements and in relationship to the buildings. Plants with different water needs shall be irrigated separately. Plants with the following classifications shall be grouped accordingly: high and moderate, moderate and low, low and very low. Deviation from these groupings shall not be permitted.
- 3) Trees for shade shall be provided for residential, commercial and industrial buildings, parking lots and open space areas. These trees can be deciduous or evergreen and are to be incorporated to provide natural cooling opportunities for the purpose of energy and water conservation.
- 4) Soil tests on all projects are required for appropriate specifications of soil amendments, and to facilitate selection of water-efficient plant species suitable for the site. Soil amendments such as compost shall be provided to improve water holding capacity of soil, where soil conditions warrant.
- 5) All exposed surfaces of non-turf areas within the developed landscape area shall be mulched with a minimum three inch (3") layer of material, except in areas with groundcover planted from flats where mulch depth shall be one and one half inches (1 ½").
- 6) Turf areas shall be used wisely in response to functional needs and in compliance with the water budget formula and specifications in the Landscaping Guide.

#### B. IRRIGATION REQUIREMENTS.

- 1) All irrigation systems shall be designed to prevent runoff, over-spray, low-head drainage and other similar conditions where water flows off-site on to adjacent property, non-irrigated areas, walk, roadways, or structures. Irrigation systems shall be designed, constructed, managed, and maintained to achieve as high an overall efficiency as possible.
- 2) Landscaped areas shall be provided with a smart irrigation controller which automatically adjusts the frequency and/or duration of irrigation events in response to changing weather conditions unless the use of the property would otherwise prohibit use of a timer. The planting areas shall be grouped in relation to moisture control zones based on similarity of water requirements (i.e. turf separate from shrub and groundcover, full sun exposure areas separate from shade areas; top of slope separate from toe of slope). Additional water conservation technology may be required, where necessary, at the discretion of the Planning Director.
- 3) Water systems for common open space areas shall use non-potable water, if approved facilities are made available by the water purveyor.

Provisions for the conversion to a non-potable water system shall be provided within the landscape plan. Water systems designed to utilize non-potable water shall be designed to meet all applicable standards of the California Regional Water Quality Control Board and the Riverside County Health Department.

- 4) Separate valves shall be provided for separate water use planting areas, so that plants with similar water needs are irrigated by the same irrigation valve. All installations shall rely on highly efficient state of the art irrigation systems to eliminate runoff and maximize irrigation efficiency as required by the Landscaping Guide.
- 5) All irrigation systems shall be equipped with the following:
  - a. A smart irrigation controller as defined in Section B. 2) of this Ordinance;
  - b. A rain sensing device to prevent irrigation during rainy weather;
  - c. Anti-drain check valves installed at strategic points to minimize or prevent low-head drainage; and
  - d. A pressure regulator when the static water pressure exceeds the maximum recommended operating pressure of the irrigation system.

Section 5. IMPLEMENTATION. In addition to the provisions contained in this ordinance, the project applicant shall comply with all the provisions of Section 18.12 of Ordinance No. 348, including, but not limited to, parking, landscaping, irrigation and shading requirements. The project applicant shall also be required to comply with Sections 5.A.(1) and 5.A.(2) of this Ordinance:

- A. All landscaping and irrigation plans submitted shall comply with the following requirements:
  - 1) Landscaping plans shall be prepared using the Water Budget Formula contained in the Landscaping Guide. In addition, landscaping plans shall provide a water budget which includes estimated annual water use (in gallons/acre feet) and the area (in square feet/acres) to be irrigated, precipitation rates for each valve circuit, and the irrigation schedules required pursuant to Section 5.A.2. of this Ordinance. Separate valves shall be provided for separate water-use planting areas, so that plant materials with similar water needs are irrigated by the same irrigation valve. The estimated annual water use, calculated by adding the amount of water recommended in the irrigation schedule shall not exceed the allowable water budget.
  - 2) Two irrigation schedules shall be prepared, one for the initial establishment period of six months and one for the established landscape, which incorporate the specific water needs of the plants and turf throughout the calendar year. The irrigation schedule shall take into account the particular characteristics of the soil; shall be continuously available on site to those responsible for the landscape maintenance; and shall contain specifics as to optimum run time and frequency of watering, and irrigation hours per day. The schedule currently in effect shall be posted at the controller.

- a. Landscape plans shall consist of separate planting and irrigation plans, both drawn at the same size and scale, and shall accurately and clearly include the following information:
    - 1) Planting plans shall identify and site the following:
      - a. New and existing trees, shrubs, ground covers, and turf areas within the developed landscape area;
      - b. Planting legend indicating all plant species by botanical name and common name, spacing, and quantities of each type of plant by container size;
      - c. Designation of hydrozones;
      - d. Area, in square feet, devoted to landscaping and a breakdown of the total area by landscape hydrozones;
      - e. Property lines, streets, and street names;
      - f. Building locations, driveways, sidewalks, retaining walls, and other hardscape features;
      - g. Appropriate scale and north arrow;
      - h. Planting specifications and details, including the recommendations from the soils analysis, if applicable.
    - 2) Irrigation plans shall identify and site the following:
      - a. Irrigation point of connection (POC) to the water system;
      - b. Static water pressure at POC;
      - c. Location and size of water meter(s);
      - d. Location, size, and type of all components of the irrigation system, including automatic controllers, main and lateral lines, valves, sprinkler heads and nozzles, pressure regulator, drip and low volume irrigation equipment;
      - e. Total flow rate (gallons per minute), and design operating pressure (psi) for each overhead spray and bubbler circuit, and total flow rate (gallons per hour) and design operating pressure (psi) for each drip and low volume irrigation circuit;
      - f. Precipitation rate (inches per hour) for each overhead spray circuit;
      - g. Irrigation legend with the manufacturer name, model number, and general description for all specified equipment, separate symbols for all irrigation equipment with different spray patterns, spray radius, and precipitation rate;
      - h. Irrigation system details for assembly and installation;
      - i. Recommended irrigation schedule for each month, including number of irrigation days per week, number of start times (cycles) per day, minutes of run time per cycle, and estimated amount of applied irrigation water, expressed in gallons per month and gallons per year, for the established landscape;
      - j. Calculation of landscape water budget using the water budget formula contained in the Landscaping Guide.
- B. If the water purveyor for a proposed project has adopted more stringent water-efficient landscaping requirements, as determined by the Planning Director, all landscaping and irrigation plans submitted shall comply with the water purveyor's

requirements. Said plans shall be accompanied by a written approved document from the water purveyor delineating each requirement.

Section 6. COMPLIANCE. The Planning Director or designee shall have the duty and authority to administer and enforce this ordinance.

- A. Prior to issuance of a building permit for a project subject to this Ordinance, or as otherwise specified in the conditions of approval for a project, Planting and Irrigation Plans prepared for the project shall be submitted for review and approval by the Planning Director. Both the Planting and Irrigation Plans shall be reviewed by an independent licensed landscape architect to ensure that all components of the Plans adhere to the requirements of this Ordinance. The licensed landscape architect shall sign the Plans verifying that the Plans comply with this Ordinance. Any Plans submitted without the signature of a licensed landscape architect shall not be accepted for review.
- B. Prior to issuance of a certificate of occupancy or final inspection for a project subject to this ordinance, a Certificate of Completion shall be submitted to the Planning Director certifying that the landscaping has been completed in accordance with the approved Planting and Irrigation Plans for the project. The Certificate of Completion shall be signed by a licensed landscape architect and shall indicate that:
  - 1) The landscaping has been installed in conformance with the approved Planting and Irrigation Plans;
  - 2) The smart irrigation controller has been set according to the irrigation schedule;
  - 3) The irrigation system has been adjusted to maximize irrigation efficiency and eliminate overspray and runoff; and
  - 4) A copy of the irrigation schedule has been given to the property owner.
- C. The Planning Director or his/her designee shall have the right to enter upon the project site at any time before, during and after installation of the landscaping to conduct inspections for the purpose of enforcing this Ordinance.

Section 7. The provisions of this ordinance shall take effect thirty (30) days after its adoption.

**Adopted:** 859 Item 16.1 of 12/19/2006 (Eff: 01/18/2007)

**Amended:** 859.1 Item 15.1 of 03/25/2008 (Eff: 04/25/2008)