

**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



FROM: Supervisor Marion Ashley

SUBMITTAL DATE:
November 21, 2006

SUBJECT: An Ordinance Establishing Water Efficient Landscape Requirements

RECOMMENDED MOTION: That the Board of Supervisors Introduce and Set for Hearing Ordinance No. 859 and Ordinance No. 348.4442.

BACKGROUND: Ordinance No. 348.3446 approved by the Board of Supervisors on 7/21/1992 (Agenda Item 3.1) added Article 19.300 establishing Water-Efficient Landscape Requirements to the Riverside County Land Use Ordinance. Since the original adoption of this language burgeoning development within the County coupled with the recognition of scarce water supplies has brought forth the need to revisit this matter. At a time whereby the County is preparing a new land use ordinance (Ord. No. 850) it is appropriate to consolidate the regulations for landscape planting, irrigation, and water conservation into a separate ordinance. Ordinance No. 859 will update existing requirements to promote water-efficient landscaping and the appropriate use of irrigation technology and management. The ordinance prescribes reasonable standards, restrictions, and requirements concerning water use in landscaped areas. It will apply to all Planning discretionary permits, and any other permit when the Planning Director deems it necessary. Implementation of the regulations will be phased in according to the following schedule:

1. Commercial, Industrial, and Multi-family Projects –Immediately upon adoption.
2. Model Homes and Subdivision Perimeter Landscaping—January 1, 2008
3. All Production Tract Development ---January 1, 2010

Ordinance 348.4442 amends Ordinance No. 348 to insure that the water-efficient landscape requirements are applicable to common areas within residential subdivisions (not including multi-family subdivisions) and any other permit when the Planning Director deems necessary provided the other permit is not subject to the requirements of Ordinance No. 859.

The draft ordinance language, as prepared and reviewed by County Counsel, is attached.

Marion Ashley

Marion Ashley
Supervisor-District 5

MB:mfb

Policy
 Policy

Consent
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Dep't Recomm.:
Per Exec. Ofc.:

Prev. Agn. Ref.

District:
Countywide

Agenda Number:

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ORDINANCE NO. 859
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_o) 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 multi-family uses except for grading permits relating to said 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

1 and Restrictions to incorporate provisions concerning landscape irrigation system management
2 and maintenance. This Ordinance shall not be construed as requiring landscaping of common
3 areas or open space that is intended to remain natural.

4 **Section 4. PLANT AND IRRIGATION REQUIREMENTS.**

5 A. PLANT REQUIREMENTS.

6 1) The "Riverside County Guide to California Friendly Landscaping" (Landscaping
7 Guide) is hereby incorporated by reference and is provided to assist the project applicant in
8 choosing and grouping plant species with similar water demands to facilitate efficient irrigation
9 through use of the water budget formula contained in the Landscaping Guide. The plant list
10 contained in the Landscaping Guide provides a classification of high, moderate, low and very low
11 water use for each plant. In order to incorporate plant species other than those listed, the project
12 applicant shall provide the Planning Director with information indicating the water requirements
13 of the species. This information shall include a description of the plant, including but not limited
14 to, its water requirements, field data, and a comparison of the plant to a similar species included in
15 the plant list. The selection of low water use, native or drought tolerant plant species is strongly
16 encouraged.

17 2) Plant types shall be grouped together in regards to their water, soil, sun and shade
18 requirements and in relationship to the buildings. Plants with different water needs shall be
19 irrigated separately. Plants with the following classifications shall be grouped accordingly: high
20 and moderate, moderate and low, low and very low. Deviation from these groupings shall not be
21 permitted.

22 3) Trees for shade shall be provided for residential, commercial and industrial
23 buildings, parking lots and open space areas. These trees can be deciduous or evergreen and are to
24 be incorporated to provide natural cooling opportunities for the purpose of energy and water
25 conservation.

26 4) Soil tests on all projects are required for appropriate specifications of soil
27 amendments, and to facilitate selection of water-efficient plant species suitable for the site. Soil
28

1 amendments such as compost shall be provided to improve water holding capacity of soil, where
2 soil conditions warrant.

3 5) All exposed surfaces of non-turf areas within the developed landscape area shall be
4 mulched with a minimum three inch (3") layer of material, except in areas with groundcover
5 planted from flats where mulch depth shall be one and one half inches (1 1/2").

6 6) Turf areas shall be used wisely in response to functional needs and in compliance
7 with the water budget formula and specifications in the Landscaping Guide.

8 B. IRRIGATION REQUIREMENTS.

9 1) All irrigation systems shall be designed to prevent runoff, over-spray, low-head
10 drainage and other similar conditions where water flows off-site on to adjacent property, non-
11 irrigated areas, walk, roadways, or structures. Irrigation systems shall be designed, constructed,
12 managed, and maintained to achieve as high an overall efficiency as possible.

13 2) Landscaped areas shall be provided with a smart irrigation controller which
14 automatically adjusts the frequency and/or duration of irrigation events in response to changing
15 weather conditions unless the use of the property would otherwise prohibit use of a timer. The
16 planting areas shall be grouped in relation to moisture control zones based on similarity of water
17 requirements (i.e. turf separate from shrub and groundcover, full sun exposure areas separate from
18 shade areas; top of slope separate from toe of slope). Additional water conservation technology
19 may be required, where necessary, at the discretion of the Planning Director.

20 3) Water systems for common open space areas shall use non-potable water, if
21 approved facilities are made available by the water purveyor. Provisions for the conversion to a
22 non-potable water system shall be provided within the landscape plan. Water systems designed to
23 utilize non-potable water shall be designed to meet all applicable standards of the California
24 Regional Water Quality Control Board and the Riverside County Health Department.

25 4) Separate valves shall be provided for separate water use planting areas, so that
26 plants with similar water needs are irrigated by the same irrigation valve. All installations shall
27 rely on highly efficient state of the art irrigation systems to eliminate runoff and maximize
28 irrigation efficiency as required by the Landscaping Guide.

- 1 5) All irrigation systems shall be equipped with the following:
- 2 a. A smart irrigation controller as defined in Section B. 2) of this Ordinance;
- 3 b. A rain sensing device to prevent irrigation during rainy weather;
- 4 c. Anti-drain check valves installed at strategic points to minimize or prevent low-head
- 5 drainage; and
- 6 d. A pressure regulator when the static water pressure exceeds the maximum
- 7 recommended operating pressure of the irrigation system.

8 **Section 5.** **IMPLEMENTATION.** In addition to the provisions contained in this ordinance,

9 the project applicant shall comply with all the provisions of Section 18.12 of Ordinance No. 348,

10 including, but not limited to, parking, landscaping, irrigation and shading requirements. The project

11 applicant shall also be required to comply with Sections 5.A.(1) and 5.A.(2) of this Ordinance:

12 A. All landscaping and irrigation plans submitted shall comply with the following

13 requirements:

- 14 1. Landscaping plans shall be prepared using the Water Budget Formula
- 15 contained in the Landscaping Guide. In addition, landscaping plans shall
- 16 provide a water budget which includes estimated annual water use (in
- 17 gallons/acre feet) and the area (in square feet/acres) to be irrigated,
- 18 precipitation rates for each valve circuit, and the irrigation schedules
- 19 required pursuant to Section 5.A.2. of this Ordinance. Separate valves
- 20 shall be provided for separate water-use planting areas, so that plant
- 21 materials with similar water needs are irrigated by the same irrigation valve.
- 22 The estimated annual water use, calculated by adding the amount of water
- 23 recommended in the irrigation schedule shall not exceed the allowable
- 24 water budget.
- 25
- 26 2. Two irrigation schedules shall be prepared, one for the initial establishment
- 27 period of six months and one for the established landscape, which
- 28 incorporate the specific water needs of the plants and turf throughout the

1 calendar year. The irrigation schedule shall take into account the particular
2 characteristics of the soil; shall be continuously available on site to those
3 responsible for the landscape maintenance; and shall contain specifics as to
4 optimum run time and frequency of watering, and irrigation hours per day.
5 The schedule currently in effect shall be posted at the controller.

6 a) Landscape plans shall consist of separate planting and irrigation
7 plans, both drawn at the same size and scale, and shall accurately
8 and clearly include the following information:

9 1) Planting plans shall identify and site the following:

- 10 a. New and existing trees, shrubs, ground covers, and turf areas
11 within the developed landscape area;
- 12 b. Planting legend indicating all plant species by botanical name
13 and common name, spacing, and quantities of each type of plant by
14 container size;
- 15 c. Designation of hydrozones;
- 16 d. Area, in square feet, devoted to landscaping and a breakdown of
17 the total area by landscape hydrozones;
- 18 e. Property lines, streets, and street names;
- 19 f. Building locations, driveways, sidewalks, retaining walls, and
20 other hardscape features;
- 21 g. Appropriate scale and north arrow;
- 22 h. Planting specifications and details, including the
23 recommendations from the soils analysis, if applicable.

24 2) Irrigation plans shall identify and site the following:

- 25 a. Irrigation point of connection (POC) to the water system;
- 26 b. Static water pressure at POC;
- 27 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.

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By: _____
Chairman, Board of Supervisors

ATTEST:

NANCY ROMERO
Clerk of the Board

By: _____

Deputy

(Seal)

APPROVED AS TO FORM

_____, 2006

By: *Karin Watts-Bazan*
KARIN WATTS-BAZAN
Deputy County Counsel

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2 KARIN WATTS-BAZAN
3 Deputy County Counsel
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