

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

627



FROM: Transportation and Land Management Agency

SUBMITTAL DATE:
 July 9, 2015

SUBJECT: Adoption of Ordinance No. 859.3 An Urgency Ordinance of the County of Riverside amending Ordinance 859.2, Water Efficient Landscape Requirements. All Districts; [\$40,000]; 100% Planning Department Budget (General Fund). CEQA EXEMPT

RECOMMENDED MOTION: That the Board of Supervisors:

1. Find the adoption of Ordinance No. 859.3 to be exempt from CEQA pursuant to State CEQA Guidelines Section 15307; and
2. Adopt Ordinance 859.3 An Urgency Ordinance of the County of Riverside Amending the Water Efficient Landscape Requirements; and
3. Find the adoption of Ordinance No. 859.3 to be effective immediately consistent with urgency ordinance adoption provisions identified in state law; and
4. Direct the Clerk of the Board to file a Notice of Exemption with the County Clerk within five (5) days of project approval.

Juan C. Perez, Director, Transportation and Land Management Agency

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost:	POLICY/CONSENT (per Exec. Office)
COST	\$ 40,000	\$ N/A	\$ 40,000	\$ N/A	Consent <input type="checkbox"/> Policy <input checked="" type="checkbox"/>
NET COUNTY COST	\$ 20,000	\$ N/A	\$ 20,000	\$ N/A	
SOURCE OF FUNDS: 100% Planning Departmental Budget (General Fund)				Budget Adjustment:	
				For Fiscal Year: 14/15	

C.E.O. RECOMMENDATION:

APPROVE

BY:
 Tina Granda

County Executive Office Signature

MINUTES OF THE BOARD OF SUPERVISORS

- A-30
- 4/5 Vote
- Positions Added
- Change Order

Prev. Agn. Ref.: 3.62 10/20/09 & III. 5/18/15

District: ALL

Agenda Number:

3-51

Departmental Concurrence

**SUBMITTAL TO THE BOARD OF SUPERVISORS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA
FORM 11: Adoption of Ordinance No. 859.3 An Urgency Ordinance of the County of Riverside
amending Ordinance 859.2, Water Efficient Landscape Requirements. All Districts; [\$40,000]; 100%
Planning Department Budget (General Fund). CEQA EXEMPT**

DATE: July 9, 2015

PAGE: 2 of 3

BACKGROUND:

Summary

Riverside County has been a leader in water conservation efforts over the last nine years, dating back to our original Ordinance 859 adopted in 2006, which set water efficient landscape requirements and water budgets. Due to unprecedented drought conditions throughout the State of California over the past four years, on April 1, 2015, Governor Brown issued Executive Order B-29-15 that directs the State Water Resource Control Board to impose restrictions on water purveyors in order to achieve a statewide 25 percent reduction in potable urban usage. This Executive Order requires commercial, industrial, and institutional users to implement water efficiency measures; prohibit irrigation with potable water of ornamental turf in public street medians; and to prohibit irrigation with potable water outside newly constructed homes and buildings that is not delivered by drip or microspray systems. Even prior to the Governor's Executive Order, County staff had been working proactively with our water purveyors, through the Riverside County Water Task Force, to analyze how to reduce water consumption by new development.

On May 18, 2015, the Board of Supervisors conducted a drought workshop to hear from local water agencies and county department heads concerning water supply availability, local drought management strategies, and county departmental strategies for reducing potable water usage. During the workshop, the Board initiated an amendment to Ordinance 859.2, *Water Efficient Landscape Requirements* to reflect the need to further conserve water resources throughout the county. A summary of key changes of the attached draft ordinance proposed by staff include the following:

- Prohibit the use of natural turf grass in front yards of new residential subdivisions. This proposal exceeds the State's requirements, which allows turf to be irrigated using drip systems.
- Require new landscapes serviced by potable water to not exceed a maximum water demand of 50% of the evapotranspiration (0.50 ETo) rate, which is a measure of the amount of water consumption used in a landscape through root absorption and/or evaporation. This is a decrease from the current standard of 0.70 ETo, providing a reduction in overall water usage of about 30%.
- Require new landscapes serviced entirely by recycled water to not exceed a maximum water demand of 70% (0.70 of ETo). The current standard does not have a water budget set for recycled water.
- Prohibit the new installation of natural turf grass within medians and parkways within and along County maintained roads. This proposal also exceeds the State requirements by extending the turf grass prohibition to parkways.

It should be noted that California's Department of Water Resources is currently updating the State Model Water Efficient Landscape Ordinance, per the Governor's Executive Order. County staff will review the final model ordinance adopted by the State to determine if further revisions to the County ordinance are warranted. Draft versions of Ordinance 859.3 have been routed to members of the Riverside County Water Task Force for comment and discussion. Members of the task force include local agencies and local water purveyors. The staff has also met with the Building Industry Association (BIA) Riverside County Chapter to discuss the proposed changes to the Ordinance and circulated this draft to the Desert Valley Builders Association (DVBA).

In some cases a local water purveyor may adopt stricter requirements than called for in this ordinance as a condition of issuing a water meter. If the local water purveyor has stricter requirements than called for in this ordinance, the project applicant is responsible for contacting the water purveyor to determine what the requirements are and for designing the plans to those requirements. The County will work with the project applicant to implement the water purveyor requirements.

**SUBMITTAL TO THE BOARD OF SUPERVISORS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA
FORM 11: Adoption of Ordinance No. 859.3 An Urgency Ordinance of the County of Riverside
amending Ordinance 859.2, Water Efficient Landscape Requirements. All Districts; [\$40,000]; 100%
Planning Department Budget (General Fund). CEQA EXEMPT
DATE: July 9, 2015
PAGE: 3 of 3**

California Environmental Quality Act (CEQA) Findings:

Pursuant to CEQA, the adoption of Ordinance No. 859.3 was reviewed and determined to be categorically exempt pursuant to State CEQA Guidelines Section 15307, Actions by Regulatory Agencies for Protection of Natural Resources. The ordinance assures the maintenance and enhancement of water resources for the protection of the environment by directly reducing the use of urban potable water resources for landscaping.

History:

Ordinance 859 was originally brought forward by Supervisor Ashley in November 2006, and later approved in December 2006. The Ordinance at the time prescribed innovative standards, restrictions, and requirements concerning water use in landscaped areas within commercial, industrial, and multi-family projects. The Ordinance was revised in March 2008 as Ordinance 859.1 to extend the requirements to include model homes, subdivision perimeter landscaping, and single family tract (subdivision) homes. The Ordinance was again amended in September 2009 to reduce the water budget target from 0.80 ETo to 0.70, also requiring smart controllers and proper soil preparation and testing. Ordinance 859.2 revisions were a result of efforts put forth by the Riverside County Water Task Force and was subsequently endorsed by the WRCOG Executive Committee to meet Assembly Bill 1881 requirements, which required local jurisdictions to adopt a local landscape ordinance "as-effective" as the State's parameters.

Impact on Residents and Businesses

Adoption of this Ordinance will significantly reduce the amount of water usage by new development by imposing strict conservation standards on landscaping.

New residential subdivisions and industrial/commercial development projects that are in the plan check process will need to comply with these new requirements prior to County plan approval. Some water purveyors may require that projects with already approved plans revise them as a condition of obtaining a water meter. County staff will work as flexibly as we can with our development community and water purveyors with the goal of immediately implementing these changes in the field. Since the Governor's Executive Order B-29-15 was issued on April 1, 2015, County staff has been requesting that project proponents and landscape architects currently in the landscape plan check revise their water budgets to meet those set forth in proposed Ordinance 859.3.

SUPPLEMENTAL

Additional Fiscal Information: The Ordinance update is being funded from the FY 14/15 Planning Departmental budgeted funds (General Fund), since the costs were incurred last fiscal year.



COUNTY OF RIVERSIDE

TRANSPORTATION AND LAND MANAGEMENT AGENCY



Juan C. Perez, P.E., T.E.
*Director of Transportation and
Land Management*

Transportation Department

Patricia Romo, P.E.
Assistant Director of Transportation

NOTICE OF EXEMPTION

July 9, 2015

PROJECT TITLE: Ordinance 859.3

Work Order #ZTR9000, Task Code #ZOVH

PROJECT SPONSOR: Riverside County Transportation Department

PROJECT LOCATION: Ordinance 859.3 is not site specific. County-wide ordinance.

SUPERVISORIAL DISTRICT: All Districts

PROJECT DESCRIPTION:

Ordinance 859.3 is an amendment to Ordinance 859 *The Water Efficient Landscape Requirements* (Ord. 859) and serves to build upon Ord. 859.1 and 859.2 which provide guidance on the conservation of water resources throughout Riverside County. Ord. 859 is a County ordinance that prescribes reasonable standards, restrictions and requirements concerning water use in landscaped areas within commercial, industrial and multi-family projects. The amendment proposes the following changes in response to the Governor of the State of California's issuance of Executive Order B-29-15 that directs the State Water Resource Control Board to impose restrictions on water suppliers to achieve a statewide 25% reduction in potable urban usage through February 2016:

- Prohibit the use of natural turf grass in front yards of new residential subdivisions (Ord 859.3 Section 2.J);
- Require new landscapes serviced by potable water not exceed a maximum water demand of 50% or 0.50 of ETo, decreased from 70% or 0.70 ETo (Ord 859.3 Section 2.E);
- Require new landscapes serviced entirely by recycled water not exceed a maximum water demand of 70% or 0.70 of ETo in lieu of a designation as a Special landscape Area (SLA) at 100% or 1.0 ETo (Ord 859.3 Section 2.F).
- Prohibit the new installation of natural turf grass within medians and parkways within and along County maintained roads (Ord 859.3 Section 2.K)

REASONS WHY PROJECT IS EXEMPT: The Riverside County Transportation Department Staff conducted a review of the above referenced project and has determined that the proposal qualifies for a Categorical Exemption per the California Environmental Quality Act (CEQA) Guidelines. Further, the changes to Ord. 859 would not result in any specific or general exceptions to the use of the categorical exemption as detailed under State CEQA Guidelines

section 15300.2.

Section 15307 *Actions by Regulatory Agencies for Protection of Natural Resources*, Class 7, which consists of actions taken by regulatory agencies as authorized by state law or local ordinance to assure the maintenance, restoration, or enhancement of a natural resource where the regulatory process involves procedures for protection of the environment. The updates to Ord. 859 will help meet the required statewide mandates for reduction in potable urban water usage. The changes to the ordinance will directly reduce the use of water by requiring enhanced designs and improvements in landscape irrigation, resulting in a greater reduction in use of potable water resources for landscaping purposes. The facts are similar to the case *Save the Plastic Bag Coalition v County of Marin* (2013) 218 Cal.App.4th 209, which allowed the use of this categorical exemption for the adoption of a local ordinance banning single-use plastic bags. The project meets the scope and intent of the Class 7 Exemption.

By: Frances Segovia, Senior Transportation Planner

Signed: Mary Zambon
Russell Williams, Environmental Division Manager

**RIVERSIDE COUNTY CLERK & RECORDER
AUTHORIZATION
TO BILL
BY JOURNAL VOUCHER**

-TO BE FILLED IN BY SUBMITTING AGENCY-

537280-20000-313010000

AUTHORIZATIONNUMBER: W.O.#ZTR9000, Task Code ZOVH

AMOUNT: \$50.00

DATE: July 9, 2015

AGENCY: Riverside County Transportation Department

THIS AUTHORIZES THE COUNTY CLERK & RECORDER TO ISSUE A VOUCHER FOR PAYMENT OF ALL FILING AND HANDLING FEES FOR THE ACCOMPANYING DOCUMENT(S).

NUMBER OF DOCUMENTS INCLUDED: One (1)

AUTHORIZED BY: Russell Williams, Environmental Division Manager

Signature: *Mary Zambon*

PRESENTED BY: Frances Segovia, Senior Transportation Planner

-TO BE FILLED IN BY COUNTY CLERK-

ACCEPTED BY: _____

DATE: _____

RECEIPT # (S) _____

1 percent (70%) or 0.70 of its reference evapotranspiration
2 (ET_o);

- 3 g. To eliminate water waste from overspray and/or runoff;
- 4 h. To achieve water conservation by raising the public
5 awareness of the need to conserve water through education
6 and motivation to embrace an effective water demand
7 management program;
- 8 i. To implement the requirements of the California Water
9 Conservation in Landscaping Act 2006 and the California
10 Code of Regulations Title 23, Division 2, Chapter 2.7;
- 11 j. To promote water conservation within new residential
12 subdivision landscapes by prohibiting the use of natural
13 turfgrass lawns within the front yards of new homes and
14 promoting low water use plants and inert materials for a
15 sustainable and marketable landscape design; and
- 16 k. To prohibit the new installation of natural turfgrass within
17 medians and parkways within and along County
18 Maintained Roads.

19 Section 3. DEFINITIONS. The terms used in this Ordinance shall
20 have the meaning set forth below:

- 21 a. "Backfilling" means to refill an excavation, usually with
22 excavated material.
- 23 b. "Backflow Prevention Device" means a safety device used
24 to prevent pollution or contamination of the water supply
25 due to the reverse flow of water from the irrigation system.
- 26 c. "Check Valve" or "Anti-Drain Valve" means a valve
27 located under a sprinkler head or other location in the
28 irrigation system to hold water in the system to prevent

1 drainage from the sprinkler heads or other irrigation device
2 when the system is off.

3 d. "Distribution Uniformity" or "DU" means the measure of
4 the uniformity of irrigation water distributed over an area,
5 typically expressed in a percentage and converted to
6 decimal form for water use calculations.

7 e. "Emitter Tubing" or "Sub-Surface Emitter Dripline" means
8 the application of irrigation water with a matched
9 precipitation rate at low pressure through a system of
10 tubing or lateral lines containing factory installed low
11 volume drip emitters equally spaced to apply small
12 volumes of water when installed per manufactures
13 recommendations at or near the root zone of plants. The
14 DU of this type of irrigation generally does not exceed 80%
15 when plant spacing is random as each emitter is not
16 dedicated to an individual plant but installed in a grid
17 fashion. The DU of this type of irrigation generally does
18 not exceed 85% when plant spacing is densely grouped in a
19 triangular or rectangular spacing as each emitter is not
20 dedicated to an individual plant but installed in a grid
21 fashion.

22 f. "Established Landscape" means the point at which plants in
23 the landscape have developed a significant root growth into
24 the site. Typically, most plants are established after one or
25 two years of growth.

26 g. "Estimated Annual Water Use" or "EAWU" means
27 estimated total water use per year as calculated by the
28 formula contained in Section 5.b.13.B.

- 1 h. “Functional Turf” means the turf areas to be publicly and
2 privately accessible and dedicated as active play and
3 recreation areas such as parks, sports fields, and golf
4 courses; where turf provides a playing field or where turf is
5 needed for high foot traffic activities.
- 6 i. “Hydrozone” means a portion of the landscaped area
7 having plants with similar water needs. A hydrozone may
8 be irrigated or non-irrigated.
- 9 j. “Invasive Species” are non-indigenous species (e.g. non-
10 native plants or animals) that adversely affect the habitats
11 they invade economically, environmentally, or
12 ecologically. Lists of invasive species are included within
13 the Western Riverside County Multiple Species Habitat
14 Conservation Plan and the Coachella Valley Multiple
15 Species Habitat Conservation Plan. Said lists are hereby
16 incorporated by reference.
- 17 k. “Landscape Architect” means a person who holds a license
18 or is registered to practice landscape architecture in the
19 State of California.
- 20 l. “Landscaped Area” or “LA” means all of the planting
21 areas, turf areas, and water features in a landscape design
22 plan subject to the Maximum Applied Water Allowance
23 (MAWA) calculation. The landscape area does not include
24 footprints of buildings, structures, sidewalks, driveways,
25 parking lots, decks, patios, gravel or stone walks, other
26 pervious or impervious hardscapes, and other non-irrigated
27 areas designated for non-development (e.g., open space and
28 existing native vegetation).

- 1 m. "Local Water Purveyor" means any entity, including a
2 public agency or private water company that provides retail
3 water service to customers in the unincorporated area of
4 Riverside County.
- 5 n. "Maximum Applied Water Allowance" or "MAWA"
6 means the upper limit of annual applied water allowed for
7 the established landscaped area as calculated by the
8 formula contained in Section 5.b.13.A.
- 9 o. "Mulch" means a layer of material applied to the surface of
10 an area of soil on the ground to prevent excessive
11 evaporation or erosion, to enrich the soil, inhibit/discourage
12 weed growth, increase the rate of saturation, and reduce
13 fluctuation in soil temperature. Mulch may be organic
14 (such as bark mulch, wood chips) or inert (decomposed
15 granite, gravel).
- 16 p. "Overhead Sprinkler Irrigation Systems" means systems
17 that deliver water through the air (e.g., impulse sprinklers,
18 spray heads and rotors, etc.).
- 19 q. "Point Source Drip" or "Point to Point Drip" means the
20 application type of irrigation water with a matched
21 precipitation rate at low pressure through a system of
22 tubing or lateral lines with a dedicated field-installed low
23 volume emitter or emitters at each specific plant. The DU
24 of this type of irrigation generally does not exceed 90%.
- 25 r. "Potable Water" means water that must meet Federal and
26 State safe drinking water standards and is safe for human
27 consumption and contact.

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1 s. "Reference Evapotranspiration" or "ETo" means a standard
2 measurement of environmental parameters which affect the
3 water use of plants. ETo is given in inches per day, month,
4 or year. Reference evapotranspiration is used as the basis
5 of determining the Maximum Applied Water Allowances
6 so that regional differences in climate can be
7 accommodated. Reference evapotranspiration numbers
8 shall be taken from the most current Evapotranspiration
9 Zones Map developed by the California Department of
10 Water Resources. For geographic areas not covered by the
11 Evapotranspiration Zones Map, data from nearby areas
12 shall be used.

13 t. "Rehabilitated Landscapes" means any re-landscaping of a
14 project that requires a discretionary permit.

15 u. "Special Landscape Area" means an area of the landscape
16 dedicated to edible plants, and areas dedicated to active
17 play such as parks, sports fields, golf courses, where turf
18 provides a playing field or where turf is needed for high
19 traffic activities. Cemeteries shall also be considered as
20 special landscape areas. These areas shall be allowed 1.0
21 ETo.

22 v. "Temporarily Irrigated" means irrigation for the purposes
23 of establishing plants, or irrigation which will not continue
24 after plant establishment. Temporary irrigation is for a
25 period of six months or less.

26 w. "Turf" or "Turfgrass" or "Lawn" means species of warm or
27 cool season grasses that form a dense thick mat of roots.
28 Mowing creates a dense even surface and increases the

1 need for water regardless of season. Turf or turfgrass or
2 lawn does not include artificial turf.

3 x. "Water-Intensive Landscaping" means a landscape with a
4 WUCOLS IV plant factor of 0.61 or greater, and
5 categorized as High or between High and Moderate.

6 y. "WUCOLS" means the publication entitled "Water Use
7 Classification of Landscape Species IV" by the California
8 Department of Water Resources (DWR) Water Use
9 Efficiency Program, California Center for Urban
10 Horticulture (CCUH), University of California Davis, and
11 University of California Cooperative Extension (2014 or
12 most current WUCOLS version).

13 Section 4. APPLICABILITY.

14 a. The water-efficient landscape requirements contained in
15 this Ordinance shall be applicable to all rehabilitated
16 landscapes associated with residential uses (including
17 single family and multi-family units/projects) with a total
18 landscape area equal to or greater than 2,500 square feet
19 which require a discretionary permit and/or approval; all
20 new landscapes associated with residential uses (including
21 single family and multi-family projects) which require a
22 discretionary permit and/or approval; and all new and
23 rehabilitated landscapes associated with commercial or
24 industrial uses which require a discretionary permit and/or
25 approval.

26 b. In the event Covenants, Conditions and Restrictions are
27 required for any permit subject to this Ordinance, a
28 condition shall be incorporated into any project approval

1 prohibiting the use of water-intensive landscaping and
2 requiring the use of low water use landscaping pursuant to
3 the provisions of this Ordinance in connection with
4 common area/open space landscaping. Additionally, such a
5 condition shall require the Covenants, Conditions and
6 Restrictions to incorporate provisions concerning landscape
7 irrigation system management and maintenance. This
8 Ordinance shall not be construed as requiring landscaping
9 of common areas or open space that is intended to remain
10 natural. Covenants, Conditions and Restrictions shall not
11 prohibit use of low-water use plants or the replacement of
12 turf with less water intensive plant species.

13 c. Recognizing the special landscape needs of cemeteries,
14 new and rehabilitated landscapes within a cemetery are
15 subject only to the provisions set forth in Sections 6.a.and
16 6.b. of this Ordinance.

17 d. The following uses and/or projects are exempt from the
18 provisions of this Ordinance:

- 19 1. Registered local, state or federal historical sites;
- 20 2. Ecological restoration projects that do not require a
21 permanent irrigation system and have an
22 establishment period of less than 5 years;
- 23 3. Mined land reclamation projects that do not require
24 a permanent irrigation system; and
- 25 4. Botanical gardens and arboretums open to the
26 public.

27 e. If the local water purveyor has stricter requirements than
28 called for in this ordinance, the project applicant is

1 responsible for contacting the water purveyor to determine
2 what the requirements are and for designing the plans to
3 those requirements. The County will work with the project
4 applicant to implement the water purveyor requirements.

5 Section 5. LANDSCAPE DOCUMENTATION REQUIREMENTS.

6 An applicant proposing any new or rehabilitated landscape for a project subject to the
7 requirements of Section 4 of this Ordinance shall prepare and submit a Construction
8 Document package (CDs) to the Planning Director including the following:

- 9 1. All Project Information;
- 10 2. A Planting Plan;
- 11 3. An Irrigation Design Plan;
- 12 4. A Soil Management Plan; and
- 13 5. A Grading Design Plan.

14 The “Riverside County Guide to California Friendly Landscaping”
15 (Landscaping Guide) as may be periodically amended by the Planning Director is hereby
16 incorporated by reference to assist in designing, constructing, and maintaining a water
17 efficient landscape and efficient irrigation system.

18 It is recommended that an applicant proposing any new or rehabilitated
19 landscape that is designated for recycled water use consult with the appropriate local
20 water purveyor early in the development review process to ensure that future recycled
21 water facilities meet the projected demand and that the aforementioned plans when
22 submitted comply with the applicable standards, approvals, and implementation
23 requirements of this Ordinance, the local water purveyor, and any applicable maintenance
24 entity.

25 Water systems for common open space areas shall use non-potable water
26 if approved facilities are made available by the local water purveyor. Provisions for a
27 non-potable water system shall be provided within the irrigation design plan. Water
28 systems designed to utilize non-potable water shall be designed to meet all applicable

standards of the appropriate Regional Water Quality Control Board and the Riverside County Health Department.

a. Project Information Located on Cover Sheet:

1. Date;
2. Name of applicant and contact information;
3. Name of project owner and contact information;
4. Project address including parcel and lot numbers;
5. Total landscape area in square feet;
6. Project type (e.g. new or rehabilitated; residential, commercial, or industrial);
7. Water supply (e.g. potable, well, recycled; use of recycled water is encouraged);
8. Applicant's signature and date with statement, "I agree to comply with the requirements of Ordinance No. 859.X and submit a complete Landscape Documentation Package."
9. Landscape Architect's information, stamp, and signature; and
10. Status of plans, e.g. "plan check set", "bid set", "construction set".

b. Planting Plan Requirements:

1. New natural turfgrass lawns are effectively prohibited within the front yard for any new residential subdivisions. New natural turfgrass within medians and parkways within and along County Maintained Roads are effectively prohibited.
2. Plant types shall be grouped together in regards to

1 their water, soil, sun, and shade requirements and in
2 relationship to the buildings. Plants with different
3 water needs shall be irrigated separately. Plants
4 with the following classifications shall be grouped
5 accordingly: high and moderate, moderate and low,
6 low and very low. Deviation from these groupings
7 shall not be permitted.

8 3. Trees for shade shall be provided for residential,
9 commercial, and industrial buildings, parking lots
10 and open space areas. These trees can be deciduous
11 or evergreen and are to be incorporated to provide
12 natural cooling opportunities for the purpose of
13 energy and water conservation.

14 4. Plants shall be placed in a manner considerate of
15 solar orientation to maximize summer shade and
16 winter solar gain.

17 5. Plant selection for projects in high fire hazard areas
18 shall address fire safety and prevention. A
19 defensible space or zone around a building or
20 structure is required pursuant to Public Resources
21 Code section 4291 and Ordinance No. 695. Fire-
22 prone plant materials and highly flammable
23 mulches shall be avoided.

24 6. Invasive species of plants shall be avoided
25 especially near parks, buffers, greenbelts, water
26 bodies, conservation areas/reserves and other open
27 space areas because of their potential to cause harm
28 to environmentally sensitive areas.

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7. 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").
8. Mulching products used on slopes shall aid in slope stability.
9. Turf areas shall be used in response to functional needs as defined and in compliance with the water budget.
10. Decorative water features shall use re-circulating water systems.
11. Where available, recycled water shall be used as the source for irrigation and decorative water features.
12. Planting plans shall identify and site the following:
 - A. New and existing trees, shrubs, ground covers, and turf areas within the proposed landscaped area;
 - B. A 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;

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- 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. Any special landscape areas;
- I. Type of mulch and application depth;
- J. Type and surface area of water features;
- K. Type and installation details of any applicable stormwater best management practices;
- L. Planting specifications and details, including the recommendations from the soils analysis, if applicable.

13. Planting plans shall be prepared and have accurate and complete water budget calculations using one (1) MAWA for the entire project and one (1) EAWU formula for each hydrozone:

A. Maximum Applied Water Allowance (MAWA):

Planting Plans shall be prepared using the following Water Budget: Formula for projects serviced by potable water sources and required not to exceed 50% or 0.50 ETo:

$$\text{MAWA (in gallons)} = (\text{ETo})(0.62)[0.5 \times \text{LA} + 0.5 \times \text{SLA}]$$

Formula for projects serviced entirely by

1 recycled water sources and required not to
2 exceed 70% or 0.70 ETo:

3 MAWA (in gallons) = (ETo)(0.62)[0.7 x
4 LA+0.3 x SLA]

5 Where:

6 ETo is reference evapotranspiration, local to
7 the project

8 SLA is the amount of special landscape area
9 in square feet

10 LA is total landscape area (including the
11 SLA) in square feet; and

12 For the purposes of determining the
13 MAWA, average irrigation efficiency is
14 assumed to be 0.71. Irrigation systems shall
15 be designed, maintained, and managed to
16 meet or exceed an average irrigation
17 efficiency of 0.71.

18 B. Estimated Annual Water Use (EAWU):

19 EAWU for a given hydrozone is calculated
20 as follows:

21 EAWU (in gallons) = (ETo)(0.62)[((PF x
22 HA)/IE) + SLA]

23 Where:

24 ETo is reference evapotranspiration

25 PF is Plant Factor

26 HA is hydrozone area in square feet

27 IE is irrigation efficiency (minimum 0.71)

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1 SLA is the amount of special landscape area
2 in square feet;

3 C. Landscaping plans shall provide EAWU (in
4 the same units as the MAWA) for the sum
5 of all valve circuits in the irrigation
6 hydrozone. The sum of all EAWU
7 hydrozone calculations shall not exceed the
8 MAWA for the project;

9 D. The plant factor used shall be from
10 WUCOLS. The plant factor for low water
11 use plants range from 0 to 0.39, for
12 moderate water use plants range from 0.4 to
13 0.6, and for high water use plants range from
14 0.61 to 1.0.

15 E. The plant factor calculation is based on the
16 proportions of the respective plant water
17 uses and their plant factor, or the factor of
18 the higher water using plant used.

19 F. The surface area of a water feature shall be
20 included in the high water use hydrozone
21 area of the water budget calculation and
22 temporarily irrigated areas in the low water
23 use hydrozone.

24 G. Landscape Concept Plans not for
25 construction shall be required to provide a
26 complete and accurate MAWA calculation
27 only.

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1 14. Planting Plans and Irrigation Design Plans (Section
2 5.c.) shall be drawn at the same size and scale.

3 15. The Planting Plan and Irrigation Design Plans
4 (Section 5.c.) including Landscape Concept Plans
5 shall be prepared by a Landscape Architect
6 Licensed or Registered by the State of California.

7 c. Irrigation Design Plan Requirements:

8 1. New natural turfgrass lawns are effectively
9 prohibited within the front yard for any new
10 residential subdivisions. New natural turfgrass
11 within medians and parkways within and along
12 County Maintained Roads is effectively prohibited.

13 2. Irrigation systems shall be designed, maintained,
14 and managed to meet or exceed an average
15 irrigation efficiency of 0.71.

16 3. All irrigation systems shall be designed to prevent
17 runoff, over-spray, low head drainage, and other
18 similar conditions where water flows off-site on to
19 adjacent property, non-irrigated areas, walks,
20 roadways, or structures. Irrigation systems shall be
21 designed, constructed, managed, and maintained to
22 achieve as high an overall efficiency as possible.
23 The irrigation system shall be designed to ensure
24 that the dynamic pressure at each emission device is
25 within the manufacturer's recommended pressure
26 range for optimal performance.

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1 4. Landscaped areas shall be provided with a smart
2 irrigation controller which automatically adjusts the
3 frequency and/or duration of irrigation events in
4 response to real time weather conditions unless the
5 use of the property would otherwise prohibit use of
6 a timer. The planting areas shall be grouped in
7 relation to moisture control zones based on
8 similarity of water requirements (e.g., turf separate
9 from shrub and groundcover, full sun exposure
10 areas separate from shade areas, top of slope
11 separate from toe of slope). Additional water
12 conservation technology may be required, where
13 necessary, at the discretion of the Planning Director.

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

23 6. Separate valves shall be provided for separate water
24 use planting areas, so that plants with similar water
25 needs are irrigated by the same irrigation valve.
26 Trees should be placed on separate irrigation valves
27 from other plants (hydrozoned) with either bubblers
28 or drip emitters All installations shall rely on highly

1 efficient state of the art irrigation systems to
2 eliminate runoff and maximize irrigation efficiency
3 as required by the Landscaping Guide.

4 7. Static water pressure, dynamic or operating
5 pressure, and flow reading of the water supply shall
6 be measured. These pressure and flow
7 measurements shall be conducted at the design
8 stage. If the measurements are not available at the
9 design stage, the measurements shall be conducted
10 at the installation.

11 8. The capacity of the irrigation system shall not
12 exceed:

13 A. The capacity required for peak water
14 demand based on water budget calculations
15 within the required water window;

16 B. Meter capacity; or

17 C. Backflow preventer type and device
18 capacity;

19 D. A velocity of five (5) feet per second for
20 polyvinyl chloride (PVC) materials and
21 seven (7) feet per second for copper and
22 brass materials.

23 9. Sprinkler heads and other emission devices shall
24 have matched precipitation rates, unless otherwise
25 directed by the manufacturer.

26 10. Within inert mulched planting areas, the use of
27 point source drip irrigation is required to maximize
28 water infiltration into the root zone. In 3" organic

1 mulched planting areas where slopes are less steep
2 than 4:1, the use of Emitter Tubing irrigation or
3 point source drip irrigation is required to maximize
4 water infiltration into the root zone. Low water use
5 plants that require overhead spray may be exempted
6 from this requirement but shall be grouped, spaced
7 and hydrozoned independently on overhead spray.
8 In 3" organic mulched planting areas where slopes
9 are steeper than 4:1, the use of low volume
10 irrigation or point source drip irrigation is required
11 to maximize water infiltration into the root zone.
12 Drip irrigation shall be installed under the mulch. If
13 grading conditions require increased stability not
14 obtainable through low volume drip methods then
15 overhead irrigation will be permitted with proper
16 justification at the discretion of the Planning
17 Director.

- 18 11. Slopes greater than or equal to 4:1 shall not be
19 irrigated with an irrigation system with a
20 precipitation rate exceeding 0.75 inches per hour.
21 This restriction may be modified if the landscape
22 designer specifies an alternative design or
23 technology, as part of the landscape documentation
24 required to be submitted pursuant to this Ordinance,
25 and if there is a clear demonstration that no runoff
26 or erosion will occur. Prevention of runoff and
27 erosion must be confirmed during the irrigation
28 audit.

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12. Long-narrow, or irregularly shaped landscaped areas including functional turf areas less than ten (10) feet in width in any direction shall be irrigated with subsurface irrigation or low-volume irrigation technology.
13. Overhead irrigation shall not be permitted within 24 inches of any non-permeable surface including DG walking trails or paths. There are no restrictions on the irrigation system type if the landscape area is adjacent to permeable surfacing or if no overspray and runoff occurs.
14. For the purpose of design, overhead irrigation shall be limited to the hours of 9:00 p.m. to 6:00 a.m. (9 hour water window), no more than 6 days a week.
15. All irrigation systems shall be equipped with the following:
 - A. A smart irrigation controller as defined in Section 5.c.4. 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;
 - D. A manual shut-off valve shall be required as close as possible to the point of connection of the water supply, to minimize water loss in case of an emergency or routine repair;

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- E. A mainline pressure regulator when the static water pressure is 15% above the recommended operating pressure of the irrigation system;
 - F. Pressure regulation within each valve circuit to establish optimal operating pressure per manufacturers' recommendations;
 - G. Backflow prevention devices within a lockable cage or enclosure or other anchoring device to prevent theft; and
 - H. Risers shall not be used in high traffic areas.
16. Dedicated landscape meters shall be required for all projects greater than 2,500 square feet except single-family residences.
17. Irrigation design plans shall identify and site the following:
- A. Hydrozones:
 - 1) Each hydrozone shall be designated by number, letter or other designation;
 - 2) A hydrozone information table shall be prepared for each hydrozone;
 - 3) Each hydrozone shall be identified by a low, medium, or high priority designation in the event of a drought or water budgeting event as determined by the local water purveyor.

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- B. The areas irrigated by each valve;
- C. Irrigation point of connection (POC) to the water system;
- D. Static water pressure at POC;
- E. Location and size of water meter(s), service laterals, and backflow preventers;
- F. 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;
- G. 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 psi for each drip and low volume irrigation circuit;
- H. Precipitation rate (inches per hour) for each irrigation circuit;
- I. 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;
- J. Irrigation system details and specifications for assembly and installation; and

1 K. Recommended irrigation schedule for each
2 month, including number of irrigation days
3 per week, number of start times (cycles) per
4 day, minutes of run time per cycle, and
5 estimated amount of applied irrigation
6 water, expressed in gallons per month and
7 gallons per year, for the established
8 landscape.

9 18. For each valve, two irrigation schedules shall be
10 prepared, one for the initial establishment period of
11 six months and one for the established landscape,
12 which incorporate the specific water needs of the
13 plants and functional turf throughout the calendar
14 year.

15 19. The Planting Plans (Section 5.b.) and Irrigation
16 Design Plans shall be drawn at the same size and
17 scale.

18 20. The Planting Plan (Section 5.b.) and Irrigation
19 Design Plans including Landscape Concept Plans
20 shall be prepared by a Landscape Architect
21 Licensed or Registered by the State of California.

22 d. Soil Management Plan Requirements:

23 1. After mass grading, the project applicant shall:

24 A. Perform a preliminary site inspection;

25 B. Determine the appropriate level of soil
26 sampling and sampling method needed to
27 obtain representative soil sample(s),
28 typically 1 test per every 25,000 square feet

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- of landscaped area;
 - C. Conduct a soil probe test to determine if the soil in the landscape area has sufficient depth to support the intended plants; and
 - D. Obtain appropriate soil sample(s).
2. The project applicant shall submit soil sample(s) to a laboratory for analysis and recommendation. The soil analysis may include:
- A. Soil texture;
 - B. Infiltration rate determined by laboratory test or soil texture infiltration rate tables;
 - C. pH;
 - D. Total soluble salts;
 - E. Sodium; and
 - F. Soil analysis recommendations.
3. The project applicant shall prepare documentation describing the following:
- A. Soil type;
 - B. Identification of limiting soil characteristics;
 - C. Identification of planned soil management actions to remediate limiting soil characteristics; and
 - D. Submit the soil analysis report and documentation verifying implementation of soil analysis report recommendations to the County pursuant to the requirements of Section 7.c.
- e. Grading Design Plan Requirements:

- 1) The landscape documentation submitted shall include rough/precise grade elevations prepared for the project by a licensed civil engineer.

Section 6. LANDSCAPE IRRIGATION AND MAINTENANCE.

This section shall apply to all projects subject to the provisions of this Ordinance as set forth in Section 4.

- a. 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.
- b. A regular maintenance schedule and Certificate of Completion shall be submitted to the Planning Director, property owner, and water purveyor. A regular maintenance schedule shall include, but not be limited to, routine inspection, adjustments, and repair of the irrigation system and its components; aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning; weeding in all landscape areas and removing any obstruction to irrigation devices. Repair of all irrigation equipment shall be done with the original equipment manufacturers

1 installed components or equivalent/improved quality
2 components.

3 c. All model homes that are landscaped shall use signs and
4 written information to demonstrate the principles of water
5 efficient landscapes described in this Ordinance.

6 d. Information shall be provided to owners of new, single
7 family residential homes regarding the design, installation,
8 management, and maintenance of water efficient
9 landscapes.

10 Section 7. COMPLIANCE/PLAN SUBMITTAL PROCESS. Prior to
11 issuance of a building permit for the project, the project applicant shall:

12 a. Submit all landscape documents for review and approval by
13 the Planning Director. The Planting Plan, Irrigation Design
14 Plan, and Soils Management Plan shall be reviewed by a
15 Licensed or Registered Landscape Architect to ensure that
16 all components of the plans adhere to the requirements of
17 this Ordinance. The Licensed or Registered Landscape
18 Architect shall sign the plans verifying that the plans
19 comply with this Ordinance. Any plans submitted without
20 the signature of a Licensed or Registered Landscape
21 Architect shall not be accepted for review.

22 b. Prior to issuance of a certificate of occupancy or final
23 inspection for the project, a regular maintenance schedule
24 and a Certificate of Completion shall be submitted to the
25 Planning Director certifying that the landscaping has been
26 completed in accordance with the approved planting,
27 irrigation design, soil management, and grading design
28 plans for the project. The Certificate of Completion shall

1 be signed by a Licensed or Registered Landscape Architect
2 and shall indicate:

- 3 1. Date;
- 4 2. Project information: Project name; Project applicant
5 name, telephone and mailing address; Project
6 address and location; and Property owner name and
7 mailing address;
- 8 3. Prior to backfilling, evidence that the party
9 responsible for irrigation installation conducted a
10 preliminary field inspection of the irrigation system
11 (evidence of field inspection shall be attached);
- 12 4. The landscaping has been installed in conformance
13 with the approved planting and irrigation design
14 plans;
- 15 5. Irrigation audit report performed by a certified
16 irrigation auditor after project installation (audit
17 report shall be attached);
- 18 6. The smart irrigation controller has been
19 programmed appropriately according to the
20 parameters of each valve circuit;
- 21 7. The irrigation system has been adjusted to
22 maximize irrigation efficiency and eliminate
23 overspray and runoff;
- 24 8. A copy of the approved landscape documentation
25 (Section 5), the irrigation schedule (Section 6.a.)
26 and the maintenance schedule (Section 6.b.) has
27 been given to the property owner and local water
28 purveyor; and

1 9. Verification that the maintenance schedule has been
2 provided to the Planning Director.

3 c. At a minimum, all landscape irrigation audits shall comply
4 with the "Irrigation Association Certified Landscape
5 Irrigation Auditor (CLIA) Training Manual" (3rd Edition,
6 2013 or most current) and shall be conducted by a certified
7 Landscape Irrigation Auditor. Any Landscape Irrigation
8 Auditor performing audits shall maintain a current
9 certification as a CLIA from the Irrigation Association
10 (IA).

11 d. The Planning Director or his/her designee shall have the
12 right to enter upon the project site at any time before,
13 during, and after installation of the landscaping, to conduct
14 inspections for the purpose of enforcing this Ordinance.

15 e. The Planning Director shall have the discretion to interpret
16 and determine suitable compliance based upon the intent of
17 the Ordinance."

18 Section 2. This ordinance is hereby declared to be an urgency measure and shall take
19 effect immediately upon its adoption. In accordance with the requirements of Government Code section
20 25123, subdivision (d), the Board of Supervisors hereby declares that the provisions contained herein are
21 necessary for the immediate preservation of the public peace, health, or safety for the following reasons:
22 1) the State of California is facing unprecedented drought conditions over the prior four (4) years,
23 requiring all public agencies to enact ordinances and regulations to conserve potable water resources; 2)
24 in 2006, the California State Assembly passed Assembly Bill 1881 which required all local agencies to
25 develop water conservation policies by 2010 as effective as the State's Model Water Efficient
26 Landscape Ordinance; 3) on April 1, 2015, Governor Brown issued Executive Order B-29-15, directing
27 the State Water Resource Control Board to impose restrictions on water purveyors to achieve a
28 statewide reduction of 25 percent in potable urban water usage through various measures including

1 restrictions on landscape irrigation; and 4) the ordinance provides increased restrictions and
2 methodologies to accomplish immediate reductions in the use of potable water resources.

5 BOARD OF SUPERVISORS OF THE COUNTY
6 OF RIVERSIDE, STATE OF CALIFORNIA

7 By: _____
Chairman, Board of Supervisors

8 ATTEST:
9 CLERK OF THE BOARD

10 By: _____
11 Deputy

12
13 APPROVED AS TO FORM:

14 By:  _____
15 AARON C. GETTIS
16 Deputy County Counsel

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Dated: July 13, 2015