SUBMITAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

FROM: Transportation and Land Management Agency

SUBMITAL 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

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SOURCE OF FUNDS: 100% Planning Departmental Budget (General Fund)

C.E.O. RECOMMENDATION: APPROVE

BY: Tina Grande

MINUTES OF THE BOARD OF SUPERVISORS

AGENDA ITEM 51

PREVIOUS AGENDA ITEM: 3-62 10/20/09 & 3-51 5/18/15 | DISTRICT: ALL | AGENDA NUMBER: 3-51
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 ET 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.
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 Zambor
Russell Williams, Environmental Division Manager
RIVERSIDE COUNTY CLERK & RECORDER
AUTHORIZATION TO BILL
BY JOURNAL VOUCHER

-TOST BE FILLED IN BY SUBMITTING AGENCY-

537280-20000-313010000
AUTHORIZATION NUMBER: 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: [Signature]

PRESENTED BY: Frances Segovia, Senior Transportation Planner

-TOST BE FILLED IN BY COUNTY CLERK-

ACCEPTED BY: ________________________________

DATE: ________________________________

RECEIPT # (S) ________________________________
ORDINANCE NO. 859.3

AN URGENCY ORDINANCE OF THE COUNTY OF RIVERSIDE
AMENDING ORDINANCE NO. 859 THE WATER EFFICIENT
LANDSCAPE REQUIREMENTS

The Board of Supervisors of the County of Riverside ordains as follows:

Section 1. Ordinance No. 859 is hereby amended in its entirety to read 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 to:

a. Establish provisions for water management practices and
water waste prevention;

b. Establish a structure for planning, designing, installing,
maintaining, and managing water efficient landscapes in
new and rehabilitated projects;

c. To reduce the water demands from landscapes without a
decline in landscape quality or quantity;

d. To retain flexibility and encourage creativity through
appropriate design;

e. To assure the attainment of water efficient landscape goals
by requiring that landscapes serviced by potable water not
exceed a maximum water demand of fifty percent (50%) or
0.50 of its reference evapotranspiration (ETo);

f. To assure the attainment of water efficient landscape goals
by requiring that landscapes serviced entirely by recycled
water not exceed a maximum water demand of seventy
percent (70%) or 0.70 of its reference evapotranspiration (ETo);

g. To eliminate water waste from overspray and/or runoff;

h. 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;

i. To implement the requirements of the California Water Conservation in Landscaping Act 2006 and the California Code of Regulations Title 23, Division 2, Chapter 2.7;

j. To promote water conservation within new residential subdivision landscapes by prohibiting the use of natural turfgrass lawns within the front yards of new homes and promoting low water use plants and inert materials for a sustainable and marketable landscape design; and

k. To prohibit the new installation of natural turfgrass within medians and parkways within and along County Maintained Roads.

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

a. “Backfilling” means to refill an excavation, usually with excavated material.

b. “Backflow Prevention Device” means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.

c. “Check Valve” or “Anti-Drain Valve” means a valve located under a sprinkler head or other location in the irrigation system to hold water in the system to prevent
drainage from the sprinkler heads or other irrigation device when the system is off.

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

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

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

g. “Estimated Annual Water Use” or “EAWU” means estimated total water use per year as calculated by the formula contained in Section 5.b.13.B.
h. "Functional Turf" means the turf areas to be publicly and privately accessible and dedicated as active play and recreation areas such as parks, sports fields, and golf courses; where turf provides a playing field or where turf is needed for high foot traffic activities.

i. "Hydrozone" means a portion of the landscaped area having plants with similar water needs. A hydrozone may be irrigated or non-irrigated.

j. "Invasive Species" are non-indigenous species (e.g. non-native plants or animals) that adversely affect the habitats they invade economically, environmentally, or ecologically. Lists of invasive species are included within the Western Riverside County Multiple Species Habitat Conservation Plan and the Coachella Valley Multiple Species Habitat Conservation Plan. Said lists are hereby incorporated by reference.

k. "Landscape Architect" means a person who holds a license or is registered to practice landscape architecture in the State of California.

l. "Landscaped Area" or "LA" means all of the planting areas, turf areas, and water features in a landscape design plan subject to the Maximum Applied Water Allowance (MAWA) calculation. The landscape area does not include footprints of buildings, structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or impervious hardscapes, and other non-irrigated areas designated for non-development (e.g., open space and existing native vegetation).
m. "Local Water Purveyor" means any entity, including a public agency or private water company that provides retail water service to customers in the unincorporated area of Riverside County.

n. "Maximum Applied Water Allowance" or "MAWA" means the upper limit of annual applied water allowed for the established landscaped area as calculated by the formula contained in Section 5.b.13.A.

o. "Mulch" means a layer of material applied to the surface of an area of soil on the ground to prevent excessive evaporation or erosion, to enrich the soil, inhibit/discourage weed growth, increase the rate of saturation, and reduce fluctuation in soil temperature. Mulch may be organic (such as bark mulch, wood chips) or inert (decomposed granite, gravel).

p. "Overhead Sprinkler Irrigation Systems" means systems that deliver water through the air (e.g., impulse sprinklers, spray heads and rotors, etc.).

q. "Point Source Drip" or "Point to Point Drip" means the application type of irrigation water with a matched precipitation rate at low pressure through a system of tubing or lateral lines with a dedicated field-installed low volume emitter or emitters at each specific plant. The DU of this type of irrigation generally does not exceed 90%.

r. "Potable Water" means water that must meet Federal and State safe drinking water standards and is safe for human consumption and contact.
s. "Reference Evapotranspiration" or "ET0" means a standard measurement of environmental parameters which affect the water use of plants. ET0 is given in inches per day, month, or year. Reference evapotranspiration is used as the basis of determining the Maximum Applied Water Allowances so that regional differences in climate can be accommodated. Reference evapotranspiration numbers shall be taken from the most current Evapotranspiration Zones Map developed by the California Department of Water Resources. For geographic areas not covered by the Evapotranspiration Zones Map, data from nearby areas shall be used.

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

u. "Special Landscape Area" means an area of the landscape dedicated to edible plants, and areas dedicated to active play such as parks, sports fields, golf courses, where turf provides a playing field or where turf is needed for high traffic activities. Cemeteries shall also be considered as special landscape areas. These areas shall be allowed 1.0 ET0.

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

w. "Turf" or "Turfgrass" or "Lawn" means species of warm or cool season grasses that form a dense thick mat of roots. Mowing creates a dense even surface and increases the
need for water regardless of season. Turf or turfgrass or lawn does not include artificial turf.

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

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

Section 4. APPLICABILITY.

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

b. In the event Covenants, Conditions and Restrictions are required 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 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. Covenants, Conditions and Restrictions shall not prohibit use of low-water use plants or the replacement of turf with less water intensive plant species.

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

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

1. Registered local, state or federal historical sites;

2. Ecological restoration projects that do not require a permanent irrigation system and have an establishment period of less than 5 years;

3. Mined land reclamation projects that do not require a permanent irrigation system; and

4. Botanical gardens and arboretums open to the public.

e. 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.

Section 5. LANDSCAPE DOCUMENTATION REQUIREMENTS.

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

1. All Project Information;
2. A Planting Plan;
3. An Irrigation Design Plan;
4. A Soil Management Plan; and
5. A Grading Design Plan.

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

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

Water systems for common open space areas shall use non-potable water if approved facilities are made available by the local water purveyor. Provisions for a non-potable water system shall be provided within the irrigation design plan. Water 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
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. Plants shall be placed in a manner considerate of solar orientation to maximize summer shade and winter solar gain.

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

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

MAWA (in gallons) = (ETo)(0.62)[0.5 x LA+0.5 x SLA]

Formula for projects serviced entirely by
recycled water sources and required not to exceed 70% or 0.70 ET0:

MAWA (in gallons) = (ET0)(0.62)[0.7 x LA+0.3 x SLA]

Where:

ET0 is reference evapotranspiration, local to the project

SLA is the amount of special landscape area in square feet

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

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

B. Estimated Annual Water Use (EAWU):

EAWU for a given hydrozone is calculated as follows:

EAWU (in gallons) = (ET0)(0.62)[((PF x HA)/IE) + SLA]

Where:

ET0 is reference evapotranspiration

PF is Plant Factor

HA is hydrozone area in square feet

IE is irrigation efficiency (minimum 0.71)
SLA is the amount of special landscape area in square feet;

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

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

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

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

G. Landscape Concept Plans not for construction shall be required to provide a complete and accurate MAWA calculation only.
14. Planting Plans and Irrigation Design Plans (Section 5.c.) shall be drawn at the same size and scale.

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

c. Irrigation Design 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 is effectively prohibited.

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

3. 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, walks, roadways, or structures. Irrigation systems shall be designed, constructed, managed, and maintained to achieve as high an overall efficiency as possible. The irrigation system shall be designed to ensure that the dynamic pressure at each emission device is within the manufacturer’s recommended pressure range for optimal performance.
4. Landscaped areas shall be provided with a smart irrigation controller which automatically adjusts the frequency and/or duration of irrigation events in response to real time 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 (e.g., 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.

5. 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.

6. 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. Trees should be placed on separate irrigation valves from other plants (hydroyzoned) with either bubblers or drip emitters 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.

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

8. The capacity of the irrigation system shall not exceed:
   A. The capacity required for peak water demand based on water budget calculations within the required water window;
   B. Meter capacity; or
   C. Backflow preventer type and device capacity;
   D. A velocity of five (5) feet per second for polyvinyl chloride (PVC) materials and seven (7) feet per second for copper and brass materials.

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

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

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

18. For each valve, 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 functional turf throughout the calendar year.

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

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

d. Soil Management Plan Requirements:

1. After mass grading, the project applicant shall:
   A. Perform a preliminary site inspection;
   B. Determine the appropriate level of soil sampling and sampling method needed to obtain representative soil sample(s), typically 1 test per every 25,000 square feet
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.
installed components or equivalent/improved quality components.

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

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

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

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

b. Prior to issuance of a certificate of occupancy or final inspection for the project, a regular maintenance schedule and a Certificate of Completion shall be submitted to the Planning Director certifying that the landscaping has been completed in accordance with the approved planting, irrigation design, soil management, and grading design plans for the project. The Certificate of Completion shall
be signed by a Licensed or Registered Landscape Architect and shall indicate:

1. Date;

2. Project information: Project name; Project applicant name, telephone and mailing address; Project address and location; and Property owner name and mailing address;

3. Prior to backfilling, evidence that the party responsible for irrigation installation conducted a preliminary field inspection of the irrigation system (evidence of field inspection shall be attached);

4. The landscaping has been installed in conformance with the approved planting and irrigation design plans;

5. Irrigation audit report performed by a certified irrigation auditor after project installation (audit report shall be attached);

6. The smart irrigation controller has been programmed appropriately according to the parameters of each valve circuit;

7. The irrigation system has been adjusted to maximize irrigation efficiency and eliminate overspray and runoff;

8. A copy of the approved landscape documentation (Section 5), the irrigation schedule (Section 6.a.) and the maintenance schedule (Section 6.b.) has been given to the property owner and local water purveyor; and
9. Verification that the maintenance schedule has been provided to the Planning Director.

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

d. 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.

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

Section 2. This ordinance is hereby declared to be an urgency measure and shall take effect immediately upon its adoption. In accordance with the requirements of Government Code section 25123, subdivision (d), the Board of Supervisors hereby declares that the provisions contained herein are necessary for the immediate preservation of the public peace, health, or safety for the following reasons:

1) the State of California is facing unprecedented drought conditions over the prior four (4) years, requiring all public agencies to enact ordinances and regulations to conserve potable water resources; 2) in 2006, the California State Assembly passed Assembly Bill 1881 which required all local agencies to develop water conservation policies by 2010 as effective as the State’s Model Water Efficient Landscape Ordinance; 3) on April 1, 2015, Governor Brown issued Executive Order B-29-15, directing the State Water Resource Control Board to impose restrictions on water purveyors to achieve a statewide reduction of 25 percent in potable urban water usage through various measures including
restrictions on landscape irrigation; and 4) the ordinance provides increased restrictions and methodologies to accomplish immediate reductions in the use of potable water resources.

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

By: ________________________________

Chairman, Board of Supervisors

ATTEST:
CLERK OF THE BOARD

By: ________________________________

Deputy

APPROVED AS TO FORM:

By: ________________________________

AARON C. GETTIS
Deputy County Counsel

Dated: July 13, 2015