



DRAFT

County of Riverside Guide to California Friendly Landscaping



BOARD OF SUPERVISORS

John F. Tavaglione, Chairman

Roy Wilson, Vice Chairman

Marion Ashley

Bob Buster

Jeff Stone

TRANSPORTATION LAND MANAGEMENT AGENCY

Tony Carstens, Agency Director

PLANNING DEPARTMENT

Ron Goldman, Planning Director

October 31, 2007



TABLE OF CONTENTS

	Page
1. Why Do We Need This Guide?	2
2. Who Does Ordinance No. 859 Apply To?	2
3. What Are The County’s General Landscaping Design Guidelines?	3
4. What Should I Know Before I Prepare My Planting Plan?	8
5. What Should I Know Before I Prepare My Irrigation Plan?	12
6. What Is A Water Budget And How Is It Calculated?	15
7. What Are The County's Installation And Maintenance Requirements? ..	21
8. How Is Recycled Water Used?	22

Figures

Figure 1 - <u>Sunset</u> Climate Zone Map	18
Figure 2 - Water Budget Formula and Tables	19
Figure 3 - Blank Water Budget Calculation Form.....	20

Attachments

Attachment A - Riverside County California Friendly Plant List	
--	--



California Friendly® is a registered trademark of the Metropolitan Water District of Southern California. Learn more about water conservation and landscape rebate programs at: www.bewaterwise.com

1. Why Do We Need This Guide?

This guide is designed to assist landscape architects, irrigation designers, contractors, planners and the public in the selection of plant materials and irrigation methods that meet the objectives of Ordinance No. 859 and Ordinance No. 348. In order to conserve water in the drought prone state of California, legislation such as AB 325 and AB1881 mandates the practice of water conservation.

Riverside County's commitment to water conservation is exemplified in the adoption of standards and implementation of guidelines that result in a reduction of water usage County wide while still maintaining a high level of quality landscaping. It is the County's goal to reduce irrigation water usage by at least twenty percent (20%) per site, through implementation of this Guide to California Friendly Landscaping (Landscaping Guide). To meet this goal, Planting Plans and Irrigation Plans shall be prepared using the Water Budget Formula found on Figure 2 of this Landscaping Guide.



Water Efficient Landscapes can be inviting and attractive

2. Who Does Ordinance No. 859 Apply To?

- A. On December 19, 2006, the Riverside County Board of Supervisors adopted Ordinance No. 859. This ordinance and the Landscaping Guide are applicable to all discretionary permits and/or approvals for the following:
1. Commercial development.
 2. Industrial development.
 3. Residential development:
 - Multi-family development
 - Single family common areas
 - Single family homes
 - Single family erosion control landscaping (slopes over 3 feet in vertical height)
 - Model homes
 4. Road rights-of-way.
 5. Parks and public lands.
 6. Landscaping associated with entry sign monuments.
 7. Fuel modification areas:
 - Applicants are encouraged to consult with the County Fire Department, determine their fuel modification requirements, and select fire-resistive plant material. A detailed plan shall be prepared pursuant to specifications of the



Fuel modification zone



Invasive plants are prohibited near MSHCP conservation areas.

County’s Planning Department and Fire Department.

8. Flood Control Areas:
 - Retention/detention basins
 - Water quality swales (‘bioswales’)
9. Development adjacent to Multiple Species Habitat Conservation Plan (MSHCP) and other conservation areas:
 - Applicants are required to consult with the Environmental Programs Department (EPD) to determine acceptable plant species that may be planted within the vicinity of MSHCP conserved lands.

B. In the event that the water purveyor for a proposed project has adopted more stringent water-efficient landscape requirements, the more stringent guidelines shall take precedence.

3. What Are The County’s General Landscaping Design Guidelines?



Lantana - gold hybrid

Landscaping and proper irrigation is a critical component of any successful development project. Landscaping should define a sense of space by making a statement, ensuring community continuity, complementing good architectural design, and creating a cohesive finished product. Emphasis on California friendly design elements can achieve aesthetic objectives while acknowledging the practical water constraints of our unique geographic environment.

The Planting Plans for various development products shall incorporate the use of native planting and compatible species of drought-tolerant/water-efficient plants to reduce water demand. A rich variety of plantings and hardscape should be selected and provided appropriately for their intended use. Landscaping shall consist of plants found in the Riverside County California Friendly Plant List (Plant List) included in this Guide as Attachment A.

The following information is intended to provide guidance for single family residential, multi-family residential, commercial/industrial/mixed-use, and park landscaping plans.

A. Single Family Residential Design Guidelines:

1. Trees, shrubs, and groundcover shall be incorporated within single-family development projects to create a comfortable and aesthetically pleasing environment for residents and those viewing from public areas.



Photo: Courtesy of Eastern Municipal Water District



Hesperaloe parviflora



California Friendly® Model Home. Photos: Courtesy of Eastern Municipal Water District



Osteospermum fruticosum

2. Landscape architects and designers are strongly encouraged to use clinging vines, espaliers, trellises, and shrubs to enhance the architecture and define attractive private open spaces.
3. Front yard areas should be designed using landscape elements pertaining to the form, horizontal and vertical lines, hardscape and softscape, and ornate qualities that are compatible with the primary structure. Visual openness and water efficiency should be maintained. Special attention shall be given to selecting appropriate trees and plants that, at their maturity, will be in scale with the house and yard.
4. Landscape architects and designers are encouraged to use visual focal points such as boulders, landscape mounds, planter beds, etc.
5. To the extent feasible, existing mature trees and shrubs that represent the existing significant landscaping elements shall be preserved.
6. Vegetative ground cover that will absorb rainwater and reduce runoff shall be used. Permeable surfaces should be used wherever possible to reduce paving.
7. Air conditioning, mechanical equipment, and trash enclosures should be screened from the public right-of-way with suitable plantings.
8. Landscaping shall be included as part of the design for a fence or wall. It should be used to soften and screen large masses of blank wall surface area and deter graffiti.
9. Model homes shall display a sign indicating that the home features water efficient planting and irrigation. The sign shall be displayed in the front yard and be clearly visible to home buyers.
10. Turf areas shall be used sparingly in response to functional needs and shall be in compliance with the Water Budget Formula (Section 6 of this Guide).
11. Soil amendments improve the water holding capacity of the soil, adjust soil pH, provide nutrients, and improve drainage. Agronomic soil tests are required to determine the recommended types, rates, and application methods of soil amendments. Implementation of the recommendations is required to help ensure optimum soil conditions for the specified plants.
12. Metropolitan Water District of Southern California (MWD) also has a California Friendly® rebate pro-



Lavatera assurgentiflora



Chitalpa tashkentensis



Photo: Courtesy of Tree of Life Nursery
www.treeoflifenuresery.com

gram available for model home and front yard landscaping. MWD rebate approved plans will be deemed compliant with Ordinance No. 859 and the Landscaping Guide subject to Planning Department review.

B. Multi-Family Residential Design Guidelines:

1. Trees, shrubs, and groundcover should be incorporated within multi-family development projects to create a comfortable and aesthetically pleasing environment for residents and those viewing from public areas.
2. Landscape architects and designers are strongly encouraged to use clinging vines, espaliers, trellises, and shrubs to enhance the architecture and define useful public and private spaces.
3. Landscape architects and designers are strongly encouraged to integrate visual focal points such as boulders, landscaped mounds or berms, sculpture, and public art into their planting design.
4. Hardy native or drought tolerant trees, shrubs, and groundcover that are easy to water and maintain are encouraged.
5. Paved areas, especially parking lots, should be shaded.
6. Plans shall comply with provisions in Section 18.12 of Ordinance No. 348.
7. Seating options in landscaped areas should be provided. They should be constructed of durable, easy-care material such as concrete and shall be treated with a graffiti resistant coating.
8. Entrances to alleys should be landscaped. Walls in alleys abutting residential uses shall be screened with landscaping such as clinging vines. Landscape areas adjacent and between garages in alley-loaded residential areas are encouraged.
9. Pedestrian walkways should be safe, visually attractive, and well defined by landscaping and lighting.
10. Landscaping shall be included as part of the design for the fence or wall. It should be used to soften and screen large masses of blank wall surface area and to deter graffiti.



Agronomic soil tests are required to determine the recommended types, rates, and application methods of soil amendments.



Photo: Courtesy of Tree of Life Nursery



Photo: Courtesy of Arid Zone Trees

11. Planting Plans shall complement the landscape elements between the proposed project, surrounding streetscapes, and adjacent publicly maintained landscaping to ensure community continuity and character.
12. Turf areas shall be used sparingly in response to functional needs and shall be in compliance with the Water Budget Formula (Section 6 of this Guide).
13. Soil amendments improve the water holding capacity of the soil, adjust soil pH, provide nutrients, and improve drainage. Agronomic soil tests are required to determine the recommended types, rates, and application methods of soil amendments. Implementation of the recommendations is required to help ensure optimum soil conditions for the specified plants.
14. Model homes shall display a sign indicating that the home features water efficient planting and irrigation. The sign shall be displayed in the front yard and be clearly visible to home buyers.

C. Commercial, Mixed Use, and Industrial Design Guidelines:

1. Landscaping should be in scale with adjacent buildings and be of appropriate size at maturity to accomplish its intended goals. A balance of deciduous and evergreen trees should be used.
2. Landscaping around the entire base of buildings (except loading or service areas) is recommended to soften the edge between the parking lot, structure(s), and street. This should be accentuated at entrances to provide a focal point.
3. Berming in conjunction with landscaping should be used at the building edge to reduce structure mass and height along façades.
4. Evergreen trees and shrubs shall be used whenever a landscape screen or buffer is required.
5. Service areas, equipment, and solid enclosures should be screened using landscaping such as tall shrubs and clinging vines especially those properties whose side yard fronts a primary street or abuts a residential property.



Vines soften fences and walls and deter graffiti. They shall have designated valves for irrigation.



This recreation center is themed after the local wine country.



Park Master Plan and Photo



6. Design and locate perimeter planters and plantings for the purpose of creating a physical barrier, providing a visual screen, and shading the parking area. The parking lot and perimeter landscape should also be designed for safe and convenient pedestrian circulation throughout, including designated paths across perimeter planters.
7. Plans shall comply with provisions in Section 18.12 of Ordinance No. 348.
8. Landscaping shall be included as part of the design for the fence or wall. It should be used to soften and screen large masses of blank wall surface area and to deter graffiti.
9. Hardscape amenities such as benches, seating areas, and trellises, should not only be included but they should also be consistent with the landscaping.
10. Landscaping plans shall complement the landscape and hardscape elements between the proposed project, surrounding streetscapes, and adjacent publicly maintained landscaping to ensure community continuity and character.
11. Turf areas shall be used sparingly in response to functional needs and shall be in compliance with the Water Budget Formula (Section 6 of this Guide).
12. Soil amendments improve the water holding capacity of the soil, adjust soil pH, provide nutrients, and improve drainage. Agronomic soil tests are required to determine the recommended types, rates, and application methods of soil amendments. Implementation of the recommendations is required to help ensure optimum soil conditions for the specified plants.

C. Park Design Guidelines:

1. A balance of deciduous and evergreen trees should be used.
2. Landscaping shall be included as part of the design for the fence or wall. It should be used to soften and screen large masses of blank wall surface area and to deter graffiti.
3. Landscaping shall complement the landscape and hardscape elements between the proposed project, surrounding streetscapes, and adjacent publicly maintained landscaping to ensure community continuity and character.



Anigozanthos flavidus - red cultivar



Photo: Courtesy of Arid Zone Trees

4. Plans shall comply with provisions of Section 18.12 of Ordinance No. 348.
5. Seating options and drinking fountains in landscaped areas should be provided. Seating and drinking fountains should be constructed of durable, easy-care material such as concrete and shall be treated with a graffiti resistant coating.
6. Adequate lighting shall be incorporated into the landscape design pursuant to the prevailing local or state standards.
7. Sprinklers or other emitters shall be positioned so that no irrigation water shall come in contact with drinking fountains, picnic tables, benches, playground equipment, buildings, or other hardscape features.
8. Soil amendments improve the water holding capacity of the soil, adjust soil pH, provide nutrients, and improve drainage. Agronomic soil tests are required to determine the recommended types, rates, and application methods of soil amendments. Implementation of the recommendations is required to help ensure optimum soil conditions for the specified plants.
9. Plans shall conform to the standards and be approved by the maintenance district responsible for perpetual maintenance.

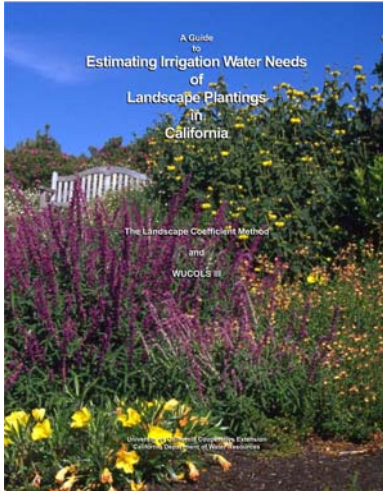
4. What Should I Know Before I Prepare My Planting Plan?



Photo: Courtesy of Arid Zone Trees

Plant species must be selected from the Plant List included as Attachment A of this Landscaping Guide. The species listed are not guaranteed for all situations. Consultation with a landscape architect, arborist, the proposed maintenance entity, or a local plant nursery is recommended.

- A. Plants shall be selected based on their level of maintenance, durability, mature widths and heights, aesthetic appeal, and thematic qualities. A greater percentage of “low” or “very low” water use plant species is strongly encouraged.
- B. Shade trees shall be provided for residential, commercial and industrial building parking lot and open space areas. They shall be incorporated to provide natural cooling opportunities and for the purpose of energy and water conservation.



The WUCOLS III guide provides estimated water uses for landscape plants. It can be downloaded from: www.owue.water.ca.gov/docs/wucols00.pdf



Organic wood mulch



Decomposed granite mulch



Regular application of mulch retains moisture and suppresses weeds. Photo: Courtesy of R Cedar, LLC

- C. In order to incorporate plant species other than those listed, the project applicant must provide the Planning Director with the following:
 1. Water use requirements per Water Use Classification of Landscape Species (WUCOLS III) or field data verifying the plant's landscape (crop) coefficient.
 2. Plant species description from Sunset Western Garden Book or other comparable source.
 3. Comparison to a similar species included in the plant list.

- D. Plant species must be selected based on their appropriate plant hardiness climate zones as defined by Sunset Western Garden Book. The climate zones are also depicted in Figure 1 and are noted on the Plant List included as Attachment A of this Landscaping Guide.

- E. All non-turf planting areas (except hydroseeded areas) must be mulched on a regular basis to retain moisture, suppress weeds, and moderate soil temperature. Mulch depth, type, and maintenance replenishment frequency must be noted on plans.
 1. Planting areas shall be mulched with three inches (3") minimum layer of organic wood mulch. (Areas of groundcover planted from flats shall be mulched with a one and one half inches (1 1/2") minimum layer of organic mulch.)
 2. Some maintenance districts require differing mulch thicknesses. The more stringent (thicker) requirement shall prevail.
 3. Color enhanced mulches are discouraged.
 4. Mulch may be omitted for native revegetation projects upon the recommendation of the project biologist.
 5. Planting areas in the desert regions (Sunset Climate Zones 11 and 13) shall be mulched with two inches layer (2") of decomposed granite (DG) /gravel mulch.
 - One inch (1") minus granite mulch is suggested for aesthetic purposes.



Turf serves as a recreational amenity

F. Turf shall be used as a functional recreational element and not solely for aesthetic purposes.

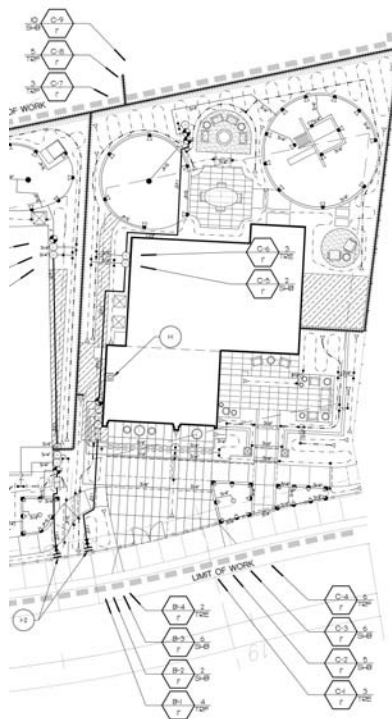
1. Small, irregularly shaped turf areas shall be avoided.
2. Lower water use, warm season turf grasses are encouraged. Grasses such as Bermuda, which are dormant (brown) in the winter, are acceptable if the maintenance entity over-seeds with perennial rye on an annual basis during the dormancy period.
3. Turf is prohibited within County road rights-of-way, unless the turf areas are contiguous to turf areas within parks, residential front yards, cemeteries or golf courses.

G. Plants must be grouped and irrigated on separate valve zones (hydrozones) based on their water use requirements, slope aspect, and sun/shade microclimate.

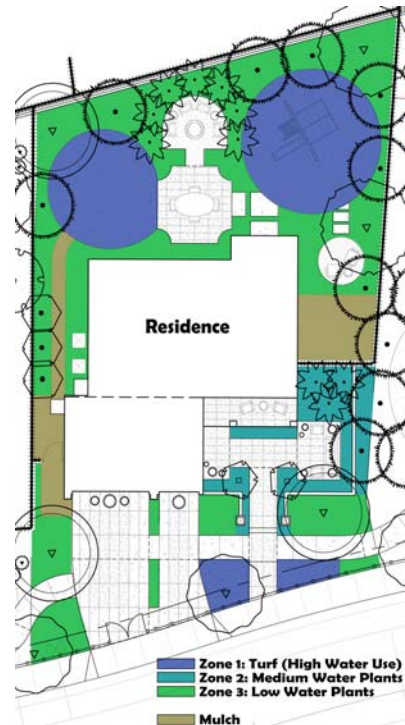
H. Shrubs shall be designed so that their mature width will not require excessive pruning. Excessive pruning is discouraged.



Planting Plan



Irrigation Plan



Hydrozones - Plants grouped and irrigated based on water use requirements



Myoporum parvifolium



Rosmarinus officinalis



Salvia clevelandii

- I. The contractor shall tag one plant of each variety with the plant's scientific name, and cultivar or variety if applicable, and common name. This is to ensure that accurate replacement plants are installed if necessary.
- J. To prevent graffiti, self-clinging vines shall be planted to ensure full coverage of the public facing side of all walls.
- K. Plans must note or specify that a site specific agronomic soils test is required and that contractors are required to follow the report's recommendations for amending the soil. Planting specifications and details including the recommendations from the soils analysis are required if applicable. A copy of the soil test shall be delivered to the Planning Department's Landscape Section.
- L. If low water use plants (those that can also survive/flourish with medium water application) are used in a medium water use hydrozone, they must be counted as medium water use in the irrigation calculations.
- M. The Planting Plan shall be prepared at the same scale as the Irrigation Plan and, at a minimum, shall identify the following:
 1. Proposed and existing trees, shrubs, ground covers, vines and turf areas indicated within the developed landscape area and within publicly maintained landscape areas within 200 feet (200') of proposed project site.
 2. Legend including plant symbol, genus, species, common name, spacing, size, quantity of each type of plant by container size, water use per applicable WUCOLS III Zone, and detail call-out (i.e.: P-1, P-2, P-3, etc.).
 3. Location of each hydrozone.
 4. Individual trees, shrubs, and groundcover plants at their average growth size to ensure coverage of the area to be landscaped.
 5. Labels for all existing trees and vegetation that will either remain or be removed.
 6. Location of street lights. Trees shall be located so that there is a minimum of twenty feet (20') of clearance with respect to the lights.
 7. Root barrier noted for trees within six feet of hardscape.
 8. Property lines, limit-of-work lines, streets, and street names.
 9. Building locations, driveways, sidewalks, and other hardscape features.
 10. Topographic elevation lines to determine slope.
 11. Appropriate four inch (4") graphic scale, title block, page numbers, and north arrow, notes, details, and specifications.

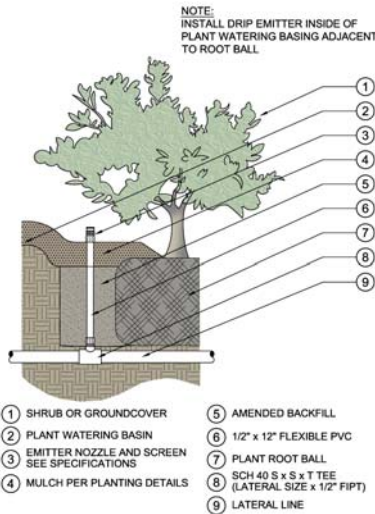


MP Rotator sprinklers are 15% more efficient than conventional spray applications.

5. What Should I Know Before I Prepare My Irrigation Plan?

Irrigation systems shall be designed, constructed, managed, and maintained to achieve the highest overall efficiency possible. Efficiency is measured by the amount of water beneficially used to sustain plant life divided by the amount of water applied. Efficiency is affected by the attributes of the controller, method of irrigation, irrigation equipment, proper hydrozoning, site topography, condition and size of plants, and weather conditions.

- A. Residential Front Yard Typical Irrigation Plans must demonstrate that sufficient capacity exists on the specified irrigation controller to supply adequate additional zones for future side and backyard landscaping. More than one controller per residential unit shall be avoided.
- B. High efficiency irrigation methods (e.g. drip, MP rotators, microsprays) are encouraged.
- C. Rotors and spray heads shall be designed and installed with minimized overspray onto paved surfaces, structures, and non-vegetated areas. The design shall be head-to-head coverage with matched precipitation heads and a maximum of fifty percent (50%) diameter overlap. Rotors and spray heads shall be zoned separately. Half rotors and full rotors shall be zoned separately unless matched precipitation nozzles are used.
- D. For drip line installations, in-line pressure regulators shall be used per factory recommendations for the specific irrigation products being used. If drip line is being installed, it must be filtered at the valve along with any other necessary equipment.
- E. Irrigation systems shall be zoned according to plant water use, slope aspect, and sun/shade microclimate. If low water use plants (that can also survive/flourish with medium water application) are used within a medium water use hydrozone, they must be counted as medium water use in the irrigation calculations.
- F. Low head drainage is not permitted. Check valves are recommended.
- G. With the exception of single family residential units, all irrigation plans shall be designed for recycled water in areas that are scheduled for recycled water in the future.



Drip irrigation is 30% more efficient than conventional spray applications.

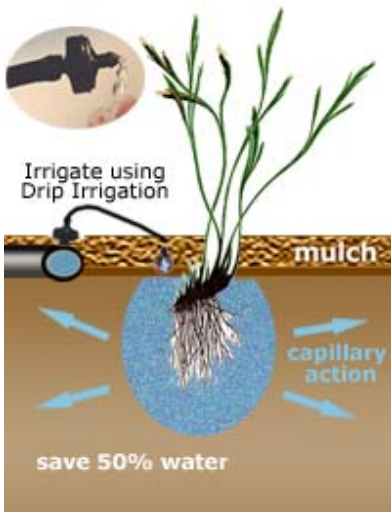


Photo: Courtesy of Northern Garden



How Can I Find A “Smart” Controller?

The Irrigation Association regularly tests “smart” controllers and provides a list of recommended controllers for commercial or private use. Below are the tested and recommended smart controllers from the Association’s 2007 list. For more information and a current list of controllers, see the Irrigation Association’s web site located at: <http://www.irrigation.org/SWAT/Industry/ia-tested.asp>

- Alex-Tronix Enercon Plus
- Alex-Tronix Smart Clock
- Aqua Conserve Aqua ET-9
- Calsense ET2000e
- ETwater Smart Controller
- Hunter ET System
- Irritrol Smart Dial
- Rain Bird ET Manager
- Rain Master RME Eagle
- Toro Intelli-Sense
- Weathermatic SL1600

- H. Projects must include a “smart” irrigation controller with the following attributes:
 1. Real-time, weather based program adjustment capability.
 2. Project must have an on-site weather station or external ETo input.
 3. Rain sensors shall placed within an unobstructed natural rainfall area and shall be located above the irrigation spray pattern.
 4. Master valve (or simultaneous operations).
 5. Flow Sensor.
 6. Multiple start times.
 7. Minimum of two programs.
- H. Systems shall be scheduled so that the irrigation precipitation rate does not exceed the infiltration rate of the soil.
- I. A baseline irrigation schedule shall be provided on the plans for the six-month initial plant establishment period. The contractor shall adjust the schedule to meet site specific requirements and use the baseline schedule to set the weather-based controller. The schedule currently in effect shall be posted in the controller.
- I. A second baseline irrigation schedule shall be provided on the plans which incorporates the specific water needs of the plants throughout the post-establishment calendar year. The contractor shall adjust the schedule to meet site specific requirements and use the baseline schedule to set the weather-based controller. The schedule currently in effect shall be posted in the controller.
- J. The irrigation schedules shall include the recommended irrigation days per week, number of cycles per day, minutes of run times per cycle, and estimated amount of applied irrigation water, expressed in gallons per month and gallons per year.
- K. The controller shall be operational and set to real-time weather prior to the completion of the 90-day maintenance period of the installing contractor.
- L. Pressure loss calculations for valve with worse condition.
- M. Commercial projects shall include a Central Controller programmed to distinguish irregular flows (e.g. broken valve,



Standard low-emission bubbler.



Standard low-emission hub.



One of many "smart controller" options.

line, spray head, etc.), temporarily shut off the affected branch or the entire system, and send an immediate electronic message to the maintenance entity.

N. The Irrigation Plan shall be prepared at the same scale as the Planting Plan and, at a minimum, shall identify the following:

1. Location and size of service lateral(s).
2. Location and size of water meter(s).
3. Point of connection (POC) location and static pressure at POC.
4. Total flow rate (gallons per minute) and designed operating pressure (psi) for each overhead spray and bubbler circuit, and total flow rate (gallons per hour) and design operating pressure (psi) for each drip and low volume irrigation circuit.
5. Location, size, and type of all irrigation components including, but not limited to, smart controller, central controller (backflow prevention device, ball valves, anti-drain check valves, pressure supply (main) line, lateral lines, pipe sizing, valves, spray heads, rotors, drip, low volume irrigation equipment, gallons per minute, pressure regulators, and pumps. Water sense components are strongly recommended.
6. Hydraulic Calculation worksheet including flow rate (gallons per minute) and design operating pressure.
7. Precipitation rate (inches per hour) for each spray type circuit.
8. Irrigation legend with the symbol, manufacturer name, model number (or non-proprietary description for publicly funded projects), separate symbols for irrigation equipment with different spray patterns, spray radius, and precipitation rate.
9. Location of each hydrozone.
10. Topographic elevation lines to determine slope.
11. Irrigation system details for assembly and installation.
12. Calculation for the project's landscape Water Budget. (Section 6 of this Guide).



6. What Is A Water Budget And How Is It Calculated?

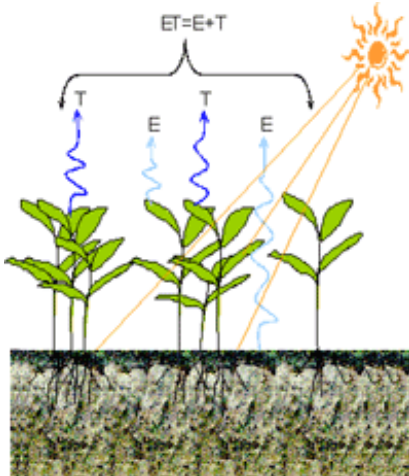


Water budgets are used to assist designers and governing authorities. They are a tool to verify compliance with the state requirements for water conservation and they assist with water demand management. A water budget determines how much water a particular landscape needs over a specified period of time. The Maximum Annual Water Allowance (MAWA) is calculated and compared to the Estimated Annual Water Use (EAWU) to verify that the project landscaping is not exceeding the allowed water use.

The County of Riverside uses the formula and tables included in Figure 2 to determine water budgets. Figure 2, the information below, and the sample worksheet following are designed to assist you in calculating a Water Budget for inclusion in your Irrigation Plan.

A. Maximum Annual Water Allowance and Evapotranspiration Rate (ET_o).

ET_o, or Annual Reference Evapotranspiration Rate, is the quantity of water evaporated from adjacent soil surfaces and transpired by plants in terms of inches for a particular climate zone. Your total square footage of landscape and ET_o are essential components of the MAWA formula.



Evapotranspiration is the loss of water to the atmosphere from plants and soil.

Because ET_o rates vary according to climate, the ET_o rate must be identified for your project in order to calculate MAWA. ET_o data is taken from the California Irrigation Management Information System (CIMIS). Table 1 on Figure 2 will help you find your ET_o for insertion into Space B of your landscape water budget formula. If your project is not within one of the weather station areas listed, use the closest representative station.

B. Estimated Annual Water Use (EAWU).

The formula for EAWU is calculated for each hydrozone separately, then the total of all hydrozones is divided by the Irrigation System Operation Efficiency (IS). In addition to the square footage of each hydrozone, the EAWU calculation relies on several other key factors. One is the average Plant Factor (PF) that is established by the WUCOLS III for plants that are considered high, medium, low, and very low based on their water requirements. For purposes of the Water Budget Formula, turf is considered to have a high water requirement. Refer to Table 2 to establish your PF for each hydrozone and enter the number in Space D of your Water Budget Formula on Figure 2.



Photo: Courtesy of Tree of Life Nursery

The water use requirements also vary according to regional climate zones. Plant categories used in the calculation must be from the appropriate WUCOLS Regional Zones as defined below and the corresponding Sunset Zones found on Figure 1 of this Landscaping Guide:

WUCOLS III Region	Corresponding Sunset Zones
1	2,3,14, 15, 16, 17
2	8, 9
3	22, 23, 24
4	18, 19, 20, 21
5	11
6	13



Photo: Courtesy of Tree of Life Nursery

Another key factor in calculating EAWU is the Irrigation Efficiency (IE). The IE is derived from measurements and estimates of the irrigation application method performance within controlled environmental conditions. Table 3 provides the IE factor to be used in Space F of the Water Budget Formula on Figure 2.

The final factor in calculating EAWU is the Irrigation System Operation Efficiency. This number is derived from the efficiency of the controller. Since “smart” controllers are required by the County per Ordinance No. 859, the IS factor shall be 0.85. This figure has been inserted in the Water Budget Formula for you.

An EAWU calculation must be performed for each hydrozone within the proposed project.

C. Finalizing the Water Budget Calculations.

Add together the EAWU subtotals for each hydrozone within the proposed project, this will be the Sub-Total EAWU. Now, divide this number by 0.85. The resulting number will be the Total EAWU. Subtract the Total EAWU number from the MAWA. The resulting number must be positive. If the number is negative, then adjustments will need to be made to the Planting Plan (e.g. use more vegetation types that consume less water) and/or the Irrigation Plan (e.g. use more efficient application methods).



Matilija Poppy.
Photo: Courtesy of Peter Odencrans

A Water Budget Formula shall be completed and included on all Irrigation Plans submitted to the County. A blank Water Budget Form is provided as Figure 3 and may also be downloaded from the Landscape Review link on the County Planning Department website: www.tlma.co.riverside.ca.us/planning.



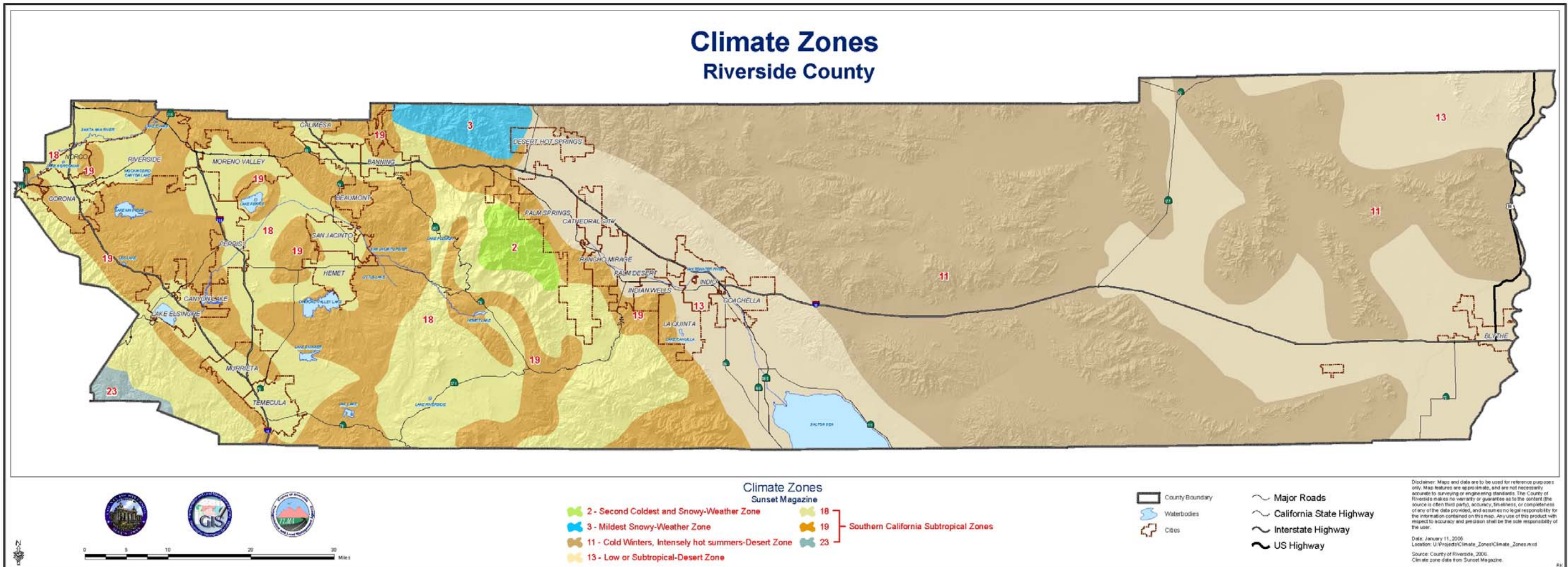
This page intentionally left blank.

DRAFT



FIGURE 1

Climate Zones Riverside County





**FIGURE 2
WATER BUDGET FORMULA AND CHARTS**

COLORED BOXES ARE DATA ENTRY FIELDS.
FACTORS USED IN WATER BUDGET FORMULA

CHART 1: FINDING YOUR ETO
Insert Your Number in Space B of the Landscape Water Use Calculation Sheet

CIMIS Station	Name	Reference ETo
24	Thermal	73.03
25	Rancho Mirage	71.40
34	Rancho California	49.54
36	Blythe	71.40
44	UC Riverside (Riverside)	56.37
55	Palm Desert	72.77
62	Temecula	66.14
118	Cathedral City	57.06
130	Temecula East	49.54
135	Blythe Northeast	70.80
136	Oasis	71.40
141	Mecca	62.68
151	Ripley	71.40
154	Salton Sea North	71.65
162	Indio	71.4
176	La Quinta	71.4
179	Winchester	57.33

CHART 2: DETERMINING YOUR PLANT FACTOR (PF)
Insert Your Plant Factor in Space D of the Landscape Water Use Calculation Sheet

Plant Category	Average PF
High	0.8
Medium	0.5
Low	0.2
Very Low	0.1

CHART 3: LOCATING YOUR IRRIGATION EFFICIENCY (IE) FACTOR
Insert Your Number in Space F of the Landscape Water Use Calculation Sheet

Application Method	IE Factor
Drip	0.90
Bubblers	0.85*
MP Rotators	0.75
Rotors	0.75
Microsprays	0.70
Spray Heads	0.60
*With proper run times	

INSTRUCTIONS FOR FILLING OUT WATER BUDGET FORMULA

1. TO FIND MAWA

STEP 1: Calculate your total square footage of the landscape area and insert that number into Space A. (Round the number to the nearest hundred).

STEP 2: Find your city on the Reference Evapotranspiration Chart (1) and insert the number in Space B.

STEP 3: Multiply A x .62 x B x .8, put the answer in space C and divide by 748. This gives you your MAWA in gallons.

2. TO FIND EAWU FOR EACH HYDROZONE

STEP 1: Find your plant factor (CHART 2) for the hydrozone remembering to use the highest plant factor per hydrozone. If you have medium and a low in the same hydrozone, the factor is medium. Place that number in Space D.

STEP 2: Calculate your square footage for the hydrozone (Round to the nearest hundred) and put number in space E. Next, insert the hydrozone irrigation efficiency number from (CHART 3) into Space F.

STEP 3: Multiply ETo (From Chart 1) x D x E x 0.62, then divide that number by F x 748. This will give you the EAWU number for Space G.

STEP 4: Repeat steps 1-3 for each hydrozone.

STEP 5: Add all G's and put number into Space H.

STEP 6: Divide H by .85 and that will give you your Total EAWU (Space I). This is the irrigation system operating efficiency.

STEP 7: To find J, Subtract I (EAWU) from MAWA and that will give you the total water use for the project. The resulting number must be positive.

BE SURE TO RUN EAWU CALCULATION FOR EACH HYDROZONE WITHIN YOUR PROJECT.

1. MAXIMUM ANNUAL WATER ALLOWANCE (MAWA)

INPUT the total square footage of landscape = X .62
 INPUT the Hist. ETo for the area = X .8

MAWA = gal / yr
 748

MAWA = ccf

2. ESTIMATED ANNUAL WATER USE (EAWU)

Hydrozone # 1
 INPUT Plant Factor = (low)
 INPUT square footage of hydrozone =
 INPUT hydrozone irrigation efficiency =
 EAWU = gal / yr

Total Your Hydrozones

+ + + =

Finding Total (EAWU)

SubTotal EAWU = cu ft / yr
 Input Irrigation System Operation Factor = 0.85
 Total EAWU =

Finding Your Total Allowance

MAWA - EAWU = cu ft / yr
 (this number must be positive)



FIGURE 3

The following blank work sheet may be modified as-needed for each project and shall be included on all Irrigation Plan submittals.

**Riverside County Ordinance 859 Landscape Water Use Calculations
WORKSHEET**

1 Maximum Annual Water Allocation (MAWA)

INPUT the total square footage of landscape = x .62
 INPUT the Hist. ETo for the area = x .8

MAWA = gal / yr

MAWA = / 748

2 Estimated Annual Water Use (EAWU)

Hydrozone # 1 INPUT Plant Factor = (Turf)
 INPUT square footage of hydrozone =
 INPUT hydrozone irrigation efficiency =
 EAWU = cu ft / yr

Hydrozone # 2 INPUT Plant Factor = (High)
 INPUT square footage of hydrozone =
 INPUT hydrozone irrigation efficiency =
 EAWU = cu ft / yr

Hydrozone # 3 INPUT Plant Factor = (Med)
 INPUT square footage of hydrozone =
 INPUT hydrozone irrigation efficiency =
 EAWU = cu ft / yr

Hydrozone # 4 INPUT Plant Factor = (Low)
 INPUT square footage of hydrozone =
 INPUT hydrozone irrigation efficiency =
 EAWU = cu ft / yr

Hydrozone # 5 INPUT Plant Factor = (Very Low)
 INPUT square footage of hydrozone =
 INPUT hydrozone irrigation efficiency =
 EAWU = cu ft / yr

SubTotal EAWU = cu ft / yr

Input Irrigation System Operation Factor 0.85

Total EAWU =

MAWA - EAWU = cu ft / yr
 (this number must be positive)



Inspectors will confirm that plants are installed per approved plans and are thriving.
Photo: Courtesy of Toyon Landscape



Inspectors will verify that the irrigation system is installed properly and functioning.



7. What Are the County's Installation and Maintenance Requirements?

Correct installation and consistent landscape maintenance is paramount to water efficient landscaping and water conservation. Regardless of the efficiency of the irrigation design and installation, a landscape can quickly lose its efficiency and aesthetic appeal without proper maintenance. To ensure that the Planting and Irrigation Plans are installed properly and maintained throughout a minimum plant establishment period, the County Planning Department will conduct the following series of site visits:

A. Installation Inspection

Personnel will, at a minimum, confirm that the irrigation system is installed according to the approved Irrigation Plan, the soil preparation and landscaping is completed as indicated in the approved Planting Plan, the project has met its Conditions of Approval, and the performance security has been approved and executed. Upon successful completion of this Installation Inspection, a Certificate of Completion will be issued to the project applicant.

B. Six Month Establishment Inspection

Personnel will, at a minimum, confirm that the irrigation system is operating at its maximum efficiency, the plantings are alive, the current irrigation schedule is posted in the controller, and any replacement components of either the landscape or irrigation reflect the original approved Irrigation and Planting Plans.

C. One Year Post-Establishment Inspection

Personnel will, at a minimum, perform an irrigation audit to confirm that the irrigation system is functioning properly and operating at its maximum level of efficiency, verify that plants are established and thriving, and ensure that the post-establishment irrigation schedule is programmed and posted in the controller, and confirm that any remaining Conditions of Approval are met. If components of either the irrigation system or the landscape have been replaced, personnel will confirm that their replacement components reflect the original approved Irrigation and Planting Plans. Upon successful completion of the Post-Establishment Inspection, the landscaping/irrigation component of the performance bond will be deemed complete.



Photo: Courtesy of Toyon Design

- D. At the Planning Director’s discretion, projects may be required to maintain an annual maintenance inspection schedule to ensure that the following obligations are met:
1. Smart controllers are monitored and adjusted for maximum operating efficiency and irrigation application equipment is calibrated to provide maximum efficiency.
 2. Non-functioning irrigation and hardscape components are replaced with identical or better components.
 3. Plant materials that fail to thrive are replaced with identical plant materials or those with similar water requirements.
 4. Minimum mulching levels are maintained.
 5. Plants are pruned to eliminate irrigation application interference.

- E. At the Planning Director’s discretion, projects may be required to provide a security deposit that covers the cost of the planting and irrigation. Upon successful completion of a one-year inspection, the deposit shall be released.



Consult with the governing water purveyor for recycled irrigation water requirements.

8. How is Recycled Water Used?

Recycled water determined to be available pursuant to Section 13550 of the California State Water Code shall be used for appropriate non-potable uses whenever it: a) provides a beneficial use to the customer, b) is economically and technically feasible, c) is consistent with applicable regulatory requirements, and d) is in the best interests of public health, safety, and welfare. With the exception of non-common areas of single-family home residential developments, irrigation systems must be designed and installed to accommodate the current or future use of recycled water for irrigation. Such plans shall be developed in accordance with standards and policies of the applicable recycled water purveyor. Recycled water systems shall be designed to meet regulatory requirements of the California Department of Public Health and the local recycled water purveyor.



Photo: Courtesy Eastern Municipal Water District.

For more information concerning this Landscaping Guide, please contact:

Kristi Lovelady, Administrative Manager
Riverside County Planning Department
Landscape Program
951-955-0781

This Landscaping Guide was prepared in association with:





This page intentionally left blank.

DRAFT



Attachment A

County of Riverside California Friendly Plant List

DRAFT

**COUNTY OF RIVERSIDE
CALIFORNIA FRIENDLY PLANT
LIST**

Botanical	Common	Wucols Region 1	Wucols Region 2	Wucols Region 3	Wucols Region 4	Wucols Region 5	Wucols Region 6	Sunset Zones	Mature Height (Feet)	Mature Width (Feet)	Road Right-of-Way	Medians* (pending project)	Erosion Control / Slope	Fuel Mod. (pending F.D.)	MSHCP Adjacent	Water Quality (Bio) Swale	Swale Location
TREES																	
Acacia aneura	Mulga	/	?	?	?	/	L	8, 9, 12-24	15'-20'	15'-20'	✓	✓	✓				
Acacia farnesiana	Sweet Acacia	?	?	L	L	/	L	13-24	20'	15'-25'	✓	✓	✓				
Acacia salicina	Willow Acacia	L	L	L	M	/	M	8, 9, 12-24	20'-40'	15'	✓	✓	✓				
Acacia stenophylla	Shoestring Acacia	VL	L	L	L	/	L	8, 9, 12-24	30'	20'	✓	✓	✓				
Aesculus californica	California Buckeye	VL	VL	VL	L	/	/	3-10, 14-24	10'-20'	30'	✓	✓	✓	✓	✓	✓	Upper
Agonis flexuosa	Peppermint Tree	L	/	L	M	/	/	15-17, 20-24	25'-35'	15'-30'	✓	✓	✓	✓	✓	✓	
Albizia julibrissin	Silk Tree	L	L	M	M	M	M	4-23	40'	40'	✓	✓	✓	✓	✓	✓	
Arbutus unedo	Strawberry Tree	L	L	L	L	M	M	8-24	8'-35'	8'-35'	✓	✓	✓	✓	✓	✓	
Bauhinia forficata	Brazilian butterfly tree	M	M	M	M	/	/	9, 12-23	20'	20'	✓	✓	✓				
Bauhinia variegata (purpurea)	Purple orchid tree	M	/	M	M	/	M	13, 18-24, H1, H2	20'-35'	20'-35'	✓	✓	✓				
Bauhinia X blakeana	Hong Kong orchid tree	M	/	M	M	/	M	13, 19, 21, 23, 24, H1, H2	20'	20'	✓	✓	✓				
Brachychiton populneus	Bottle Tree	L	L	L	L	M	M	12-24	30'-50'	30'	✓	✓	✓				
Brahea armata	Blue Hesper Palm	L	?	M	?	?	?	10, 12-17, 19-24, H1	20'-40'	12'-25'	✓	✓	✓				
Brahea edulis	Guadalupe Palm	L	?	L	L	L	L	12-24	30'	15'	✓	✓	✓				
Butia capitata	Pindo Palm	L	L	L	L	L	L	8, 9, 12-24, H1, H2	10'-20'	10'-15'	✓	✓	✓				
Caesalpinia cacalaco	Cascalote	?	?	?	?	/	L	12, 13, 21-24	20'	20'	✓	✓	✓	✓	✓	✓	
Callistemon citrinus	Lemon Bottlebrush	L	L	L	L	/	M	8, 9, 12-24, H1, H2	10'-15'	10'-15'	✓	✓	✓	✓	✓	✓	
Callistemon viminalis	Weeping Bottlebrush	L	L	M	M	/	M	6-9, 12-24	20'-30'	15'	✓	✓	✓				
Calocedrus decurrens	Incense Cedar	M	M	M	M	M	/	2-12, 14-24	75'-90'	10'-15'	✓	✓	✓	✓	✓	✓	
Cassia leptophylla	Gold Medallion Tree	L	L	M	M	/	/	15, 16, 20-24, H1, H-2	20'-25'	30'	✓	✓	✓				
Cedrus deodara	Deodar Cedar	L	M	L	M	M	M	3b-10, 14-24	80'	40'	✓	✓	✓				
Cercidium floridum (Parkinsonia florida)	Blue Palo Verde	VL	VL	VL	L	/	L	8-14, 18-20	35'	30'	✓	✓	✓	✓	✓	✓	
Cercidium microphyllum	Little Leaf Palo Verde	/	VL	VL	L	/	L	8-14, 18-20	20'	20'	✓	✓	✓	✓	✓	✓	
Cercidium praecox	Sonoran Palo Verde	/	L	VL	L	/	L	12, 13, 18-20	20'	20'	✓	✓	✓	✓	✓	✓	
Cercis occidentalis	Western Redbud	VL	VL	L	L	/	/	2-24	10'-18'	10'-18'	✓	✓	✓	✓	✓	✓	
Chilopsis linearis	Desert Willow	VL	VL	VL	L	M	M	3b, 7-14, 18-23	15'-30'	10'-20'	✓	✓	✓	✓	✓	✓	Upper
Chitalpa tashkentensis	Chitalpa	L	M	L	L	L	M	3-24	20'-30'	20'-30'	✓	✓	✓	✓	✓	✓	
Chorisia speciosa	Floss Silk Tree	L	/	L	L	/	M	12-24, H1, H2	30'-60'	30'-60'	✓	✓	✓				
Cinnamomum camphora	Camphor Tree	M	/	M	M	/	M	8, 9, 12-24, H1, H2	50'	60'	✓	✓	✓				
Cotinus coggyria	Smoke Tree	L	L	L	L	/	/	2-24	12'-15'	12'-15'	✓	✓	✓	✓	✓	✓	
Cupaniopsis anacardioides	Carrot Wood	M	/	M	M	/	/	16-24, H1, H2	40'	30'	✓	✓	✓				
Cupressus sempervirens	Italian Cypress	L	M	L	L	M	M	4-24, H1, H2	60'	5'-10'	✓	✓	✓	✓	✓	✓	
Dalbergia sissoo	Sissoo Tree	/	/	/	/	/	M	13, 19, 21-24, H1, H2	25'-50'	35'-50'	✓	✓	✓	✓	✓	✓	
Dracaena draco	Dragon Tree	L	/	VL	L	/	/	16, 17, 21-24, H1, H2	20'	20'	✓	✓	✓	✓	✓	✓	
Elaeocarpus decipiens	Japanese Blueberry Tree	M	?	M	?	?	?	8, 9, 14-24, H1	30'-60'	20'-30'	✓	✓	✓	✓	✓	✓	
Eriobotrya deflexa	Bronze Loquat	M	M	M	M	/	M	8-24	15'-30'	15'-30'	✓	✓	✓	✓	✓	✓	Upper
Erythrina americana (E. coralloides)	Naked Coral Tree	/	/	L	L	/	/	12, 13, 19-24	30'	30'	✓	✓	✓	✓	✓	✓	
Erythrina X sykesii	Sykes Coral Tree	/	/	L	L	/	/	19-24	24'-30'	24'-30'	✓	✓	✓	✓	✓	✓	
Erythrina X bidwillii	Coral Tree	L	L	L	L	/	/	8, 9, 12-24	24'-30'	24'-30'	✓	✓	✓	✓	✓	✓	
Eucalyptus citriodora	Lemon Scented Gum	L	/	L	M	/	M	5, 6, 8-24, H1, H1	45'-90'	15'-45'	✓	✓	✓	✓	✓	✓	
Eucalyptus microtheca	Coobah Tree	L	L	L	M	M	M	5, 6, 8-24, H1, H2	30'-60'	24'-54'	✓	✓	✓	✓	✓	✓	
Eucalyptus papuana*	Ghost Gum	L	L	L	L	M	M	5, 6, 8-24, H1, H2	30'-54'	24'-45'	✓	✓	✓	✓	✓	✓	
Eucalyptus polyanthemus	Silver Dollar Gum	L	L	L	L	M	M	5, 6, 8-24, H1, H3	30'-75'	15'-45'	✓	✓	✓	✓	✓	✓	
Eucalyptus torquata	Coral Gum	L	L	L	M	/	M	5, 6, 8-24, H1, H2	18'-36'	15'-30'	✓	✓	✓	✓	✓	✓	
Ficus microcarpa	Indian Laurel Fig	M	/	M	M	/	M	9, 13, 16-24, H1, H2	60'	75'	✓	✓	✓	✓	✓	✓	
Fraxinus greggii*	Little Leaf Ash	M	M	M	M	M	M	10-13	25'	20'	✓	✓	✓	✓	✓	✓	Upper
Fraxinus uhdei	Shamel Ash	M	M	M	M	H	H	9, 12-24	25'-80'	15'-60'	✓	✓	✓	✓	✓	✓	Upper
Fraxinus velutina	Arizona Ash	M	M	M	M	M	M	3b-24	30'-50'	30'-40'	✓	✓	✓	✓	✓	✓	Upper
Geijera parviflora	Australian Willow	M	M	L	M	M	M	8, 9, 12-24	25'-30'	20'	✓	✓	✓	✓	✓	✓	
Ginkgo biloba	Maidenhair Tree	M	M	M	M	M	?	A3, 1-10, 12, 14-24	35'-50'	15'-25'	✓	✓	✓	✓	✓	✓	
Gleditsia triacanthos	Honey Locust	L	L	M	L	L	L	1-16, 18-20	35'-70'	25'-35'	✓	✓	✓	✓	✓	✓	
Jacaranda mimosifolia	Jacaranda	M	M	M	M	/	M	12, 13, 15-24, H1, H2	25'-40'	15'-30'	✓	✓	✓	✓	✓	✓	
Juglans californica	S. California Black Walnut	M	/	L	L	/	/	18-24	15'-30'	15'-30'	✓	✓	✓	✓	✓	✓	
Juniperus californica	California Juniper	L	L	L	M	M	M	3, 6-12, 14-24	10'-40'	10'-40'	✓	✓	✓	✓	✓	✓	
Juniperus scopulorum 'Tolleson's Weeping'	Tolleson's Weeping Juniper	L	L	M	M	M	M	1-24	20'	10'	✓	✓	✓	✓	✓	✓	
Koelreuteria bipinnata	Chinese Flame Tree	M	M	M	M	/	M	8-24; H-1	20'-40'	20'-40'	✓	✓	✓	✓	✓	✓	
Koelreuteria paniculata	Golden Rain Tree	M	M	L	L	M	M	A2, 2-24	20'-35'	25'-40'	✓	✓	✓	✓	✓	✓	
Lagerstroemia indica	Crape Myrtle	L	L	M	M	M	M	7-10, 12-14, 18-21, H1, H2	25'	25'	✓	✓	✓	✓	✓	✓	
Lagunaria patersonii	Primrose Tree	L	/	L	L	/	/	13, 15-24, H1, H2	20'-50'	40'	✓	✓	✓	✓	✓	✓	
Laurus nobilis 'Saratoga'	Sweet Bay	L	L	L	L	M	M	5-9, 12-24, H1, H2	12'-40'	12'-40'	✓	✓	✓	✓	✓	✓	
Leucanea retusa*	Golden Ball Lead Tree	/	L	L	L	M	M	10-13	12'-20'	12'-20'	✓	✓	✓	✓	✓	✓	
Liquidambar styraciflua (seedless var.)	Sweet Gum	M	M	M	M	/	/	3-9, 14-24	60'	20'-25'	✓	✓	✓	✓	✓	✓	
Lithocarpus densiflorus	Tanbark Oak	L	/	L	L	/	/	4-7, 14-24	40'-80'	30'-50'	✓	✓	✓	✓	✓	✓	
Lyonothamnus floribundus	Catalina Ironwood	L	/	VL	L	/	/	14-17, 19-24	20'-35'	15'	✓	✓	✓	✓	✓	✓	
Lysiloma microphylla va. thornberi	Desert Fern (feather bush)	?	/	L	L	/	M	12-24, H1, H2	12'-15'	12'-15'	✓	✓	✓	✓	✓	✓	

**COUNTY OF RIVERSIDE
CALIFORNIA FRIENDLY PLANT
LIST**

Botanical	Common	Wucols Region 1	Wucols Region 2	Wucols Region 3	Wucols Region 4	Wucols Region 5	Wucols Region 6	Sunset Zones	Mature Height (Feet)	Mature Width (Feet)	Road Right-of-Way	Medians* (pending project)	Erosion Control / Slope	Fuel Mod. (pending F.D.)	MSHCP Adjacent	Water Quality (Bio) Swale	Swale Location
TREES																	
Magnolia grandiflora	Magnolia Species	M	M	M	M	/	H	4-12, 14-24, H1, H2	Varies	Varies	✓			✓			
Melaleuca linariifolia	Flax Leaf Paper Bark	L	L	L	L	/	/	9, 13-24, H1	20'-30'	20'-25'	✓		✓				
Melaleuca nesophila	Pink Melaleuca	L	L	L	L	/	/	13, 16-24, H1	15'-20'	15'-20'			✓	✓			
Melaleuca quinquinervia (M. vir. Rubifolia)	Cajeput Tree	L	L	M	M	/	M	9, 12, 13, 15-17, 20-24, H1, H2	20'-40'	15'-25'	✓		✓	✓			
Nerium oleander	Oleander (Tree Form)	L	L	L	L	M	M	8-16, 18-24, H1, H2	20'	12'	✓	✓	✓				
Olea europaea 'Swan Hill'	Fruitless Olive	VL	VL	L	L	M	M	8, 9, 11-24, H1, H2	25'-30'	25'-30'	✓		✓	✓			
Olneya tesota	Ironwood	/	/	/	/	L	L	8, 9, 11-14, 18-23	15'-30'	15'-30'	✓		✓	✓			
Phoenix canariensis	Canary Island Date Palm	L	L	L	L	M	M	8, 9, 11-24, H1, H1	60'	50'	✓						
Phoenix dactylifera	Date Palm	L	L	L	L	M	M	8, 9, 11-24, H1, H2	80'	20'-40'	✓						
Pinus attenuata	Knobcone Pine	L	L	L	L	/	/	2-10, 14-21	20'-80'	20'-25'	✓		✓	✓			
Pinus brutia (eldarica)	Calabrian Pine	L	L	L	L	M	M	6-9, 12-24	30'-80'	15'-25'	✓		✓	✓			
Pinus canariensis	Canary Island Pine	L	L	L	M	M	M	8, 9, 12-24	50'-80'	20'-35'	✓		✓	✓			
Pinus coulteri	Coulter Pine	L	L	L	L	M	/	3-10, 14-23, H1	30'-80'	20'-40'			✓	✓			
Pinus edulis	Pinyon Pine	L	L	VL	L	L	/	1-11, 14-21	10'-20'	8'-16'			✓	✓			
Pinus halepensis	Aleppo Pine	L	L	L	L	L	L	7-9, 11-24	30'-60'	20'-40'			✓	✓			
Pinus monophylla	Single Leaf Pinyon Pine	L	/	L	L	L	/	2-12, 14-21	10'-25'	10'-15'			✓	✓			
Pinus sabiniana	Gray Pine	VL	VL	VL	L	/	/	3-10, 14-21	40'-80'	30'-50'			✓	✓			
Pistacia chinensis	Chinese Pistache	L	L	M	M	M	M	4-16, 17, 18-23	30'-60'	30'-60'	✓		✓	✓			
Pithecellobium flexicaule	Texas Ebony	?	?	/	?	/	L	10 - 13	15'-30'	15'-20'	✓	✓	✓	✓			
Pittosporum phylloraeoides	Willow Pittosporum	M	M	L	L	/	M	8, 9, 12-24	12'-20'	10'-15'	✓	✓	✓	✓			
Platanus acerifolia	London Plane Tree	M	M	M	M	H	H	2-24	40'-80'	30'-40'	✓			✓	✓		Upper
Platanus racemosa	California Sycamore	M	M	M	M	H	H	4-24	30'-80'	20'-50'	✓			✓	✓		Upper
Platanus wrightii	Arizona Sycamore	M	?	M	M	H	H	8-12	80'	55'	✓			✓	✓		Upper
Podocarpus gracilior (Afrocarpus grac.)	Fern Pine	M	M	M	M	?	M	8, 9, 13-24, H1, H2	20'-60'	10'-20'	✓			✓	✓		
Podocarpus henkelii	Long Leafed Yellow Wood	M	H	M	M	/	/	8, 9, 14-24, H1, H2	30'-50'	15'-20'	✓			✓			
Podocarpus macrophyllus	Yew Pine	M	M	M	M	M	M	4-9, 12-24, H1, H2	15'-50'	6'-15'	✓			✓			
Populus fremontii	Fremont Cottonwood	M	M	M	M	H	H	1-12, 14-21	40'-60'	30'	✓			✓	✓		Upper
Prosopis alba	Argentine Mesquite	/	L	L	L	M	M	10-13, 18-24	50'	50'	✓		✓				
Prosopis chilensis	Chilean Mesquite	/	L	L	L	L	L	10-13, H1, H2	50'	50'	✓		✓				
Prosopis glandulosa	Honey Mesquite	/	L	L	L	L	L	10-13, 18-24	30'-50'	30'-50'	✓		✓				
Prosopis juliflora	Arizona Mesquite	?	?	L	L	L	L	10-13, 18-24	30'-35'	30'-35'	✓		✓				
Prosopis pubescens	Screwbean Mesquite	/	L	L	L	M	M	10-13, 18-24	30'-35'	30'-35'	✓		✓				
Prosopis velutina	Velvet Mesquite	/	L	L	L	M	M	10-13, 18-24	30'-35'	30'-35'	✓		✓				
Prunus carolina	Carolina Laurel Cherry	L	L	M	M	M	M	5-24	20'-30'	15'-25'	✓	✓	✓	✓			
Prunus cerasifera	Purple Leaf Plum	L	M	M	M	M	M	3-22	25'-35'	25'-35'	✓	✓	✓				
Prunus ilicifolia	Hollyleaf Cherry	L	L	VL	VL	/	/	5-9, 12-24	10'-25'	10'-25'	✓	✓	✓	✓			
Prunus ilicifolia lyonii	Catalina Cherry	L	L	L	L	/	/	5-9, 12-24	45'	30'	✓		✓	✓			
Punica granatum	Pomegranate	L	L	M	M	M	M	5-24, H1, H2	8'-10'	8'-10'			✓	✓			
Quercus agrifolia	Coast Live Oak	VL	VL	L	L	/	M	7-9, 14-24	20'-70'	20'-70'	✓		✓	✓	✓		
Quercus chrysolepis	Canyon Live Oak	VL	L	L	L	/	/	3-11, 14-24	20'-60'	20'-60'			✓	✓	✓		
Quercus engelmannii	Mesa Oak	/	L	L	L	/	/	7-9, 14-24	40'-50'	80'-100'			✓	✓	✓		
Quercus ilex	Holly Oak	L	L	L	L	M	M	4-24	30'-60'	30'-60'	✓		✓	✓	✓		
Quercus kelloggii	California Black Oak	L	M	/	M	/	/	6-7, 9, 14-21	30'-80'	30'-80'			✓	✓			
Quercus lobata	Valley Oak	L	L	/	M	/	/	3b-9, 11-24	70'	70'			✓	✓	✓		
Quercus suber	Cork Oak	L	L	L	L	L	L	5-16, 18-24	30'-60'	30'-60'	✓		✓	✓	✓		
Quercus virginiana	Southern Live Oak	M	M	M	M	M	M	4-24	40'-80'	80'-100'	✓		✓	✓	✓		
Quercus wislizeni	Interior Live Oak	VL	VL	VL	VL	M	/	7-9, 14-16, 18-21	30'-75'	30'-75'			✓	✓	✓		
Rhaphiolepis indica 'Majestic Beauty'	Majestic Beauty Hawthorn	L	L	M	M	M	M	8-10, 12-24, H1, H2	20'-25'	8'-10'	✓	✓	✓	✓			
Rhus lancea	African Sumac	L	L	L	L	M	M	8, 9, 12-24	20'-30'	20'-35'			✓	✓			
Robinia neomexicana*	Desert Locust	L	L	L	L	M	M	2, 3, 7-11, 14, 18-24	6'-30'	6'-30'	✓		✓	✓			
Robinia x ambigua	Locust	L	L	L	L	M	M	2-24	40'-50'	20'	✓		✓				
Sabal 'Riverside'	Riverside Palmetto	/	/	M	M	/	/	12-17, 19-24, H1, H2	20'	10'			✓	✓			
Sambucus mexicana	Mexican Elderberry	L	L	L	L	M	M	2-24, H1	10'-30'	8'-20'	✓		✓	✓	✓		Upper
Schinus molle	California Pepper Tree	VL	L	VL	L	M	M	8, 9, 12-24, H1, H2	25'-40'	25'-40'			✓	✓			
Syagrus romanzoffianum	Queen Palm	L	M	M	M	M	M	12, 13, 15-17, 19-24, H1, H2	50'	20'-25'	✓	✓			✓		
Tecoma stans	Yellow Bells (Tree Form)	/	/	L	L	L	/	12, 13, 21-24, H1, H2	25'	10'-20'			✓	✓			
Tipuana tipu	Tipu Tree	M	/	M	M	/	/	12-16, 18-24, H1, H2	25'-40'	30'-60'	✓		✓	✓			
Trachycarpus fortunei	Windmill Palm	L	M	M	M	/	M	4-24	30'	10'	✓		✓	✓			
Tristania conferta (Lophostemon conf.)	Brisbane Box	M	/	M	M	/	/	15-17, 19-24; H1, H2	30'-45'	25'	✓	✓	✓	✓			
Tristaniopsis laurina	Water Gum	M	/	M	M	/	/	15-17, 19-24; H1, H2	45'	50'	✓		✓	✓			
Ulmus parvifolia	Chinese Elm	M	M	M	M	M	M	3-24	40'-60'	50'-70'	✓		✓	✓			
Umbellularia californica	California Laurel	M	M	M	M	/	/	4-9, 14-24	20'-25'	20'-25'			✓	✓			
Vitex agnus-castus	Monk's Pepper Tree	L	L	L	M	M	M	4-24, H1, H2	8'-10'	8'-10'	✓		✓	✓			
Washingtonia filifera	California Fan Palm	L	M	L	L	M	M	8-24, H1, H2	60'	20'	✓		✓	✓			
Washingtonia robusta	Mexican Fan Palm	L	M	L	L	M	M	8-24, H1, H2	100'	10'	✓		✓	✓			

**COUNTY OF RIVERSIDE
CALIFORNIA FRIENDLY PLANT
LIST**

Botanical	Common	Wucols Region 1	Wucols Region 2	Wucols Region 3	Wucols Region 4	Wucols Region 5	Wucols Region 6	Sunset Zones	Mature Height (Feet)	Mature Width (Feet)	Road Right-of-Way	Medians (0=omit in sight lines)	Erosion Control / Slope	Fuel Mod. (pending F.D.)	MSHCP Adjacent	Water Quality (Bio) Swale	Swale Location
SHRUBS																	
Acacia craspedocarpa	Leather Leaf Acacia	? ? ? ? L L						8, 9, 12-24	8'-10'	5'-10'							
Acanthus mollis	Grecian Urn Plant	M M M M / M						5-24	4'-5'	4'-5'							
Adenostoma fasciculatum	Chamise	VL VL VL VL / /						6-9, 14-24	5'-12'	5'-12'	✓	0	✓		✓		
Aloysia triphylla	Lemon Verbena	L L L L L L						9, 10, 12-21	6'	6'	✓	0	✓		✓		
Alyogyne hakeifolia**	Red Centered Hibiscus	/ / L L / /						13-17, 20-24, H1, H2	5'-8'	5'-8'	✓	0	✓		✓		
Alyogyne huegelii	Blue Hibiscus	L L L L / L						13-17, 20-24, H1, H2	5'-8'	5'-8'	✓	0	✓		✓		
Ambrosia deltoidea**	Bursage	? ? ? ? L L						8-16, 18-24, H1	1'-2'	1'-3'	✓	0	✓		✓		
Ambrosia dumosa**	White Bursage	? ? / / L L						8-16, 18-24, H1	2'-3'	2'-3'	✓	0	✓		✓		
Anisacanthus spp.	Desert Honeysuckle	? ? L L L L						8-13, 18-23, H1, H2	4'	4'	✓	0	✓		✓		
Arctostaphylos densiflora	Sonoma Manzanita	VL L L L / /						7-9, 14-21	5'-6'	7'	✓	0	✓	✓	✓		
Arctostaphylos edmundsii	Little Sur Manzanita	VL L L L / /						6-9, 14-24	3'	12'	✓	0	✓	✓	✓		
Artemisia californica	California Sagebrush	VL L L L L L						7-9, 14-24	1 1/2'-5'	4'-7'	✓	0	✓	✓	✓		
Atriplex hymenelytra	Desert Holly	VL VL VL VL L VL						3, 7-14, 18, 19	1'-3'	3'	✓	0	✓			✓	Upper
Baccharis pilularis	Coyote Brush	L L L L / /						5-11, 14-24	8'-24"	6'	✓	0	✓		✓		
Baccharis sarothroides	Desert Broom	VL L VL L L L						7-24	5'	5'	✓	0	✓		✓		
Berberis thunbergii	Japanese Barberry	L L L L L M						A3, 2b-24	4'-6'	4'-6'	✓	0	✓		✓	✓	Upper
Bougainvillea spp.	Bougainvillea	L L L L / M						5, 6, 12-17, 19, 21-24, H1, H2	3'-6'	3'-6'	✓	0	✓		✓		
Buddleia marrubiifolia	Wooly Butterfly Bush	? L ? L / L						10-13, 18-24	5'	5'	✓	0	✓		✓		
Buxus microphylla japonica	Japanese Boxwood	M M M M M M						3b-24	4'-6'	4'-6'	✓	0	✓		✓		
Buxus sempervirens	Common Boxwood	M M M / M M						3b-6, 15-17	15'-20'	15'-20'	✓	0	✓		✓		
Caesalpinia gilliesii	Desert Bird of Paradise	L L L L M M						8-16, 18-24	10'	8'	✓	0	✓		✓		
Caesalpinia mexicana	Mexican Poinciana	? / ? L / L						12-16, 18-24	10'-12'	6'-8'	✓	0	✓		✓		
Caesalpinia pulcherrima	Dwarf Poinciana	L L M M / M						12-16, 18-23, H1, H2	10'	10'	✓	0	✓		✓		
Calliandra californica	Baja Fairy Duster	/ / VL L / L						10-24	5'	5'-6'	✓	0	✓	✓	✓		
Calliandra eriophylla	Fairy Duster	/ / VL VL / L						10-24	3'	4'-5'	✓	0	✓	✓	✓		
Callistemon viminalis 'Little John'	Weeping Bottlebrush	L L M M / M						6-9, 12-24	3'	3'	✓	0	✓				
Calocephalus brownii	Cushion Bush	L / L L / L						16, 17, 19, 21-24	3'	3'	✓	0	✓		✓		
Calycanthus occidentalis	Spice Bush	L L M M / /						4-9, 14-24	4'-12'	4'-12'	✓	0	✓		✓	✓	Upper
Carissa macrocarpa 'Boxwood Beauty'	Boxwood Beauty Natal Plum	L / M M / M						22-24, H2	2'	2'	✓	0	✓		✓		
Carissa macrocarpa 'Tuttle'	Tuttle Natal Plum	L / M M / M						22-24, H2	2'-3'	3'-5'	✓	0	✓		✓		
Carissa macrocarpa 'Variegata'	Variegated Natal Plum	L / M M / M						22-24, H2	2'-4'	3'-6'	✓	0	✓		✓		
Ceanothus spp.	California Wild Lilac	L L L L L /						5-9, 14-24	3'-15'	3'-15'	✓	0	✓	✓	✓	✓	Upper
Cercocarpus betuloides	Mountain Ironwood	VL VL VL VL VL /						3, 5, 7-10, 13-24	5'-12'	5'-12'	✓	0	✓		✓		
Cercocarpus minutiflorus**	San Diego Mountain Mahogany	L / VL VL / /						3, 5, 7-10, 13-24	5'-12'	5'-12'	✓	0	✓		✓		
Chamaelucium uncinatum	Geraldton Wax Flower	L L L M / M						8, 9, 12-24	6'-8'	6'-8'	✓	0	✓		✓		
Cistus spp.	Rockrose	L L L L L L						6-9, 14-24	3'-6'	3'-6'	✓	0	✓				
Cocculus laurifolius	Cocculus	M M M M / M						8, 9, 12-24	25'	25'	✓	0	✓		✓		
Convolvulus cneorum	Bush Morning Glory	L L L L L L						7-9, 12-24	2'-4'	2'-4'	✓	0	✓		✓		
Convolvulus mauritanicus (C. sasbatus)	Ground Morning Glory	L L L L M M						4-9, 12-24	1'-2'	3'	✓	0	✓	✓	✓		
Cordia boissieri	Texas Olive	? ? ? L L L						8-24	12'	8'-10'	✓	0	✓		✓		
Cordia parvifolia	Little Leaf Cordia	? ? L L / L						8-14, 18-24	12'	8'-10'	✓	0	✓		✓		
Correa spp.	Australian Fuchsia	L L L L / M						14-24	2'-5'	2'-5'	✓	0	✓		✓		
Cotoneaster adpressus praecox	Creeping Cotoneaster	L L L M M M						2-24	6'	6'	✓	0	✓		✓	✓	Upper
Cotoneaster apiculatus	Cranberry Cotoneaster	L L L M M M						A3, 2-24	3'	6'	✓	0	✓		✓	✓	Upper
Cotoneaster buxifolius**	Cotoneaster Buxifolius	L L L M M M						2-24	3'	6'	✓	0	✓		✓	✓	Upper
Cotoneaster congestus (C. micro. gla.)	Pyrenees cotoneaster	L L L M M M						3b-24	3'	3'	✓	0	✓		✓	✓	Upper
Cotoneaster salicifolius	Willowleaf cotoneaster	L L L M M M						3b-24	15'-18'	15'-18'	✓	0	✓		✓	✓	Upper
Crassula spp.	Crassula	L L L L / L						8, 9, 12-24	1'-4'	1'-4'							
Cuphea llavea	Bat-Faced Cuphea	M ? ? ? / /						16-24, H1, H2	2'-3'	3'	✓	0	✓		✓		
Dalea bicolor	Dalea	/ / L L / M						10-13	8'	5'-6'	✓	0	✓		✓		
Dendromecon harfordii	Island Bush Poppy	VL L VL L / /						7-9, 14-24	8'-20'	8'-20'	✓	0	✓		✓		
Dendromecon rigida	Bush Poppy	VL L VL L / /						4-12, 14-24	4'-8'	4'-6'	✓	0	✓		✓		
Dodonaea viscosa	Hopbush	L L L M / M						7-24, H1, H2	10'-15'	10'-15'	✓	0	✓		✓		
Dodonaea viscosa 'Purpurea'	Purple Hopbush	L L L M / M						7-24, H1, H2	10'-15'	10'-15'	✓	0	✓		✓		
Echium fastuosum	Pride of Madeira	L L L L / M						14-24	5'-6'	6'-10'	✓	0	✓		✓		
Elaeagnus pungens	Silverberry	L L L L L L						4-24	10'-15'	10'-15'	✓	0	✓		✓		
Encelia californica	Brown Eyed Susan	/ / VL L / L						7-16, 18-24	3'	4'	✓	0	✓		✓		
Encelia farinosa	Brittlebush	/ / VL L L L						8-16, 18-24, H1	3'	4'	✓	0	✓		✓		
Eriogonum fasciculatum	California Buckwheat	L L VL L L L						7-9, 12-24	1'-3'	4'	✓	0	✓		✓		
Escallonia 'Compakta'	Compact Escallonia	M M M M / M						4-9, 14-24	3'	3'	✓	0	✓		✓		
Escallonia 'fradesii'	Escallonia	M M M M / M						4-9, 14-24	5'-6'	5'-6'	✓	0	✓		✓		
Euonymus japonicus spp.	Euonymous	L L M M M M						4-20, H1	8'-10'	6'	✓	0	✓		✓		
Euryops pectinatus	Shrub Daisy	L L L L M M						8, 9, 12-24, H1, H2	3'-6'	3'-6'	✓	0	✓		✓		
Fallugia paradoxa	Apache plume	/ ? VL VL L L						2-23	4'-6'	5'	✓	0	✓		✓		
Feijoa sellowiana (Acca sellowiana)	Pineapple Guava	L L L M / M						6-9, 12-24, H1, H2	10'-25'	10'-25'	✓	0	✓		✓		
Forestiera neomexicana	Desert Olive	? ? L L L L						1-3, 7-24	12'-18'	12'	✓	0	✓		✓		
Fremontodendron spp.	Flannel Bush	VL VL VL L / /						4-24	20'	12'	✓	0	✓		✓		

**COUNTY OF RIVERSIDE
CALIFORNIA FRIENDLY PLANT
LIST**

Botanical	Common	Wucols Region 1	Wucols Region 2	Wucols Region 3	Wucols Region 4	Wucols Region 5	Wucols Region 6	Sunset Zones	Mature Height (Feet)	Mature Width (Feet)	Road Right-of-Way	Medians (0=omit in sight lines)	Erosion Control / Slope	Fuel Mod. (pending F.D.)	MSHCP Adjacent	Water Quality (Bio) Swale	Swale Location
SHRUBS																	
Galvezia speciosa	Island Bush Snapdragon	L	L	VL	L	?	M	14-24	3'	5'	✓	0	✓	✓	✓		
Garrya elliptica	Coast Silk Tassel	L	L	L	M	/	/	4-9, 14-24	10'-20'	10'-20'	✓	0	✓	✓	✓		
Grevillia 'Noellii'	Noel's Grevellia	L	L	L	L	/	M	8, 9, 12-24	4'	4'-5'	✓	0	✓	✓	✓		
Grewia occidentalis	Lavender Star Flower	M	M	M	M	/	M	8, 9, 12-24, H1, H2	6'-10'	6'-10'	✓	0	✓	✓	✓		
Hakea laurina	Sea Urchin Tree	L	L	L	L	/	/	9, 12-17, 19-24	10'-25'	9'-30'	✓	0	✓	✓	✓		
Hakea suaveolens	Sweet Scented Hakea	L	L	L	L	/	/	9, 12-17, 19-24	10'-20'	10'-20'	✓	0	✓	✓	✓		
Hebe 'Veronica Lake'	Veronica Lake Hebe	M	M	M	M	/	/	14-24	3'	3'	✓	0	✓	✓	✓		
Heteromeles arbutifolia	Toyon	VL	VL	L	L	/	/	5-9, 14-24	6'-10'	6'-10'	✓	0	✓	✓	✓		
Heuchera sanguinea	Coral Bells	M	M	M	M	M	M	A1-A3, 1-11, 14-24	1'-2'	1'-2'	✓	0	✓	✓	✓		
Hibiscus rosa-sinensis	Hibiscus	M	M	M	M	/	H	9, 12-16, 19-24, H1, H2	8'-15'	5'-8'	✓	0	✓	✓	✓		
Ilex cornuta 'Burfordii'	Burford Holly	L	M	M	M	M	M	3-24	15'	10'	✓	0	✓	✓	✓		
Ilex vomitoria	Yaupon	L	M	L	L	M	M	3-9, 11-24, H1, H2	15'-20'	10'-15'	✓	0	✓	✓	✓		
Juniperus chinensis X pfitzeriana	Pfitzer Juniper	L	L	L	M	M	M	A2, A3, 1-24, H1, H2	5'-6'	10'-12'	✓	0	✓	✓	✓		
Juniperus chinensis 'Torulosa'	Hollywood Juniper	L	L	L	M	M	M	1-24, H1, H2	15'	10'	✓	0	✓	✓	✓		
Justicia californica	Chuparosa	M	/	VL	L	L	M	10-14, 18-24	6'	6'	✓	0	✓	✓	✓		
Justicia spicigera	Mexican Honeysuckle	/	?	L	L	/	L	12-24	3'	4'	✓	0	✓	✓	✓		
Lantana camara	Bush Lantana	L	L	L	L	/	M	8-10, 12-24, H1, H2	6'	6'	✓	0	✓	✓	✓		
Lantana montevidensis (gold cultivars)	Trailing Lantana	L	L	L	L	/	M	8-10, 12-24, H1, H2	2'	6'	✓	0	✓	✓	✓		
Larrea tridentata	Creosote Bush	VL	VL	VL	L	L	L	7-14, 18-21	8'	8'	✓	0	✓	✓	✓		
Lavandula angustifolia (L. officinalis)	English Lavender	L	L	L	L	M	M	2-24	2'	2'	✓	0	✓	✓	✓		
Lavandula dentata	French Lavender	L	L	L	L	M	M	8, 9, 12-24	4'	6'	✓	0	✓	✓	✓		
Lavandula X intermedia	Lavandin, Hedge Lavender	L	L	L	L	M	M	4-24	3'	2'	✓	0	✓	✓	✓		
Lavandula latifolia (L. spika)	Spike Lavender	L	L	L	L	M	M	4-24	3'	2'	✓	0	✓	✓	✓		
Lavandula pinnata (L. multifida)	Fernleaf lavender	L	L	L	L	M	M	16-24	1 1/2'	3'	✓	0	✓	✓	✓		
Lavandula stoechas	Spanish Lavender	L	L	L	L	M	M	4-24	3'	3'	✓	0	✓	✓	✓		
Lavatera assurgentiflora	Tree Mallow	L	M	L	L	/	M	14-24	12'	12'	✓	0	✓	✓	✓		
Lavatera bicolor (L. maritima)	California Tree Mallow	L	L	M	M	?	?	6-9, 12-24	8'	4'	✓	0	✓	✓	✓		
Leonotis leonurus	Lion's Tail	L	L	L	L	M	M	8-24, H1, H2	6'	6'	✓	0	✓	✓	✓		
Leptospermum laevigatum	Australian Tea Tree	L	L	L	L	/	/	14-24, H1, H2	30'	30'	✓	0	✓	✓	✓		
Leptospermum scoparium spp.	New Zealand Tea Tree	M	M	M	M	/	/	14-24, H1, H2	4'-12'	4'-8'	✓	0	✓	✓	✓		
Leucophyllum candidum	Cenizo, Violet Silverleaf	L	L	L	L	L	L	7-24	4'	4'	✓	0	✓	✓	✓		
Leucophyllum frutescens	Texas Sage	L	L	L	L	L	L	7-24, H1, H2	8'	8'	✓	0	✓	✓	✓		
Leucophyllum laevigatum	Chihuahuan Rain Sage	L	L	L	L	L	L	7-24	4'	5'	✓	0	✓	✓	✓		
Leucophyllum langmaniae	Langmanie's Sage, Cinnamon Sage	L	L	L	L	L	L	7-24	5'	5'	✓	0	✓	✓	✓		
Leucophyllum prinosum	Sierra Bouquet	L	L	L	L	L	L	7-24	6'	6'	✓	0	✓	✓	✓		
Leucophyllum zygophyllum	Blue Rain Sage	L	L	L	L	L	L	7-24	3'	3'	✓	0	✓	✓	✓		
Ligustrum japonicum 'Texanum'	Texas Privet	M	M	M	M	M	M	4-24, H1, H2	12'	8'	✓	0	✓	✓	✓		
Lobelia laxiflora	Mexican Bush Lobelia	?	?	VL	VL	?	M	7-9, 12-24	3'	6'	✓	0	✓	✓	✓		
Lonicera nitida	Box Honeysuckle	L	M	/	M	/	/	4-9, 14-24, H1, H2	11'	10'	✓	0	✓	✓	✓	✓	Upper
Lycium fremontii**	Wolfberry	/	L	L	L	L	L	8-16, 18-24, H1	9'	9'	✓	0	✓	✓	✓		
Mahonia aquifolium	Oregon Grape	M	M	M	M	M	M	2-12, 14-24	6'	5'	✓	0	✓	✓	✓		
Mahonia 'Golden Abundance'	Golden Abundance Mahonia	L	L	L	M	M	M	2b-12, 14-24	6'	5'	✓	0	✓	✓	✓	✓	Upper
Mahonia nevinii	Nevin Mahonia	VL	L	L	L	M	M	7-24	6'	6'	✓	0	✓	✓	✓	✓	Upper
Malacothamnus fasciculatus**	Mesa Bushmallow	VL	L	VL	L	/	/	7-24	4'-6'	4'-6'	✓	0	✓	✓	✓	✓	Upper
Melaleuca nesophila	Pink Melaleuca	L	L	L	L	/	/	13, 16-24, H1	20'	20'	✓	0	✓	✓	✓		
Mimulus aurantiacus	Sticky Monkey Flower	L	L	L	L	/	/	7-9, 14-24	4 1/2'	4 1/2'	✓	0	✓	✓	✓		
Myrica californica	Pacific Wax Myrtle	L	L	L	M	/	/	4-9, 14-24	30'	30'	✓	0	✓	✓	✓	✓	Upper
Myrsine africana	African Boxwood	L	L	L	M	/	/	8, 9, 14-24	8'	6'	✓	0	✓	✓	✓		
Myrtus communis	Common Myrtle	L	L	L	M	M	M	8-24, H1, H2	6'	5'	✓	0	✓	✓	✓		
Myrtus communis 'Boetica'	Twisted Myrtle	L	L	L	M	M	M	8-24, H1, H2	5'-15'	4'-20'	✓	0	✓	✓	✓		
Myrtus communis 'Compacta'	Compact Myrtle	L	L	L	M	M	M	8-24, H1, H2	4'	4'	✓	0	✓	✓	✓		
Nandina domestica species	Heavenly Bamboo	L	L	L	M	M	M	4-24, H1, H2	8'	4'	✓	0	✓	✓	✓		
Nerium oleander	Oleander	L	L	L	L	M	M	8-16, 18-24, H1, H2	20'	12'	✓	0	✓	✓	✓		
Nerium oleander 'Mrs. Roeding'	Mrs. Roeding Oleander	L	L	L	L	M	M	8-16, 18-24, H1, H2	6'	4'	✓	0	✓	✓	✓		
Nerium oleander 'Petite Pink'	Petite Pink Oleander	L	L	L	L	M	M	8-16, 18-24, H1, H2	6'	6'	✓	0	✓	✓	✓		
Philadelphus mexicanus	Evergreen Mock Orange	L	M	M	M	M	M	8, 9, 14-24	6'	6'	✓	0	✓	✓	✓		
Phlomis fruticosa	Jerusalem Sage	L	L	L	L	M	M	3b-24	4'	4'	✓	0	✓	✓	✓		
Phlomis italica	Phlomis italica	L	M	L	L	?	?	5-24	4'	6'	✓	0	✓	✓	✓		
Phlomis tuberosa	Phlomis	M	?	L	L	?	?	A1-A3, 1-24	3'-6'	3'-6'	✓	0	✓	✓	✓		
Photinia serratifolia (P. serrulata)	Chinese Photinia	M	M	/	M	M	M	4-16, 18-22	30'	30'	✓	0	✓	✓	✓		
Photinia x fraseri	Fraser's Photinia	M	M	M	M	M	M	3b, 4-24	15'	15'	✓	0	✓	✓	✓		
Pittosporum tobira and hybrids	Tobira / Japanese Mock Orange	L	M	M	M	M	M	8-24, H1, H2	15'	15'	✓	0	✓	✓	✓		
Plecostachys serpyllifolia (Helichrysum)	Straw Flower	L	L	L	L	M	M	8, 9, 14-24	1 1/2'	3'	✓	0	✓	✓	✓		
Plumbago auriculata (campense)	Cape Plumbago	L	M	M	M	/	M	8, 9, 12-24, H1, H2	6'	10'	✓	0	✓	✓	✓		
Polygala dalmasiana	Sweet Pea Shrub	L	M	M	M	/	/	8, 9, 12-24	5'	5'	✓	0	✓	✓	✓		
Potentilla gracilis (P. fruticosa)	Cinquefoil	M	M	/	/	/	/	A1-A3, 1-11, 14-21	2'-4'	2'-4'	✓	0	✓	✓	✓	✓	Lower
Prunus caroliniana 'Bright 'n Tight'	Dwarf Caroliana Laurel Cherry	L	L	M	M	M	M	5-24	10'	8'	✓	0	✓	✓	✓		

**COUNTY OF RIVERSIDE
CALIFORNIA FRIENDLY PLANT
LIST**

Botanical	Common	Wucols Region 1	Wucols Region 2	Wucols Region 3	Wucols Region 4	Wucols Region 5	Wucols Region 6	Sunset Zones	Mature Height (Feet)	Mature Width (Feet)	Road Right-of-Way	Medians (0=omit in sight lines)	Erosion Control / Slope	Fuel Mod. (pending F.D.)	MSHCP Adjacent	Water Quality (Bio) Swale	Swale Location
SHRUBS																	
<i>Prunus caroliniana</i> 'Compacta'	Dwarf Carolina Laurel Cherry	L	L	M	M	M	M	5-24	10'	8'	✓	0	✓	✓	✓		
<i>Prunus ilicifolia</i>	Hollyleaf Cherry	L	L	VL	VL	/	/	5-9, 12-24	10'-25'	10'-25'	✓	0	✓	✓	✓		
<i>Prunus lyonii</i> **	Catalina Cherry	L	L	L	L	/	/	5-9, 12-24	15'-20'	15'-20'	✓	0	✓	✓	✓		
<i>Punica granatum</i> 'Nana'	Dwarf Pomegranate	L	L	M	M	M	M	5-24, H1, H2	3'	6'	✓	0	✓	✓	✓		
<i>Pyracantha</i> species	Firethorn	L	L	L	M	M	M	4-24	4'-10'	4'-10'	✓	0	✓	✓	✓		
<i>Rhamnus californica</i>	Coffeeberry	L	L	VL	L	/	M	3a-10, 14-24, H1, H2	15'	8'	✓	0	✓	✓	✓	✓	Upper
<i>Rhamnus crocea</i>	Redberry	L	L	VL	L	/	M	7, 14-24	3'	6'	✓	0	✓	✓	✓	✓	Upper
<i>Rhamnus croceus</i> spp. <i>ilicifolia</i>	Hollyleaf Redberry	L	L	VL	L	/	M	7-10, 14-23	15'	15'	✓	0	✓	✓	✓	✓	Upper
<i>Rhaphirolepis indica</i> species	Indian Hawthorn	L	L	M	M	M	M	8-10, 12-24, H1, H2	5'	6'	✓	0	✓	✓	✓		
<i>Rhus integrifolia</i>	Lemonade Berry	L	L	VL	L	/	/	8, 9, 14-17, 19-24	10'	10'	✓	0	✓	✓	✓	✓	Upper
<i>Rhus laurina</i>	Laurel Sumac	VL	L	VL	L	/	/	8, 9, 14-17, 19-25	15'	15'	✓	0	✓	✓	✓		
<i>Rhus ovata</i>	Sugar Bush	L	L	VL	L	M	M	9-12, 14-24	10'	10'	✓	0	✓	✓	✓		
<i>Rhus trilobata</i>	Squawbush	L	L	L	L	L	/	1-12, 14-21	5'	5'	✓	0	✓	✓	✓		
<i>Ribes aureum</i>	Golden Currant	L	L	L	L	L	/	A2, A3, 1-12, 14-23	6'	6'	✓	0	✓	✓	✓	✓	Upper
<i>Ribes indecorum</i>	White Flowering Currant	L	L	L	L	L	/	7-9, 11, 14-24	9'	6'	✓	0	✓	✓	✓		
<i>Ribes malvaceum</i>	Chaparral Currant	VL	VL	VL	L	/	/	6-9, 14-24	5'	5'	✓	0	✓	✓	✓		
<i>Ribes sanguineum</i>	Red Flowering Currant	L	L	L	M	/	/	A3, 4-9, 14-24	12'	12'	✓	0	✓	✓	✓	✓	Upper
<i>Ribes speciosum</i>	Fuchsia Flowering Gooseberry	L	L	L	M	/	/	7-9, 14-24	8'	10'	✓	0	✓	✓	✓		
<i>Romneya coulteri</i>	Matilija Poppy	VL	VL	VL	L	/	/	4-12, 14-24, H1	6'-8'	6'-8'	✓	0	✓	✓	✓		
<i>Rosa banksiae</i>	Lady Bank's Rose	L	L	M	M	M	M	4-24, H1, H2	12'-20'	12'-20'	✓	0	✓	✓	✓		
<i>Rosa californica</i> **	California Wild Rose	L	L	L	L	/	/	4-24	3'-9'	3'-9'	✓	0	✓	✓	✓	✓	Upper
<i>Rosmarinus officinalis</i> 'Tuscan Blue'	Tuscan Blue Rosemary	L	L	L	L	M	M	4-24, H1, H2	7'	3'	✓	0	✓	✓	✓		
<i>Rubus ursinus</i> **	Blackberry	L	L	M	?	?	?	4-6, 14-17	10'-20'	10'-20'	✓	0	✓	✓	✓	✓	Lower
<i>Ruellia brittoniana</i>	Mexican Barrio Ruellia	M	?	L	?	M	L	8, 9, 12-24, H1, H2	3'	1 1/2'	✓	0	✓	✓	✓		
<i>Ruellia brittoniana</i> 'Katie'	Dwarf Mexican Barrio Ruellia	M	?	L	?	M	L	8, 9, 12-24, H1, H2	1'		✓	0	✓	✓	✓		
<i>Ruellia californica</i>	Sonoran Desert Ruellia	?	?	VL	VL	/	L	12, 13	4 1/2'	4 1/2'	✓	0	✓	✓	✓		
<i>Russelia equisetiformis</i> *	Coral Fountain	/	L	M	M	M	M	14, 19-24, H1, H2	5'	5'	✓	0	✓	✓	✓		
<i>Russelia polyedra</i> *	Wild Coral Fountain	/	L	M	M	M	M	14, 19-24, H1, H2	5'	5'	✓	0	✓	✓	✓		
<i>Salvia apiana</i>	White Sage	VL	L	VL	VL	L	L	7-9, 11, 13-24	5'	5'	✓	0	✓	✓	✓		
<i>Salvia argentea</i>	Silver Sage	L	L	L	L	?	?	1-24	10'	2'	✓	0	✓	✓	✓		
<i>Salvia clevelandii</i> & hybrids	Salvia	L	L	VL	L	L	L	8, 9, 12-24	5'	8'	✓	0	✓	✓	✓		
<i>Salvia greggii</i> & hybrids	Autumn Sage	L	L	L	L	M	M	8-24	4'	4'	✓	0	✓	✓	✓		
<i>Salvia leucantha</i>	Mexican Bush Sage	L	L	L	L	/	M	12-24, H1, H2	4'	6'	✓	0	✓	✓	✓		
<i>Salvia leucophylla</i>	Purple Sage	L	/	L	L	/	M	8, 9, 14-17, 19-24	5'	5'	✓	0	✓	✓	✓		
<i>Salvia mellifera</i>	Black Sage	L	L	L	L	/	M	7-9, 14-24	6'	5'	✓	0	✓	✓	✓		
<i>Sambucus mexicana</i>	Mexican Elderberry	L	L	L	L	M	M	2-24, H1	30'	20'	✓	0	✓	✓	✓	✓	Upper
<i>Santolina chamaecyparissus</i> (S. <i>incana</i>)	Lavender Cotton	L	L	L	L	L	L	2-24, H1, H2	2'	3'	✓	0	✓	✓	✓		
<i>Santolina rosmarinifolia</i> (S. <i>virens</i>)	NCN	L	L	L	L	L	L	3-9, 14-24	2'	3'	✓	0	✓	✓	✓		
<i>Sarcococca ruscifolia</i>	Fragrant Sweet Box	L	M	M	M	/	/	4-9, 14-24	6'	7'	✓	0	✓	✓	✓		
<i>Senna artemesioides</i> (Cassia art.)	Feathery Cassia/Senna	L	L	L	L	L	L	8, 9, 12-16, 18-23	5'	5'	✓	0	✓	✓	✓		
<i>Senna nemophila</i>	Desert Cassia	/	?	L	L	L	L	12-24	5'	5'	✓	0	✓	✓	✓		
<i>Senna phyllodenia</i> (Cassia <i>phyllodenia</i>)	Silver Senna/Cassia	?	?	L	L	L	L	12-24	6'	6'	✓	0	✓	✓	✓		
<i>Senna spectabilis</i> (Cassia <i>excelsa</i>)**	Senna/Cassia <i>spectabilis</i>	?	?	L	L	?	?	12-24	6'	6'	✓	0	✓	✓	✓		
<i>Senna sturtii</i> (Cassia <i>sturtii</i>)	Sturt's Cassia/Senna	/	/	L	L	L	L	12-24	6'	4'	✓	0	✓	✓	✓		
<i>Shepherdia argentea</i>	Silver Buffalo Berry	L	?	VL	VL	?	?	1-3, 7, 10	12'	12'	✓	0	✓	✓	✓		
<i>Simmondsia chinensis</i>	Jojoba	VL	VL	VL	VL	L	L	7-24	6'	6'	✓	0	✓	✓	✓		
<i>Solanum rantonnetii</i> (Lycianthus rant.)	Blue Potato Bush	M	M	M	M	/	M	12, 13, 15-24, H1, H2	8'-12'	6'-10'	✓	0	✓	✓	✓		Upper
<i>Solanum xanthii</i>	Purple Nightshade	L	L	L	L	/	L	7-9, 11, 14-24	3'	3'	✓	0	✓	✓	✓		
<i>Sollya heterophylla</i>	Australian Bluebell Creeper	L	L	L	L	/	/	8, 9, 14-24, H1, H2	3'	5'	✓	0	✓	✓	✓		
<i>Sophora arizonica</i>	Arizona Sophora	L	L	L	L	M	M	10-13	10'	10'	✓	0	✓	✓	✓		
<i>Sophora secundiflora</i>	Texas Mountain Laurel	L	L	L	L	M	M	8-16, 18-24	25'	15'	✓	0	✓	✓	✓		
<i>Sphaeralcea ambigua</i>	Desert Mallow	L	L	L	L	/	L	3, 7-24	4'	3'	✓	0	✓	✓	✓		
<i>Spiraea douglasii</i>	Western Spiraea	M	M	M	M	M	M	1-9, 14-21	6'	6'	✓	0	✓	✓	✓	✓	Upper
<i>Spiraea japonica</i>	Spiraea	M	M	M	M	M	M	A2, A3, 2-10, 14-21	6'	6'	✓	0	✓	✓	✓	✓	Upper
<i>Spiraea x japonica</i> 'bumalda'	Bumalda Spiraea	M	M	M	M	M	M	A2, A3, 2-10, 14-21	3'	3'	✓	0	✓	✓	✓	✓	Upper
<i>Symphoricarpos albus</i>	Snow Berry	L	L	L	L	?	/	A3, 1-11, 14-21	2'-6'	2'-6'	✓	0	✓	✓	✓		
<i>Tagetes lemmonii</i>	Mountain Marigold	L	L	L	L	M	M	8-10, 12-24, H1	6'	6'	✓	0	✓	✓	✓		
<i>Tecoma alata</i> *	Orange Bells	M	M	L	L	/	M	12, 13, 21-24	8'	5'	✓	0	✓	✓	✓		
<i>Tecoma garrocha</i> *	Argentine Tecoma	M	M	L	L	/	M	12, 13, 21-24	5'	5'	✓	0	✓	✓	✓		
<i>Tecoma stans</i> var. <i>angustata</i> *	Hardy Yellow Trumpet Flower	M	M	L	L	/	M	12, 13, 21-24, H1, H2	10'	8'	✓	0	✓	✓	✓		
<i>Tecomaria capensis</i>	Cape Honeysuckle	M	M	M	M	/	M	12, 13, 20-24, H1, H2	8'	5'	✓	0	✓	✓	✓		
<i>Teucrium chamaedrys</i>	Germander	L	L	L	L	M	M	2-24	1'	2'	✓	0	✓	✓	✓		
<i>Teucrium fruticans</i>	Bush Germander	L	L	L	L	/	M	4-24	8'	8'	✓	0	✓	✓	✓		
<i>Teucrium marum</i>	Cat Thyme	L	L	L	L	?	?	3-9, 14-24	1 1/2'	1 1/2'	✓	0	✓	✓	✓		
<i>Vauquelinia californica</i>	Arizona Rosewood	L	?	/	/	M	M	10-13	20'	15'	✓	0	✓	✓	✓		
<i>Vauquelinia corymbosa angustifolia</i> *	Chihuahuan Rosewood	L	?	/	/	M	M	10-13	20'	15'	✓	0	✓	✓	✓		

**COUNTY OF RIVERSIDE
CALIFORNIA FRIENDLY PLANT
LIST**

Botanical	Common	Wucols Region 1	Wucols Region 2	Wucols Region 3	Wucols Region 4	Wucols Region 5	Wucols Region 6	Sunset Zones	Mature Height (Feet)	Mature Width (Feet)	Road Right-of-Way	Medians (0=omit in sight lines)	Erosion Control / Slope	Fuel Mod. (pending F.D.)	MSHCP Adjacent	Water Quality (Bio) Swale	Swale Location
SHRUBS																	
Viburnum japonicum	Viburnum	M	M	M	M	M	/	5-10, 12, 14-24	15'	12'	✓	✓	✓	✓	✓		
Viburnum suspensum	Sandankwa Viburnum	M	M	M	M	M	M	12-24	10'	10'	✓	✓	✓	✓	✓		
Viguiera deltoidea*	Goldeneye	/	/	VL	L	L	L	10-24	3'	3'	✓	✓	✓	✓	✓		
Westringia fruticosa (rosmariniformis)	Coast Rosemary	L	L	L	L	/	M	8, 9, 14-24	3'	3'	✓	✓	✓	✓	✓		
Westringia longifolia	Coast Rosemary	L	?	L	?	/	M	8, 9, 14-24	3'	2'	✓	✓	✓	✓	✓		
Xylosma congestum	Shiny Xylosma	L	L	M	M	M	M	8-24	10'	10'	✓	✓	✓	✓	✓		
ACCENTS / GRASSES																	
Agapanthus species	Lily of the Nile	M	M	M	M	/	M	6-9, 12-24, H-1, H-2	1 1/2'-5'	1'-2'	✓	0	✓	✓	✓		
Agave americana	Century Plant	L	L	L	L	/	L	10, 12-24, H1, H2	10'	10'	✓	✓	✓	✓	✓		
Agave attenuata	Nova Agave	L	L	L	L	/	L	13, 20-24, H1, H2	5'	5'	✓	0	✓	✓	✓		
Agave bovicornuta**	Cowshorn Agave	L	L	L	L	/	L	10, 12-24, H1, H2	3'	3'	✓	0	✓	✓	✓		
Agave bracteosa	Spider Squid Agave	L	L	L	L	/	L	7-9, 12-24	2'-2 1/2'	2'-2 1/2'	✓	✓	✓	✓	✓		
Agave deserti**	Desert Agave	L	L	L	L	/	L	10, 12-24, H1, H2	18"-20"	18"-20"	✓	✓	✓	✓	✓		
Agave desmettiana	Desmettiana Agave	L	L	L	L	/	L	13, 20-24	2'	2'	✓	✓	✓	✓	✓		
Agave geminiflora	Twin Flowered Agave	L	L	L	L	/	L	13, 24-24, H1	3'	3'	✓	0	✓	✓	✓		
Agave schidigera**	Durango Delight	L	L	L	L	/	L	10, 12-24, H1, H2	1'	1'	✓	✓	✓	✓	✓		
Agave victoriae-reginae	Queen Victoria Agave	L	L	L	L	/	L	10, 12, 13, 15-17, 21-24	8"	8"	✓	✓	✓	✓	✓		
Agave vilmoriana	Octopus Agave	L	L	L	L	/	L	12-24	3'-4'	3'-4'	✓	0	✓	✓	✓		
Agave weberi	Weber Agave	L	L	L	L	/	L	8, 9, 12-24	6'	6'	✓	0	✓	✓	✓		
Aleopecurus pratensis**	Yellow Foxtail Grass	?	?	M	?	?	?	7-9, 14-24	2'	2'	✓	✓	✓	✓	✓		Lower
Aloe species	Aloe	L	L	L	L	/	L	8, 9, 12-24	1'-3'	1'-3'	✓	✓	✓	✓	✓		
Anigozanthos cultivars (A. flavidus)	Kangaroo Paw	L	L	L	L	/	M	15-24	5'	2'-3'	✓	0	✓	✓	✓		
Asclepias subulata	Desert Milkweed	L	L	L	L	L	L	1-24	3'-6'	2'-3'	✓	0	✓	✓	✓		
Bouteloua gracilis	Blue Grama Grass	L	L	?	?	M	?	1-3, 7-11, 14, 18-21	1 1/2'-2'	1'	✓	✓	✓	✓	✓		
Calamagrostis acutiflora	Feather Reed Grass	L	?	M	M	?	?	2b-24	2'-3'	2'-3'	✓	0	✓	✓	✓		Lower
Carex buchanani	Leatherleaf Sedge	M	M	M	M	/	M	2b-9, 14-24	3'	2.5'	✓	0	✓	✓	✓		
Carex conica	Snowline Sedge	M	M	M	M	/	M	3-9, 14-24	2'	2'	✓	✓	✓	✓	✓		Lower
Carex elata 'aurea'	Bowles Golden Sedge	M	M	M	M	/	M	2-9, 14-24	2 1/2'	1 1/2'	✓	0	✓	✓	✓		Bottom
Carex flagellifera	New Zealand Sedge	M	M	M	M	/	M	4-9, 14-24	3'	2-2 1/2'	✓	0	✓	✓	✓		Lower
Carex marrovi	Japanese Sedge	M	M	M	M	/	M	3-9, 14-24	1'	1 1/2'	✓	✓	✓	✓	✓		Lower
Carex pansa	California Meadow Sedge	M	M	M	M	/	M	7-9, 11-24	6"-8"	12"	✓	✓	✓	✓	✓		Lower
Carex tumicola	Berkeley Sedge	M	M	M	M	/	M	2b-9, 11-24	6"-8"	12"	✓	✓	✓	✓	✓		Lower
Carnegiea gigantea	Saguaro	/	/	VL	L	/	L	12, 13, 18-21	50'	18"-8"	✓	0	✓	✓	✓		
Cephalocereus spp.	Old Man Cactus	VL	/	VL	L	L	L	13, 21-24, H1	15'-45'	12'-5'	✓	0	✓	✓	✓		
Cereus peruvianus	Peruvian Apple Cactus	/	?	L	L	/	L	13, 16, 17, 21-24, H2	10'	15'	✓	0	✓	✓	✓		
Chamaerops humilis	Mediterranean Fan Palm	L	L	M	M	M	M	4-24, H1, H2	20'	20'	✓	0	✓	✓	✓		
Chondropetalum tectorum	Cape Rush	H	?	M	?	?	?	8, 9, 14-24	3'-5'	4'-6'	✓	0	✓	✓	✓		Bottom
Clivia miniata	Kaffir Lily	M	M	L	M	/	M	12-17, 19-24, H1, H2	2'	2'	✓	✓	✓	✓	✓		
Cordyline australis	Giant Dracaena	L	M	L	M	M	M	5, 8-11, 14-24, H1, H2	20'-30'	6'-12'	✓	0	✓	✓	✓		
Cycas revoluta	Sago Palm	M	M	M	M	M	M	8-24, H1, H2	2'-10'	2'-6'	✓	0	✓	✓	✓		
Dasyliion acrotriche**	Green Desert Spoon	VL	/	L	L	L	L	10-24	5'	5'	✓	0	✓	✓	✓		
Dasyliion longissimum	Toothless Desert Spoon	VL	/	L	L	L	L	12-24	5'-10'	5'	✓	0	✓	✓	✓		
Dasyliion wheeleri	Desert Spoon	VL	/	L	L	L	L	10-24	3'-5'	4'-5'	✓	0	✓	✓	✓		
Deschampsia caespitosa	Tufted Hair Grass	L	L	L	L	/	/	2-24	1'-2'	2'	✓	✓	✓	✓	✓		Lower
Deschampsia flexuosa*	Crinkled Hair Grass	L	L	L	L	/	/	2-24	2'	1'	✓	✓	✓	✓	✓		Lower
Distichlis spicata 'Stricata***	Salt Grass	M	M	M	M	M	M	7-9, 14-24	2'	1'	✓	✓	✓	✓	✓		Bottom
Dietes bicolor	Fortnight Lily	L	L	M	M	/	M	8, 9, 12-24, H1, H2	2'-3'	1'-2'	✓	0	✓	✓	✓		
Dietes iridioides (vegeta)	African iris	L	L	M	M	/	M	8, 9, 12-24, H1, H2	3'	3'	✓	0	✓	✓	✓		
Dudleya lanceolata**	LiveForever	L	L	VL	L	L	L	7-24	1'-2'	1'-2'	✓	✓	✓	✓	✓		
Echeveria elegans	Hens and Chickens	L	L	L	L	/	M	8, 9, 12-24	4"	8"	✓	0	✓	✓	✓		
Echinocactus grusonii	Golden Barrel Cactus	VL	VL	L	L	/	L	12-24	4'	2 1/2'	✓	✓	✓	✓	✓		
Eleocharis macrostachya**	Spike Rush	M	M	M	M	M	M	7-9, 14-24	1'-2'	1'-2'	✓	✓	✓	✓	✓		Bottom
Elymus magellanicus	Magellan Wheatgrass	L	L	L	L	M	M	3-6, 14-17, 21-24	1 1/2'	1 1/2'	✓	✓	✓	✓	✓		Lower
Ephedra viridis*	Morman Tea	L	L	L	L	L	L	1-3, 7-24	3'-4'	3'-4'	✓	0	✓	✓	✓		
Esposita lantana	Peruvian Old Man Cactus	?	?	L	L	L	L	12-24	8'	2'	✓	0	✓	✓	✓		
Euphorbia characias wulfenii	no common name	L	L	L	L	?	?	4-24	4'	4'	✓	0	✓	✓	✓		
Euphorbia ingens*, **	Candelabra Tree	L	L	L	L	?	?	4-25	8'	4'	✓	0	✓	✓	✓		
Euphorbia milii	Crown of Thorns	/	L	L	L	/	L	13, 21-24, H1, H2	1'-4'	1 1/2'	✓	0	✓	✓	✓		
Euphorbia rigida	Euphorbia	/	L	VL	L	/	L	4-24	2'	3'-5'	✓	✓	✓	✓	✓		
Euphorbia tirucallii	Pencil Tree (milk bush)	/	/	VL	/	/	L	13, 23, 24, H1, H2	20'	6'	✓	✓	✓	✓	✓		
Ferocactus spp.	Barrel Cactus	VL	VL	VL	L	L	L	8-24	8'-9'	3'	✓	0	✓	✓	✓		
Festuca (ovina) glauca	Blue Fescue	L	L	M	M	M	M	1-24	1'	10"	✓	✓	✓	✓	✓		
Festuca idahoensis	Fescue	VL	L	?	?	?	?	1-10, 14-24	14"	10"	✓	✓	✓	✓	✓		Lower
Fouquieria splendens	Ocotillo	L	/	VL	L	L	L	10-13, 18-20	5'-10'	8'-25'	✓	0	✓	✓	✓		

**COUNTY OF RIVERSIDE
CALIFORNIA FRIENDLY PLANT
LIST**

Botanical	Common	Wucols Region 1	Wucols Region 2	Wucols Region 3	Wucols Region 4	Wucols Region 5	Wucols Region 6	Sunset Zones	Mature Height (Feet)	Mature Width (Feet)	Road Right-of-Way	Medians (0=omit in sight lines)	Erosion Control / Slope	Fuel Mod. (pending F.D.)	MSHCP Adjacent	Water Quality (Bio) Swale	Swale Location
ACCENTS / GRASSES																	
Helictotrichon sempervirens	Blue Oat Grass	L	L	M	M	M	M	1-12, 14-24	2'-3'	2'-3'	✓	✓	✓	✓	✓	✓	Lower
Hemerocallis hybrids	Day Lily	M	M	M	M	M	M	1-24, H1, H2	6'	2'-3'	✓	✓	✓	✓	✓	✓	
Hesperaloe funifera	Coahuilan Hesperaloe	/	/	VL	L	L	L	12, 13	6'	6'-8'	✓	0	✓	✓	✓	✓	
Hesperaloe parviflora	Red / Yellow Yucca	/	/	VL	L	L	L	2b, 3, 7-16, 18-24	3'-4'	3'-4'	✓	0	✓	✓	✓	✓	
Imperata cylindrica rubra	Japanese Blood Grass	H	H	M	M	?	M	2b-24	1'-2'	1'	✓	✓	✓	✓	✓	✓	Lower
Iris douglasiana	Douglas Iris	L	L	M	M	H	/	4-9, 14-24	1'-2'	1'	✓	✓	✓	✓	✓	✓	Bottom
Juncus acutus**	Spiny Rush	H	H	M	M	?	?	4-9, 14-24	1'	1'	✓	✓	✓	✓	✓	✓	Bottom
Juncus patens	California Gray Rush	H	H	M	M	?	?	4-9, 14-24	2'	2'	✓	✓	✓	✓	✓	✓	Bottom
Kalanchoe thyrsiflora	Paddle Plant	L	L	L	L	/	M	13, 17, 21-24	1'-3'	1'-3'	✓	✓	✓	✓	✓	✓	
Kniphofia triangularis (K. galpinii)	Coral Poker	M	M	L	L	/	M	2-9, 14-24	2'	2'	✓	✓	✓	✓	✓	✓	
Kniphofia uvaria	Red Hot Poker	M	M	L	L	/	M	2-9, 14-24	2'	2'	✓	✓	✓	✓	✓	✓	
Leymus condensatus	Giant Wild Rye	VL	VL	M	M	?	?	7-12, 14-24	9'	6'	✓	0	✓	✓	✓	✓	Upper
Leymus triticoides**	Creeping Wild Rye	VL	VL	M	M	?	?	7-12, 14-24	3'	3'	✓	0	✓	✓	✓	✓	Lower
Lilium paradalinum	Leopard Lily	M	M	M	M	M	M	4-7, 14-17	4'-8'	4'	✓	0	✓	✓	✓	✓	Lower
Liriope gigantea**	Giant Lilyturf	M	M	M	M	M	M	2B-10, 14-24, H1, H2	3'	2'	✓	0	✓	✓	✓	✓	
Liriope muscari	Big Blue Lilyturf	M	M	M	M	M	M	2B-10, 14-24, H1, H2	1 1/2'	1'	✓	✓	✓	✓	✓	✓	
Milium effusum 'Aureum'	Bowles Golden Grass	M	?	?	?	?	?	3b-9, 14-17	2'	2'	✓	✓	✓	✓	✓	✓	Bottom
Miscanthus sinensis	Japanese Silver Grass	H	H	M	M	M	M	2-24	2'-6'	2'-6'	✓	0	✓	✓	✓	✓	Lower
Miscanthus transmorrisonensis	Evergreen Miscanthus	H	H	M	M	M	M	2-24	2'-3'	3'-4'	✓	0	✓	✓	✓	✓	Lower
Muhlenbergia capillaris	Pink Muhly (Hairy awn muhly)	L	?	M	?	M	M	4-24	3'	6'	✓	0	✓	✓	✓	✓	Upper
Muhlenbergia dumosa	Bamboo Muhly	L	?	M	M	M	M	8-24	3'-6'	3'-6'	✓	0	✓	✓	✓	✓	Upper
Muhlenbergia emersleyi	Bull Grass	M	?	?	?	?	M	2-24	1 1/2'	3'-4'	✓	✓	✓	✓	✓	✓	Upper
Muhlenbergia rigens	Deer Grass	L	M	L	M	M	M	4-24	4'	4'	✓	0	✓	✓	✓	✓	Upper
Nolina bigelovii	Bigelow Nolina	VL	VL	VL	VL	L	L	7-16, 18-24	3'	3'-4'	✓	0	✓	✓	✓	✓	
Nolina longifolia	Mexican Grass Tree	VL	VL	VL	VL	L	L	12-24	6'-10'	9'	✓	0	✓	✓	✓	✓	
Nolina matapensis	Tree Bear Grass	VL	VL	VL	VL	L	L	10-13	10'-25'	10'	✓	0	✓	✓	✓	✓	
Nolina microcarpa	Bear Grass	VL	VL	VL	VL	L	L	3, 10-13	3'	6'	✓	0	✓	✓	✓	✓	
Nolina recurvata	Pony Tail Palm	VL	VL	VL	VL	L	L	13, 16-24, H1, H2	12'-15'	9'-12'	✓	0	✓	✓	✓	✓	
Opuntia acicularis**	Bristly Prickly Pear	VL	VL	VL	L	L	L	2, 3, 7-24	1'	4'	✓	✓	✓	✓	✓	✓	
Opuntia basilaris	Beaver Tail Cactus	VL	VL	VL	L	L	L	2, 3, 7-24	1'	4'	✓	✓	✓	✓	✓	✓	
Opuntia bigelovii	Teddy Bear Cholla	VL	VL	VL	L	L	L	10-24	3'-6'	3'	✓	0	✓	✓	✓	✓	
Opuntia engelmannii**	Engelmann's Prickly Pear	VL	VL	VL	L	L	L	2, 3, 7-24	4'-6'	4'-15'	✓	0	✓	✓	✓	✓	
Opuntia ficus-indica	India Fig	VL	VL	VL	L	L	L	8, 9, 12-24, H1, H2	15'	10'	✓	0	✓	✓	✓	✓	
Opuntia fulgida**	Chainfruit Cholla	VL	VL	VL	L	L	L	2, 3, 7-24	12'	6'	✓	0	✓	✓	✓	✓	
Opuntia microdasys	Bunny Ears	VL	VL	VL	L	L	L	12-24	2'-3'	4'-5'	✓	✓	✓	✓	✓	✓	
Opuntia versicolor**	Staghorn Cholla	VL	VL	VL	L	L	L	2, 3, 7-24	3'-12'	3'-9'	✓	0	✓	✓	✓	✓	
Pachycereus marginatus	Mexican Fence	/	?	L	L	/	L	13, 16, 17, 21-24, H2	25'	12'	✓	0	✓	✓	✓	✓	
Panicum virgatum	Switch Grass	M	?	?	?	?	?	1-11, 14-23	4'-7'	2'-4'	✓	0	✓	✓	✓	✓	Bottom
Phoenix roebelenii	Pigmy Date Palm	L	/	M	/	M	M	13, 16, 17, 22-24, H2	6'-10'	6'-8'	✓	0	✓	✓	✓	✓	
Phormium hybrids	New Zealand Flax Hybrids	L	L	L	M	/	M	7-9, 14-24, H1, H2	1'-5'	1'-3'	✓	✓	✓	✓	✓	✓	
Phormium tenax	New Zealand Flax	L	L	L	M	/	M	7-9, 14-24, H1, H2	9'	5'	✓	0	✓	✓	✓	✓	
Portulacaria afra	Elephants Food	L	L	L	L	/	L	8, 9, 12-24, H1, H2	12'	12'	✓	0	✓	✓	✓	✓	
Romneya coulteri	Matiija Poppy	VL	VL	VL	L	/	/	4-12, 14-24, H1	6'-8'	15'	✓	0	✓	✓	✓	✓	
Scirpus cernuus	Fiber Optics Plant	H	H	H	H	H	H	7-24	2'	2'	✓	✓	✓	✓	✓	✓	Bottom
Scirpus maritimus**	Bulrush	M	M	M	M	M	M	7-24	2'	2'	✓	✓	✓	✓	✓	✓	Bottom
Sedum brevifolium	no common name	L	L	L	L	L	L	8, 9, 14-24	2"-3"	1"	✓	✓	✓	✓	✓	✓	
Sedum confusum	no common name	L	L	L	L	L	L	8, 9, 14-24	6"-18"	6"-18"	✓	✓	✓	✓	✓	✓	
Sedum X rubrotinctum	Pork and Beans	L	L	L	L	L	L	8, 9, 12, 14-24, H1, H2	6"-8"	12"	✓	✓	✓	✓	✓	✓	
Sedum spurium	Dragons Blood	L	L	L	L	L	L	1-10, 14-24	4"-5"	2"	✓	✓	✓	✓	✓	✓	
Senecio cineraria	Dusty Miller	L	L	L	L	/	M	4-24, H1, H2	2'-3'	2'-3'	✓	0	✓	✓	✓	✓	
Senecio mandraliscae	Blue Chalk Sticks	/	/	L	M	/	M	12, 13, 16, 17, 21-24, H1, H2	1'-1 1/2'	2'	✓	✓	✓	✓	✓	✓	
Sisyrinchium bellum	Blue-Eyed Grass	VL	VL	L	L	M	M	4-9, 14-24	4"-2"	6"-2"	✓	✓	✓	✓	✓	✓	Upper
Sisyrinchium californicum	Yellow-eyed Grass	M	M	M	M	M	M	4-9, 14-24	6"-2"	8"-10"	✓	✓	✓	✓	✓	✓	Bottom
Spartina pectinata*	Praire Cord Grass	M	M	M	M	M	M	1-9, 14-24	5'	3'	✓	0	✓	✓	✓	✓	Bottom
Stenocereus thurberi (Lemaireocereus)	Organpipe Cactus	/	/	VL	L	/	L	12-24	15'-20'	12'	✓	0	✓	✓	✓	✓	
Strelitzia nicolai (protected areas only)	Giant Bird of Paradise	M	/	M	M	/	M	22-24, H1, H2	5'-30'	5'-30'	✓	0	✓	✓	✓	✓	
Strelitzia reginae (protected areas only)	Bird of Paradise	M	M	M	M	/	M	22-24, H1, H2	5'-6'	5'-6'	✓	0	✓	✓	✓	✓	
Trichostema lanatum	Woolly Blue Curly	VL	VL	VL	L	/	M	14-24	3'-5'	4'-8'	✓	0	✓	✓	✓	✓	
Tulbaghia violacea	Society Garlic	M	M	M	M	/	M	13-24, H1, H2	1'-2'	1'-2'	✓	✓	✓	✓	✓	✓	
Yucca aloifolia	Spanish Bayonet	L	L	L	L	L	L	7-24, H1, H2	10'	5'	✓	0	✓	✓	✓	✓	
Yucca baccata	Banana Yucca	L	L	L	L	L	L	1-3, 7, 9-14, 18-24	3'	5'	✓	0	✓	✓	✓	✓	
Yucca brevifolia	Joshua Tree	L	L	L	L	L	L	7, 9-16, 18-23	15'-30'	30'	✓	0	✓	✓	✓	✓	
Yucca elata	Soaptree Yucca	L	L	L	L	L	L	7-24	6'-20'	8'-10'	✓	0	✓	✓	✓	✓	
Yucca gloriosa	Spanish Dagger	L	L	L	L	L	L	7-9, 12-24, H1, H2	10'	8'	✓	✓	✓	✓	✓	✓	
Yucca recurvifolia	Pendulous Yucca	L	L	L	L	L	L	7-10, 12-24	6'-10'	6'-8'	✓	✓	✓	✓	✓	✓	
Yucca rostrata	Chihuahuan Desert Tree Yucca	L	L	L	L	L	L	7-24	12'	9'	✓	✓	✓	✓	✓	✓	
Yucca vallida**	Tree Yucca	L	L	L	L	L	L	7-24	10'-20'	5'-10'	✓	✓	✓	✓	✓	✓	
Yucca whipplei	Our Lord's Candle	L	L	L	L	L	L	2-24	3'	6'	✓	✓	✓	✓	✓	✓	

**COUNTY OF RIVERSIDE
CALIFORNIA FRIENDLY PLANT
LIST**

Botanical	Common	Wucols Region 1	Wucols Region 2	Wucols Region 3	Wucols Region 4	Wucols Region 5	Wucols Region 6	Sunset Zones	Mature Height (Feet)	Mature Width (Feet)	Road Right-of-Way	Medians (0=omit in sight lines)	Erosion Control / Slope	Fuel Mod. (pending F.D.)	MSHCP Adjacent	Water Quality (Bio) Swale	Swale Location
GROUND COVER																	
Achillea tomentosa	Yarrow Woolly	L	L	L	L	M	M	A1-A-3, 1-24	6"	18"	✓	✓	✓				
Anemopsis californica**	Yerba Mansa	?	?	?	?	H	H	7-9, 14-24	6"	1'	✓	✓	✓		✓	✓	Lower
Aptenia 'Red Apple'	Red Apple	L	L	L	L	/	H	12, 13, 15-17, 21-24, H1, H2	6"	2'	✓	✓	✓				
Arctostaphylos 'Emerald Carpet'	Emerald Carpet Manzanita	VL	L	L	L	/	/	6-9, 14-24	8"-14"	8"-14"	✓	✓	✓	✓	✓		
Arctostaphylos hookeri	Monterey Manzanita	VL	L	L	L	/	/	6-9, 14-24	4'	6'	✓	✓	✓	✓	✓		
Arctostaphylos 'Pacific Mist'	Pacific Mist Manzanita	VL	L	L	L	/	/	7-9, 14-24	2 1/2'	10'	✓	✓	✓	✓	✓		
Artemisia arborescens 'Powis Castle'	Powis Castle Artemisia	VL	L	L	L	L	L	7-9, 14-24	3'	6'	✓	✓	✓	✓	✓		
Artemisia douglasiana**	Mugwort	VL	L	L	L	L	L	7-9, 14-24	2'	2'	✓	✓	✓	✓	✓	✓	Lower
Artemisia pycnocephala	Sandhill Sage	VL	L	L	L	L	L	4, 5, 7-9, 14-17, 19-24	2'	3'	✓	✓	✓	✓	✓		
Atriplex semibaccata	Creeping Salt Bush	VL	VL	VL	VL	L	VL	8-10, 12-24	1'	6'	✓	✓	✓	✓	✓		
Baccharis 'Centennial'	Centennial Baccharis	VL	L	VL	L	L	L	7-24	3'	4'-5'	✓	✓	✓	✓	✓	✓	Upper
Baccharis pilularis 'Pigeon Point'	Dwarf Coyote Bush	L	L	L	L	/	/	5-11, 14-24	2'-3'	9'	✓	✓	✓	✓	✓	✓	Upper
Baccharis pilularis 'Twin Peaks'	Dwarf Coyote Bush	L	L	L	L	/	/	5-11, 14-24	8"-24"	6'	✓	✓	✓	✓	✓	✓	Upper
Baileya multiradiata	Desert Marigold	?	?	?	L	L	L	1-3, 7-23	1 1/2'	1 1/2'	✓	✓	✓	✓	✓		
Calystegia macrocarpa*, **	Morning Glory	L	L	M	M	/	/	7-9, 14-24	2'	10'	✓	✓	✓	✓	✓	✓	Lower
Carissa macrocarpa 'Green Carpet'	Green Carpet Natal Plum	L	/	M	M	/	M	22-24, H2	1 1/2'	4'	✓	✓	✓	✓	✓		
Carissa macrocarpa 'Prostrata'	Prostrate Natal Plum	L	/	M	M	/	M	22-24, H2	2'	2'	✓	✓	✓	✓	✓		
Ceanothus griseus var. horizontalis	Carmel Ceanothus	VL	L	VL	L	L	/	5-9, 14-24	1/2'-2 1/2'	15'	✓	✓	✓	✓	✓		
Cephalophyllum 'Red Spike'	Red Spike Ice Plant	L	L	L	L	/	L	8, 9, 11-24	3"-5"	15"-18"	✓	✓	✓	✓	✓		
Chrysactinia mexicana*	Damianita Daisy	L	L	L	L	L	L	10-13, 18-24	2'	2'	✓	✓	✓	✓	✓		
Cistus corbariensis	White Rockrose	L	L	L	L	L	L	6-9, 14-24	3'-4'	3'-4'	✓	✓	✓	✓	✓		
Cistus salviifolius	Sage Leaf Rockrose	L	L	L	L	L	L	6-9, 14-24	2'	6'	✓	✓	✓	✓	✓		
Convolvulus sabatius	Ground Morning Glory	L	L	L	L	M	M	7-9, 14-24	1'-2'	3'	✓	✓	✓	✓	✓		
Coprosma kirkii	Coprosma	L	L	M	M	/	/	14-24, H1, H2	1'-3'	4'-6'	✓	✓	✓	✓	✓		
Coprosma 'Verde Vista'	Verde Vista Coprosma	L	L	M	M	/	/	8, 9, 14-24	1'-3'	4'-6'	✓	✓	✓	✓	✓		
Cotoneaster adpressus praecox	Creeping Cotoneaster	L	L	L	M	M	M	2-24	1 1/2'	6'	✓	✓	✓	✓	✓		
Cotoneaster apiculatus	Cranberry Cotoneaster	L	L	L	M	M	M	A3, 2-24	3'	6'	✓	✓	✓	✓	✓		
Cotoneaster buxifolius**	Cotoneaster Buxifolius	L	L	L	M	M	M	2-24	3'	6'	✓	✓	✓	✓	✓		
Cotoneaster dammeri (C. humifusus)	Bearberry Cotoneaster	L	L	L	M	M	M	2-24	8"	10"	✓	✓	✓	✓	✓		
Cotoneaster horizontalis	Rock Cotoneaster	L	L	L	M	M	M	A3, 2b-11, 14-24	2'-3'	15'	✓	✓	✓	✓	✓		
Dalea greggii	Trailing Indigo Bush	?	/	L	L	L	L	10-13	1 1/2'	6'	✓	✓	✓	✓	✓		
Dodecatheon clevelandii*	Shooting Star	M	M	M	M	M	M	7-9, 14-24	2'	2'	✓	✓	✓	✓	✓	✓	Lower
Drosanthemum floribundum	Rosea Ice Plant	L	L	L	L	/	L	14-24, H1	6"	5"	✓	✓	✓	✓	✓		
Duchesnea indica	Indian Mock Strawberry	M	M	M	M	/	M	1-24, H1, H2	12"	3'	✓	✓	✓	✓	✓		
Dymondia margaretae	Dymondia	L	L	L	L	/	/	15-24	2'-3'	20"	✓	✓	✓	✓	✓		
Dyssodia pentachaeta**	Golden Dyssodia	?	M	?	?	M	M	10-13	6"	1'	✓	✓	✓	✓	✓		
Erigeron glaucus	Beach Aster	L	/	M	M	/	/	4-6, 15-17, 22-24	1'	1 1/2'	✓	✓	✓	✓	✓		
Erigeron karvinskianus	Mexican Daisy	L	M	M	M	M	M	8, 9, 12-24, H1, H2	10"-20"	3'	✓	✓	✓	✓	✓		
Fragaria californica	Wood Strawberry	M	M	M	M	M	M	2b-9, 14-24, H2	4"-8"	3'	✓	✓	✓	✓	✓	✓	Lower
Galvezia speciosa	Island Snapdragon	L	L	VL	L	?	M	14-24	3'	5'	✓	✓	✓	✓	✓	✓	Upper
Gazania rigens hybrids	Clumping Gazania	M	M	M	M	M	M	8-24, H1, H2	6"-10"	3'-4'	✓	✓	✓	✓	✓		
Gazania rigens leucolanea	Trailing Gazania	M	M	M	M	M	M	8-24, H1, H2	6"-10"	3'-4'	✓	✓	✓	✓	✓		
Helleborus orientalis	Lenten Rose	M	M	M	M	/	/	2b-10, 14-24	1'	2'-3'	✓	✓	✓	✓	✓	✓	Lower
Heuchera micrantha	Alum Root	M	M	M	M	M	M	1-10, 14-24	2'-3'	2'-3'	✓	✓	✓	✓	✓	✓	Lower
Hymenoxys acaulis**	Angelita Daisy	?	?	?	?	/	M	11-24	1'	1'	✓	✓	✓	✓	✓		
Iva hayesiana**	Poverty Weed	VL	VL	VL	L	/	/	4-9, 14-24	1'	3'	✓	✓	✓	✓	✓	✓	Bottom
Juniperus rigida conferta*	Shore Juniper	L	L	L	M	M	M	A1-A-3, 1-24	1'	6'-8'	✓	✓	✓	✓	✓		
Juniperus horizontalis 'Bar Harbor'	Bar Harbor Juniper	L	L	L	M	M	M	A1-A-3, 1-24	1'	8'-10'	✓	✓	✓	✓	✓		
Juniperus horizontalis 'Wiltonii' ('Blue Rug')	Blue Carpet Juniper	L	L	L	M	M	M	A1-A3, 1-24	4"-6"	6'-8'	✓	✓	✓	✓	✓		
Juniperus sabina 'Broadmoor'	Broadmoor	L	L	L	M	M	M	A2, A3, 1-24	2'-3'	10'	✓	✓	✓	✓	✓		
Juniperus sabina 'Tamariscifolia'	Tamarix Juniper, Tam	L	L	L	M	M	M	A2, A3, 1-24	1.5'-2.5'	10'	✓	✓	✓	✓	✓		
Keckiella antirrhinoides	Yellow Penstemmon	?	?	L	L	/	/	7-9, 12-24	4'	3'	✓	✓	✓	✓	✓		
Keckiella cordifolia	Heart-Leaved Penstemmon	?	?	VL	L	/	/	7-9, 12-24	5'	5'	✓	✓	✓	✓	✓		
Lampranthus spectabilis	Trailing Ice Plant	L	L	L	L	/	L	12-24	1'	1 1/2'-2'	✓	✓	✓	✓	✓		
Lonicera japonica 'Halliana'	Hall's Japanese Honeysuckle	M	M	L	L	M	M	1-24, H1, H2	18"	15'	✓	✓	✓	✓	✓		
Lupinus bicolor**	Bicolor Lupine	M	M	M	M	M	M	7-24	1 1/2'	1 1/2'	✓	✓	✓	✓	✓	✓	Upper
Lupinus succulentus (L. sparsiflorus)*	Arroyo Lupine	M	M	M	M	M	M	7-24	1 1/2'	1 1/2'	✓	✓	✓	✓	✓	✓	Lower
Mahonia repens	Creeping Mahonia	L	L	L	M	M	/	2b-9, 14-24	1'	3'	✓	✓	✓	✓	✓		
Maleophora crocea	Orange Ice Plant	L	L	L	L	/	L	11-24	6"-12"	6'	✓	✓	✓	✓	✓		
Maleophora lutea	Yellow Ice Plant	L	L	L	L	/	L	12-24	1'	6'	✓	✓	✓	✓	✓		
Melampodium leucanthum	Blackfoot Daisy	L	L	L	L	/	L	2, 3, 10-13	1'	1'	✓	✓	✓	✓	✓		
Mimulus guttatus**	Seep Monkey Flower	H	H	H	H	/	/	7-9, 14-24	1'	1'	✓	✓	✓	✓	✓	✓	Lower
Myoporum 'Pacificum'	Pacific Myoporum	L	L	L	M	/	/	16-24	2'	30"	✓	✓	✓	✓	✓		
Myoporum parvifolium 'Pink'	Pink Myoporum	L	L	L	L	/	M	8, 9, 12-24	3'-6"	9"	✓	✓	✓	✓	✓		
Myoporum parvifolium 'Prostratum'	Prostrate Myoporum	L	L	L	L	/	M	8, 9, 12-24	3'-6"	9"	✓	✓	✓	✓	✓		
Oenothera caespitosa	White Evening Primrose	L	?	/	L	L	L	1-3, 7-14, 18-21	8"-12"	2'	✓	✓	✓	✓	✓		
Oenothera stubbei	Baja Evening Primrose	L	L	L	L	L	L	10-14, 18-24	5"	4'	✓	✓	✓	✓	✓		

**COUNTY OF RIVERSIDE
CALIFORNIA FRIENDLY PLANT
LIST**

Botanical	Common	Wucols Region 1	Wucols Region 2	Wucols Region 3	Wucols Region 4	Wucols Region 5	Wucols Region 6	Sunset Zones	Mature Height (Feet)	Mature Width (Feet)	Road Right-of-Way	Medians (0=omit in sight lines)	Erosion Control / Slope	Fuel Mod. (pending F.D.)	MSHCP Adjacent	Water Quality (Bio) Swale	Swale Location	
GROUNDCOVER																		
Osteospermum fruticosum	Trailing African Daisy	L	L	L	L	/	M	8, 9, 12-24	6"-12"	2'-4'	✓	✓	✓					
Pelargonium species	Ivy Geranium	M	M	M	M	/	M	8, 9, 12-24; A2, A3	1'	5'	✓	✓	✓					
Pyracantha hybrid 'Ruby Mound'	Firethorn species	L	L	L	M	M	M	8, 9, 12-24	2 1/2'	10'	✓	✓	✓	✓				
Pyracantha hybrids 'Apache'	Firethorn species	L	L	L	L	/	M	8, 9, 12-24	4'	6'	✓	✓	✓	✓				
Pyracantha hybrids 'Tiny Tim'	Firethorn species	L	L	L	L	/	M	8, 9, 12-24	3'	3'	✓	✓	✓	✓				
Rosmarinus officinalis 'Prostratus'	Prostrate Rosemary	L	L	L	L	M	M	4-24, H1, H2	2'	8'	✓	✓	✓	✓				
Sarcococca hookerana humilis	Sweet Box	L	M	M	M	/	/	4-9, 14-24	1 1/2'	8'	✓	✓	✓	✓				
Satureja douglasii	Yerba Buena	L	?	M	?	?	?	4-9, 14-24	6"	3'	✓	✓	✓	✓		✓	Bottom	
Stachys byzantina	Lamb's Ear	L	L	M	M	/	M	1-24	1 1/2'	10'	✓	✓	✓	✓				
Stachys coccinea*	Texas Betony	L	L	M	M	/	M	7-10, 12-24	1 1/2'	1 1/2'	✓	✓	✓	✓				
Symphoricarpos mollis	Snow Berry	L	L	?	?	?	/	2-10, 14-24	1 1/2'	1 1/2'	✓	✓	✓	✓				
Teucrium cossonii	Majorcan Germander	VL	L	L	L	/	L	7-9, 14-24	8"	1 1/2'	✓	✓	✓	✓				
Thymus praecox	Mother-of-thyme	M	M	M	M	M	M	1-24	3'	3'	✓	✓	✓	✓				
Thymus vulgaris	Common Thyme	M	M	M	M	M	M	1-24	1'	2'	✓	✓	✓	✓				
Trachelospermum asiaticum	Asiatic Jasmine	M	M	M	M	M	M	6-24	18"	5'	✓	✓	✓	✓				
Trachelospermum jasminoides	Star Jasmine	M	M	M	M	M	M	8-24, H1, H2	2'	10'	✓	✓			✓			
Tradescantia pallida	Purple Heart Plant	L	/	M	M	H	H	12-24, H1, H2	1 1/2'	3'	✓	✓	✓	✓				
Verbena goodingii	Gooding Verbena	L	L	L	L	/	M	7-24	1 1/2'-2'	3'-4'	✓	✓	✓	✓				
Verbena lilacina	Lilac Verbena	L	?	L	L	/	L	12-24	1'	3'	✓	✓	✓	✓				
Verbena peruviana	Peruvian Verbena	L	L	L	L	/	M	8-24	18"	3'	✓	✓	✓	✓				
Verbena rigida	Sandpaper Verbena	M	M	M	M	/	M	3-24	1'-2'	3'-4'	✓	✓	✓	✓				
Verbena tenuisecta	Moss Verbena	L	L	L	L	/	M	7-9, 14-24	1'-2'	3'-4'	✓	✓	✓	✓				
Wedelia trilobata	Wedelia	?	?	H	/	/	?	12-13, 21-24	1 1/2'-2'	6'	✓	✓			✓			
Zauschneria californica	California Fuchsia	L	L	VL	L	M	M	2-11, 14-24	6"	3'-4'	✓	✓			✓	✓	Upper	
VINES																		
Antigonon leptopus	Queens Wreath	M	/	L	L	/	L	12, 13, 18-24, H1, H2	40'									
Bougainvillea species	Bougainvillea	L	L	L	L	/	M	5, 6, 12-17, 19, 21-24, H1, H2	15'-30'									
Campsis radicans	Common Trumpet Creeper	L	L	M	M	M	M	1-21	40'									
Cissus incisa	Texas Grape Ivy	L	M	M	M	/	M	16-24	30'-50'									
Cissus trifoliata	Native Grape Ivy	?	/	?	?	?	L	10-13	30'									
Clematis armandii	Evergreen Clematis	M	M	M	M	M	M	4-9, 12-24	15'-20'									
Clematis texensis*	Scarlet Clematis	M	M	M	M	/	M	2b-11, 14-24	6'-10'									
Distictis buccinatoria	Blood Red Trumpet Vine	M	M	M	M	/	M	8, 9, 14-24, H1	20'-30'									
Ficus pumila	Creeping Fig	M	M	M	M	M	M	8-24, H1, H2	40'-60'									
Gelsemium sempervirens	Cariolina Jasmine	L	L	M	M	/	M	4-24	20'									
Hardenbergia violacea	Lilac Vine	M	M	M	M	/	M	8-24	10'									
Hedera canariensis	Algerian Ivy	M	M	M	M	M	M	5-9, 12-24	20'									
Hedera helix	English Ivy	M	M	M	M	M	M	3-24, H1	20'									
Lonicera hildebrandiana	Giant Burmese Honeysuckle	M	M	M	M	M	M	9, 14-17, 19-24, H1, H2	30'									
Lonicera japonica	Japanese Honeysuckle	M	M	L	L	M	M	1-24, H1, H2	30'									
Lonicera sempervirens	Trumpet Honeysuckle	M	M	/	M	M	M	2-24	10'-20'									
Macfadyena unguis-cati	Cat's Claw Vine	L	L	L	L	L	L	8-24, H1, H2	25'-40'									
Mandevilla hybrida	Mandevilla	M	/	M	M	/	M	21-24, H1, H2	15'-20'									
Mascagnia lilacina	Lavendar Orchid Vine	?	?	?	?	?	M	12-24	15'-20'									
Mascagnia macroptera	Yellow Orchid Vine	?	?	?	?	?	M	12-24	15'									
Merremia aurea	Yellow Morning Glory	?	?	?	?	/	M	12-24	25'									
Pandorea jasminoides	Bower Vine	M	/	M	M	/	/	16-24, H1, H2	20'-30'									
Parthenocissus quinquefolia	Virginia Creeper	M	M	M	M	M	M	A2, A3, 1-24	20'									
Parthenocissus tricuspidata	Boston Ivy	M	M	M	M	M	M	1-24	20'									
Podranea ricasoliana	Pink Trumpet Vine	/	M	M	M	/	M	9, 12, 13, 19-24, H1, H2	20'									
Polygonum aubertii	Silver Lace Vine	L	L	L	L	M	M	A1-A3, 1-24	15'-20'									
Rosa banksiae	Lady Bank's Rose	L	L	M	M	M	M	4-24, H1, H2	20'									
Vigna caracalla	Snail Vine	M	/	M	M	/	M	12-24, H1, H2	10'-20'									
Vitis californica	Vitis californica	L	M	VL	L	M	M	4-24	30'									
Vitis girdiana	Desert Grape	L	M	L	L	M	M	4-24	30'									
Wisteria floribunda	Japanese Wisteria	M	M	M	M	M	M	2-24	15'-30'									
Wisteria sinensis	Chinese Wisteria	M	M	M	M	M	M	3-24	15'-30'									
TURF																		
Cynodon dactylon 'Santa Ana'	Santa Ana Bermuda	60% of Eto						5-10, 12-24, H1, H2	*Requires over-seeding of Perennial Rye during dormancy									
Cynodon dactylon 'Tifdwarf'	Tifdwarf Bermuda	60% of Eto						5-10, 12-24, H1, H2	*Requires over-seeding of Perennial Rye during dormancy									
Cynodon dactylon 'Tifgreen'	Tifgreen Bermuda	60% of Eto						5-10, 12-24, H1, H2	*Requires over-seeding of Perennial Rye during dormancy									
Cynodon dactylon 'Tifway'	Tifway Bermuda	60% of Eto						5-10, 12-24, H1, H2	*Requires over-seeding of Perennial Rye during dormancy									
Cynodon dactylon 'U-3'	U-3 Bermuda	60% of Eto						5-10, 12-24, H1, H2	*Requires over-seeding of Perennial Rye during dormancy									
Cynodon dactylon 'GN-1'	GN-1 Bermuda	60% of Eto						5-10, 12-24, H1, H2	*Requires over-seeding of Perennial Rye during dormancy									
Festuca arundinacea	Tall Fescue	80% of Eto						A1-A3, 1-10, 14-24	*Hybrids such as "Medallion" or "Marathon" recommended									
Festuca rubra	Red Fescue	80% of Eto						A2, A3, 1-10, 14-24										
Lolium perenne	Perennial Rye Grass	80% of Eto						A2, A3; 1-6, 15-17										
Stenotaphrum secundatum	St. Augustine	60% of Eto						12, 13, 18-24, H1, H2										
Zoysia 'Victoria'	Victoria Zoysiagrass	60% of Eto						8, 9, 12-24, H1, H2										

PLANTS NOT ALLOWED IN RIVERSIDE COUNTY

Lobularia maritima	Sweet Alyssum
Oenothera speciosa	Mexican Evening Primrose
Pennisetum spp.	Fountain Grass

PLANT LIST KEY

WUCOLS III (Water Use Classification of Landscape Species)	
WUCOLS Region	Sunset Zones
1	2,3,14,15,16,17
2	8,9
3	22,23,24
4	18,19,20,21
5	11
6	13

WUCOLS III Water Usage/ Average Plant Factor Key			
H-High (0.8)	M-Medium (0.5)	L-Low (.2)	VL-Very Low (0.1)

* Water use for this plant material was not listed in WUCOLS III, but assumed in comparison to plants of similar species

** Zones for this plant material was not listed in Sunset, but assumed in comparison to plants of similar species