

WATER EFFICIENT LANDSCAPING

DOCUMENTATION PACKAGE AND GUIDELINES



REVISED JULY 6, 2015

CITY OF ARCADIA
DEVELOPMENT SERVICES DEPARTMENT
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CITY OF ARCADIA

WATER EFFICIENT LANDSCAPING DOCUMENTATION PACKAGE AND GUIDELINES

TABLE OF CONTENTS

<u>TOPIC</u>	<u>PAGE</u>
DOCUMENTATION PACKAGE	
APPLICABILITY	1
PROCESS FOR COMPLIANCE	2
WORKSHEET	
SECTION A: PROJECT INFORMATION	3
SECTION B: PROJECT CONTACTS	4
SECTION C: WATER BUDGET & MAXIMUM APPLIED WATER ALLOWANCE	6
SECTION D: HYDROZONE INFORMATION TABLE	7
SECTION E: ESTIMATED APPLIED WATER USE	8
SECTION F: WATER BUDGET COMPARISON & ACKNOWLEDGEMENT	9
SAMPLE WORKSHEET	10
CERTIFICATE OF COMPLETION	11
GUIDELINES	
INTRODUCTION	12
WHY DO I NEED THIS GUIDE?	12
WHAT ARE THE GENERAL LANDSCAPING DESIGN GUIDELINES I SHOULD FOLLOW?	13
A. SINGLE-FAMILY RESIDENTIAL DESIGN GUIDELINES	13
B. MULTIPLE-FAMILY RESIDENTIAL DESIGN GUIDELINES	14
C. COMMERCIAL, MIXED-USE, AND INDUSTRIAL DESIGN GUIDELINES	14
WHAT SHOULD I KNOW BEFORE I PREPARE MY PLANTING PLAN?	15
WHAT SHOULD I KNOW BEFORE I PREPARE MY IRRIGATION PLAN?	16
DROUGHT TOLERANT PLANTS	17
RECOMMENDED LOW WATER USE PLANT LIST	20

THE WATER EFFICIENT LANDSCAPE DOCUMENTATION PACKAGE MUST BE COMPLETED AND SUBMITTED WITH YOUR PLANS. IF YOU HAVE ANY QUESTIONS OR NEED ANY ADDITIONAL ASSISTANCE, PLEASE CONTACT THE CITY OF ARCADIA DEVELOPMENT SERVICES DEPARTMENT AT (626) 574-5423.

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WATER EFFICIENT LANDSCAPING DOCUMENTATION PACKAGE

APPLICABILITY

Your action is required to conserve water supplies and comply with State law. The Water Conservation in Landscaping Act of 2006 (AB 1881) required cities and counties to adopt landscape water conservation ordinances by January 1, 2010. The City of Arcadia adopted Ordinance No. 2267 on December 15, 2009 to comply with the State law.

These regulations have been revised, effective June 1, 2015, in accordance with the Governor's Executive Order No. B-29-15, to address the ongoing emergency drought conditions, and the Building Standards Commission's Information Bulletin No. 15-02.

The landscaping for all projects that meet the following thresholds are required to comply with specific water conservation practices:

- A residential project that is subject to a building permit, landscaping permit, building plan check, and/or design review that includes a total area of 2,500 or more square feet of rehabilitated and/or new irrigated landscaping.
- A private non-residential development project subject to a building permit, landscaping permit, building plan check, and/or design review that includes a total area of rehabilitated and/or new irrigated landscaping of 1,000 or more square feet.
- Any public agency project.



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WATER EFFICIENT LANDSCAPING DOCUMENTATION PACKAGE
PROCESS FOR COMPLIANCE

Prior to the approval of any **Design Review and/or Plan Check** for a project that meets the thresholds for this review, the following must be submitted:

- Residential – Landscape Concept Plan that includes a design statement, irrigation and planting notes, a conceptual plant palette identifying proposed hydrozones, and an estimate of the Maximum Applied Water Allowance – see page 6. **Irrigation controllers shall be weather-based with rain sensors, or soil moisture-based.**
- Non-Residential – Outdoor water use shall have a separate meter or sub-meter.

- - -

Prior to the approval of a **Plan Check** and issuance of a **Building Permit** or other relevant permit, all of the following items are required to be submitted:

- Water Efficient Landscaping Documentation Package
 - Section A. Project Information – page 3
 - Section B. Project Contacts – pages 4 & 5
 - Section C. Water Budget & Maximum Applied Water Allowance – page 6
 - Section D. Hydrozone Information Table – page 7
 - Section E. Estimated Applied Water Use – page 8
 - Section F. Water Budget Comparison and Acknowledgement – page 9
- Soil Management Plan (Soil Analysis Report and On-site Soil Assessment with Recommendations)
- Landscape Design Plan
- Irrigation Design Plan
- Grading Design Plan

- - -

Prior to a **Final Inspection** sign-off and/or the issuance of a **Certificate of Occupancy** for any project, the following shall be submitted:

- A **Certificate of Completion** (see page 11) signed by a licensed landscape architect or certified irrigation designer and the property owner certifying that the landscaping has been installed and will be maintained in accordance with the approved plans, and also certifying that the irrigation and maintenance schedule has been completed and will be followed.

CITY OF ARCADIA

WATER EFFICIENT LANDSCAPING DOCUMENTATION PACKAGE

WORKSHEET

Please complete the entire worksheet (Sections A through F) as it is part of the Water Efficient Landscaping Documentation Package that is required to be submitted per Ordinance No. 2267 and the Governor's Executive Order No. B-29-15.

SECTION A: PROJECT INFORMATION

Date: _____

Project Name: _____

Project Applicant: _____

Project Address and Location:

Street Address		Assessor Parcel Number
Arcadia		Tract/Parcel Map No. and Lot Number(s)
California	9100____	Nearest Cross Street

Project Type: Please check only one

<input type="checkbox"/> Public or community facility (i.e., park, playground, etc.)	<input type="checkbox"/> Single-Family Residential
<input type="checkbox"/> Commercial	<input type="checkbox"/> Multiple-Family Residential
<input type="checkbox"/> Industrial	<input type="checkbox"/> Mixed-Use
<input type="checkbox"/> Institutional (i.e., hospital, school, etc.)	<input type="checkbox"/> Other _____

Please fill in the information below to describe the landscape project:

Total landscaped area _____ (sq. feet)

Total turf area _____ (sq. feet)

Total non-turf area _____ (sq. feet)

Total active recreational areas _____ (sq. feet)

Total area permanently and solely dedicated to edible plants _____ (sq. feet)

Total irrigated landscape area _____ (sq. feet)

Total non-irrigation landscape area _____ (sq. feet)

CITY OF ARCADIA

WATER EFFICIENT LANDSCAPING DOCUMENTATION PACKAGE – WORKSHEET

SECTION B: PROJECT CONTACTS – The project applicant and other individuals may receive inquiries or notifications of all proceedings regarding the Water Efficient Landscaping Documentation Package. Please provide the name, mailing address, email address, and telephone no(s) etc. of each person to receive such inquiries and notifications.

1. Project Applicant

Name	Telephone and Fax Number(s)	
Title	Email Address	
Company	Mailing Address	
City	State	Zip Code

2. Property Owner

Name(s)	Telephone and Fax Number(s)	
Mailing Address	Email Address	
City	State	Zip Code

3. Licensed Landscape Architect

Name	Title	
Company	License No.	
Mailing Address	Telephone and Fax Number(s)	
City	Email Address	
State	Zip Code	Website

4. Certified Irrigation Designer

Name	Title	
Company	License No.	
Mailing Address	Telephone and Fax Number(s)	
City	Email Address	
State	Zip Code	Website

- Continued on page 5 -

CITY OF ARCADIA
WATER EFFICIENT LANDSCAPING DOCUMENTATION PACKAGE – WORKSHEET

SECTION B: PROJECT CONTACTS – CONTINUED FROM PAGE 4

5. Landscape Installation Contractor

Name		Title
Company		License No.
Mailing Address		Telephone and Fax Number(s)
City		Email Address
State	Zip Code	Website

6. Irrigation Installation Contractor

Name		Title
Company		License No.
Mailing Address		Telephone and Fax Number(s)
City		Email Address
State	Zip Code	Website

7. Landscape & Irrigation Maintenance Contractor (if known at this time)

Name		Title
Company		License No.
Mailing Address		Telephone and Fax Number(s)
City		Email Address
State	Zip Code	Website

8. Please check the Water Supplier that applies to this project:

- City of Arcadia Water Services – 11800 Goldring Road, Arcadia, CA 91006 – (626) 256-6650
- East Pasadena Water Company – 3725 Mountain View Ave., Pasadena, CA 91107 – (626) 793-6189
- Sunny Slope Water Company – 1040 El Campo Dr., Pasadena, CA 91107 – (626) 568-4266
- California American Water – 2020 Huntington Drive, San Marino, CA 91108 – (831) 646-3252
- Golden State Water Company – 110 E. Live Oak Avenue, Arcadia, CA 91006 – (626) 446-1372

CITY OF ARCADIA
WATER EFFICIENT LANDSCAPING DOCUMENTATION PACKAGE – WORKSHEET

SECTION C: WATER BUDGET CALCULATION

MAXIMUM APPLIED WATER ALLOWANCE (MAWA) FOR PROJECT

The Project's **Maximum Applied Water Allowance (MAWA)** in gallons per year shall be calculated using this formula:

$$\text{MAWA} = (\text{ETo}) (0.62) (0.55 \times \text{LA})$$

MAWA = Maximum Applied Water Allowance in gallons per year

ETo = Reference Evapotranspiration rate (inches per year) which is 50.2 for the Arcadia area*

0.62 = Conversion factor (to gallons)

0.55 = Evapotranspiration Adjustment Factor (ETAF) for plant types and irrigation efficiency

LA = Landscaped Area in square feet

Maximum Applied Water Allowance = _____ gallons per year

Show Calculations (a sample calculation is shown on page 10)

* The ETo for the Arcadia area is based on the State's Department of Water Resources' Reference Evapotranspiration rate (ETo) for the City of Monrovia.

CITY OF ARCADIA
WATER EFFICIENT LANDSCAPING DOCUMENTATION PACKAGE – WORKSHEET

SECTION D: HYDROZONE INFORMATION TABLE

Please complete a Hydrozone Information Table with the details for each Hydrozone. Use as many sheets as necessary to detail all the Hydrozones. The table is to be keyed to the landscape and irrigation plans – a sample table is shown on page 10.

Project Address:				
Hydrozone*	Irrigation Zone or Valve	Irrigation Method**	Area in Sq. Ft.	% of Landscape Area
Totals	--	--		100

Attach as many sheets as necessary.

* **Hydrozone** – Per the Department of Water Resources' Water Use Classification of Landscape Species (WUCOLS) for Region 4 – South Inland Valleys and Foothills, the various Hydrozone designations are as follows. The applicable WUCOLS edition is available at www.water.ca.gov/wateruseefficiency/docs/wucols00.pdf.

HW = High Water Use Zone – Plants and water features that need or use high amounts of water (i.e., Dichondra, Japanese maples, pools, spas, fountains, ponds, etc.)

MW = Moderate Water Use Zone

LW = Low Water Use Zone

VLW = Very Low Water Use Zone – Typically an area that is not automatically irrigated, but has plants that may need only occasional hand-watering during particularly hot and/or dry periods.

CST = Cool Season Turfgrass Zone (prohibited)

WST = Warm Season Turfgrass Zone

NW = No Water Use Zone

****Irrigation Method** – Residential controllers are required to be weather-based with rain sensors, or soil moisture-based.

D=Drip B=Bubbler So=Soaker N=None MS=Micro-spray (prohibited) Sp=Spray (prohibited)
R=Rotor (prohibited) O=Other

CITY OF ARCADIA
WATER EFFICIENT LANDSCAPING DOCUMENTATION PACKAGE – WORKSHEET

SECTION E: ESTIMATED APPLIED WATER USE

The project's Estimated Applied Water Use (EAWU) in gallons per year is calculated using the following formula. The EAWU must not exceed the Maximum Applied Water Allowance (MAWA) calculated on page 6.

$$\text{EAWU} = (\text{ETo}) (0.62) [(\text{Sum of all HAs} \times \text{their PFs}) \div 0.71]$$

EAUW = Estimated Applied Water Use in gallons per year
ETo = Reference evapotranspiration¹ rate
0.62 = Conversion factor to gallons
HA = Hydrozone Area in square feet
PF = Plant Factor²
0.71 = Irrigation efficiency factor (measurement of water beneficially used vs. water applied) per State regulations.

Show calculations (sample calculations are shown on page 10)

Attach additional sheets if necessary.

¹ The Reference Evapotranspiration rate (ETo) for Hydrozones that are to be irrigated year round is **50.2**. To calculate EAWU on a monthly basis for Hydrozones that will not be irrigated year round, the following ETo table is to be used and totaled to arrive at an annual EAWU for those Hydrozones:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2.2	2.3	3.8	4.3	5.5	5.9	6.9	6.4	5.1	3.2	2.5	2.0

² The Plant Factor (PF) is an estimate of the amount of water needed by a plant based on the Hydrozone designation by the Department of Water Resources' Water Use Classification of Landscape Species (WUCOLS). The applicable WUCOLS edition is available at www.water.ca.gov/wateruseefficiency/docs/wucols00.pdf. For the purposes of this Water Efficient Landscape Documentation Package, the Plant Factors for the Hydrozones are as follows: HW is 0.85, MW is 0.50, LW is 0.15, VLW is 0.05, CST is 0.80, WST is 0.60, and NW is 0.00.

CITY OF ARCADIA
WATER EFFICIENT LANDSCAPING DOCUMENTATION PACKAGE – WORKSHEET
SECTION F: WATER BUDGET COMPARISON & ACKNOWLEDGEMENT

WATER BUDGET COMPARISON

The **Estimated Applied Water Use (EAWU)** from page 8 must not exceed the **Maximum Applied Water Allowance (MAWA)** from page 6.

The EAWU of _____ gallons per year is less than or equal to the MAWA of _____ gallons per year.

ACKNOWLEDGMENT

SIGNATURE(S):

The signature of at least one of the following is required to complete this Water Efficient Landscaping Documentation Package.

I/We acknowledge and agree under penalty of perjury under the laws of the State of California that the information contained in this Water Efficient Landscaping Documentation Package is true and correct.

Signature of Project Applicant

Date

Signature of Property Owner

Date

Signature and Wet Stamp of Licensed Landscape Architect

Date

CITY OF ARCADIA

WATER EFFICIENT LANDSCAPING DOCUMENTATION PACKAGE

--- **SAMPLE WORKSHEET** ---

The following calculations and tables are provided only as examples.

Section C: MAWA = (ETo) (0.62) (0.55 x Landscape Area)
 = (50.2) (0.62) (0.55 x 7,250 sq. ft.)
 = (50.2) (0.62) (3,987.50)
 = 124,106.95

Section D:

Project Address: somewhere in Arcadia, CA					
Hydrozones (see page 7)	Irrigation Zone or Valve	Irrigation Method (see page 7)	Landscape Area in Sq. Ft.	Plant Factor (see page 8)	% of Landscape Area
A = WST	1	MS	600	0.60	8.28
B = LW	2	D	1,000	0.15	13.79
C = MW	3	B	890	0.50	12.28
D = LW	4	D	2,850	0.15	39.31
E = VLW	5	none	810	0.05	11.17
F = HW	Pool & Spa	n.a.	1,100	0.85	15.17
Totals	--	--	7,250	--	100.00

Section E:

EAUW = (ETo) (0.62) [(Sum of all Hydrozone Areas x Plant Factors) ÷ 0.71]

$$\text{Hydrozone A: } 600 \times 0.60 = 360.00$$

$$\text{Hydrozone B: } 1,000 \times 0.15 = 150.00$$

$$\text{Hydrozone C: } 890 \times 0.50 = 445.00$$

$$\text{Hydrozone D: } 2,850 \times 0.15 = 427.50$$

$$\text{Hydrozone E: } 810 \times 0.05 = 40.50$$

$$\text{Hydrozone F: } 1,100 \times 0.85 = 935.00$$

$$\text{Sum of all Hydrozone Areas x Plant Factors} = 2,358.00$$

$$\text{EAUW} = (50.2) (0.62) [2,358.00 \div 0.71]$$

$$= (50.2) (0.62) [3,321.13] = 103,366.85$$

Section F:

The Estimated Applied Water Use (EAUW) of 103,366.85 is less than or equal to the Maximum Applied Water Allowance (MAWA) of 124,106.95. The proposed landscaping complies with Ordinance No. 2267 and the Governor's Executive Order No. B-29-15.



CITY OF ARCADIA WATER EFFICIENT LANDSCAPING DOCUMENTATION PACKAGE CERTIFICATE OF COMPLETION

This certificate is to be filled out by the project applicant and the property owner upon completion of the landscaping project.

Project Information

Date of Project Completion	Permit Type and No.
Project Address	
Name of Project Applicant and Title	Name of Property Owner
Company Name & Mailing Address	Mailing Address
Telephone and Fax No(s).	Telephone and Fax No(s).
Email Address	Email Address

Project Applicant – The signer of the landscape design plan, signer of the irrigation plan, the licensed landscape contractor that installed the landscaping and irrigation, or a licensed professional that performed periodic site observations to verify that the project is consistent with the Water Efficient Landscaping Documentation Package for the project and that the project complies with Ordinance No. 2267 and the Governor's Executive Order No. B-29-15.

"I/we certify that based upon periodic site observations, the work has been substantially completed in accordance with Ordinance No. 2267 and the Governor's Executive Order No. B-29-15 and that the landscape planting and irrigation installation conform with the criteria and specifications of the approved Landscape and Irrigation Plans and Landscape Documentation Package and acknowledge that the project may be subject to inspection and a Landscape Water Audit to verify that the project is maintained in compliance with Ordinance No. 2267 and the Governor's Executive Order No. B-29-15."

Signature	Date
Name (print)	Telephone and Fax No(s).
Title	License No. or Certification No.
Company	Email Address
Mailing Address	

Property Owner

"I/we certify that I/we have received copies of all the documents within the Water Efficient Landscaping Documentation Package for our project and that it is my/our responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule for the project and in compliance with Ordinance No. 2267 and the Governor's Executive Order No. B-29-15, and I/we acknowledge that the project may be subject to inspection and a Landscape Water Audit to verify that the project is being maintained in compliance with Ordinance No. 2267 and the Governor's Executive Order No. B-29-15.



CITY OF ARCADIA WATER EFFICIENT LANDSCAPING GUIDELINES

INTRODUCTION

The purpose of this Guide is to present practical standards for landscape and irrigation design for projects in the City of Arcadia. Additionally, 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 the City's Water Efficient Landscaping Ordinance in order to conserve water in this drought prone state of California.

Arcadia's commitment to water conservation is exemplified in the adoption of standards and the implementation of guidelines which result in a reduction of landscape related water usage citywide. It is the City's goal to reduce landscape related water usage as much as possible per site, through implementation of the Guide. To meet this goal, Planting Plans and Irrigation Plans are to be prepared using the Water Budget Formula found in the City's Landscape Documentation Package.

WHY DO I NEED THIS GUIDE?

The Water Efficient Landscaping Ordinance and the Governor's Executive Order No. B-29-15 apply to all projects that require permits, plan check, and/or design reviews and includes both public and private development. Specifically, it applies to residential projects with landscaped areas larger than 2,500 square feet. Non-residential projects with 1,000 or more square feet of landscaping shall have a separate meter or sub-meter for outdoor water use.

Landscaping and proper irrigation are critical components 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. The City of

Arcadia emphasizes design elements that can achieve aesthetic objectives while acknowledging the practical water constraints of this unique geographic environment.

WHAT ARE THE GENERAL LANDSCAPING DESIGN GUIDELINES I SHOULD FOLLOW?

Landscape plans should incorporate the following design guidelines relative to their respective product types and use of drought-tolerant and water-efficient plants to reduce water demand – see the lists of Drought Tolerant Plants beginning on page 17. A rich variety of plantings and hardscape can enhance the landscape design based on their intended uses.



Adenium Obesum

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. Acceptable planting palette examples can be found in the Single Family Residential Design Guidelines, in this handout, and on the Department of Water Resource Water Use Classification of Landscape Species (WUCOLS) website at www.water.ca.gov/wateruseefficiency/docs/wucols00.pdf.
2. Landscape architects and designers are encouraged to use clinging vines, espaliers, trellises, and shrubs to enhance the architecture and define attractive private open spaces.
3. Front yard areas can 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 should 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 can use visual focal points such as boulders, landscape mounds, planter beds, etc.
5. Use of vegetative ground cover that will absorb rainwater and reduce runoff is strongly encouraged. Permeable surfaces shall be used wherever possible to reduce paving.

6. Landscaping should 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.
7. Turf areas should be used sparingly in response to functional needs and shall be in compliance with the water budget formula.

B. Multiple-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 can use clinging vines, espaliers, trellises, and shrubs to enhance the architecture and define useful public and private spaces.
3. Landscape architects and designers can integrate visual focal points such as boulders, landscaped mounds or berms, sculpture, and public art into their planting designs.
4. Planting plans should utilize hardy native or drought tolerant trees, shrubs, and groundcover that are easy to water and maintain.



5. Landscaping should 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.
6. Planting plans should complement the landscape elements between the proposed project, surrounding streetscapes, and adjacent publicly maintained landscaping to ensure community continuity and character.
7. Turf areas should be used sparingly in response to functional needs and shall be in compliance with the water budget formula.

C. Commercial, Mixed-Use, & Industrial Design Guidelines:

1. Landscaping should be in scale with adjacent buildings and be of appropriate size at maturity to accomplish its intended purpose. A balance of deciduous and evergreen trees can be used.
2. Landscaping should be incorporated around the base of building(s) (except loading or service areas) to soften the edge between the parking lot, structure(s), and street. Such landscaping should be accentuated at entrances to provide a focal point.

3. New projects proposed adjacent to existing residential uses should incorporate adequate landscape screening/buffering.
4. Landscaping should 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.
5. Turf areas should be used sparingly in response to functional needs and shall be in compliance with the water budget formula.
6. Landscaping plans should complement the landscape and hardscape elements between the proposed project, surrounding streetscapes, and adjacent publicly maintained landscaping to ensure community continuity and character.

WHAT SHOULD I KNOW BEFORE I PREPARE MY PLANTING PLAN?

- Plants should 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.
- Shade trees are ideal for residential, commercial and industrial building parking lots and open space areas. They should be incorporated to provide natural cooling opportunities and for the purpose of energy and water conservation.
- All non-turf planting areas (except hydroseeded areas) should be mulched on a regular basis to retain moisture, suppress weeds, and moderate soil temperature.
- Turf should be minimal, but if used, it should serve as a functional recreational element and not solely as an aesthetic element.
- Plants should be grouped and irrigated on separate valve zones (hydrozones) based on their water use requirements, slope aspect, and sun/shade microclimate.
- Shrubs should be designed so that their mature width will not require excessive pruning, which is discouraged.
- To prevent graffiti, clinging vines should be planted to ensure full coverage of the public facing side of all walls.



Ginger Torch



Agave Americana

WHAT SHOULD I KNOW BEFORE I PREPARE MY IRRIGATION PLAN?



regulators should be used per factory recommendations for the specific irrigation products being used.

- Irrigation systems shall be designed, constructed, managed, and maintained to achieve the highest overall efficiency possible.
- Irrigation that delivers water through the air; that is, sprayers, rotors, misters, etc., are prohibited.
- Irrigation should be designed and installed to avoid over-watering and runoff onto paved surfaces, structures, and non-vegetated areas.
- For drip line installations, in-line pressure

- Irrigation systems should be zoned according to plant water use, slope aspect, and sun/shade microclimate.
- All irrigation plans should be designed for rainwater capture and/or recycled water use in the future.
- Projects should include a “smart” irrigation controller with the following attributes:
 - a. Real time, weather-based program adjustment capability with rain sensors, or soil moisture sensors;
 - b. On-site weather station or external ETo input;
 - c. Rain sensors should be placed within an unobstructed natural rainfall area and located above the irrigation system;
 - d. Flow sensor;
 - e. Multiple start times; and
 - f. Minimum of two programs.

- Systems should be scheduled so that the irrigation rate does not exceed the infiltration rate of the soil.

The Water Efficient Landscape Documentation Package must be completed and submitted with your plans. If you have any questions or need any additional assistance, please contact the City of Arcadia Development Services Department at (626) 574-5423.

Drought Tolerant Plants

SHRUBS & GROUNDCOVER

Genus	Notable Species	Specifications	
Agave (<i>century plant</i>)	A. Americana, A. Attenuata, A. Tequilana	Part Sun <i>Height:</i> 1-20 Feet <i>Width:</i> 1-10 Feet Perennial Spiked Edges	
Artemisia (<i>mugwort, wormwood, and sagebrush</i>)	A. Absinthium, A. Californica, A. Dracunculus, A. Tridentata, A. Vulgaris	Full Sun <i>Height:</i> 1-3 Feet <i>Width:</i> 1-10 Feet Perennial Strong Aromas	
Callistemon (<i>bottlebrushes</i>)	C. Citrinus, C. Pallidus, C. Viminalis, C.	Full Sun <i>Height:</i> 3-5 Feet <i>Width:</i> 6-8 Feet Slow Growing Bottlebrush Flowers	
Ceanothus (<i>California Lilac, wild lilac, and soap bush</i>)	C. Americanus, C. Coeruleus, C. Arboreus, C. Thyrsiflorus	Full Sun <i>Height:</i> 2-3 Feet <i>Width:</i> 6-8 Feet Evergreen Flowers Cluster	
Cistus (<i>Rockrose</i>)	C. Albidus, C. Crispus, C. Ladanifer, C. Monspeliensis, C. Salviifolius	Full Sun <i>Height:</i> 4-5 Feet <i>Width:</i> 4-5 Feet Perennial 5-Petaled Flower	
Grevillea (<i>grevillea, spider flower, silky oak, and toothbrush</i>)	G. Banksii, G. Robusta, and G. Rosmarinifolia	Part Sun <i>Height:</i> 8-20 Feet <i>Width:</i> < 8 Feet Cut Flowers Fragrance	
Lantana (<i>shrub verbenas and lantanas</i>)	(L. Camara, L. Lilacina, and L. Trifolia)	Full Sun <i>Height:</i> < 8 Feet <i>Width:</i> < 4 Feet Attracts Birds Aromatic	

Genus	Notable Species	Specifications	
Lavandula (<i>lavender</i>)	L. Angustifolia, L. Dentata, L. Multifida, and L. Stochas	Full Sun <i>Height:</i> 1-3 Feet <i>Width:</i> 1-3 Feet Culinary Herb Lavender Color	
Mahonia	M. Aquifolium and M. Japonica	Part Sun <i>Height:</i> 6-20 Feet <i>Width:</i> 3-5 Feet Pinnate Leaves Edible Berries	
Plumbago (<i>Plumbago and Leadwort</i>)	P. Acuriculata, P. Indica, P. Zeylanica	Part Sun <i>Height:</i> 6-8 Feet <i>Width:</i> 8-12 Feet Lead-colored Trichomes	
Pyracantha (<i>firethorn and pyracantha</i>)	P. Angustifolia, P. Atalantioides, P. Coccinea, and P. Koidzumii	Part/Full Sun <i>Height:</i> <20 Feet <i>Width:</i> 3-6 Feet Thorny Leaves Poisonous Fruits	
Rosemarinus (<i>Rosemary and Anthos</i>)	R. Eriocalyx and R. Officinalis	Full Sun <i>Height:</i> 6"- 8'-0" <i>Width:</i> 2-4 Feet Perennial Pest-Control	
Salvia (<i>Sage</i>)	S. Apiana, S. Officinalis, and S. Leucantha	Part/Full Sun <i>Height:</i> 1-3 Feet <i>Width:</i> 1 Feet Two-Cleft Flower	
Sedum (<i>stonecrops</i>)	S. Acre, S. Album, S. Dasypodium, S. Hispaeicum, S. Reflexum	Part/Full Sun <i>Height:</i> < 3 Feet <i>Width:</i> 1-3 Feet Water-Storing Leaves	
Verbena (<i>garden vervain</i>)	V. Bonariensis, V. Hastata, V. Orcuttiana	Full Sun <i>Height:</i> 1-3 Feet <i>Width:</i> 1-2 Feet	

Drought Tolerant Plants

VINE

Genus	Notable Species	Specifications	
Bougainvillea (<i>buganivilia</i> and <i>paper flower</i>)	B. Glabra	Full Sun Height:8-20 Feet Width:10-40' Pest-Free Toxic Sap	

FLOWERING TREES

Genus	Notable Species	Specifications	
Albizia (<i>Persian silk tree</i> and <i>pink silk tree</i>)	A. Julibrissin	Full Sun Height:20-40' Width:20-40' Bipinnate Leaves	
Cercis (<i>Redbuds</i>)	C. Occidentalis	Part Sun Height:12-30' Width:10-30' Bright Flowers	
Geijera (<i>Australian willow, sheepbrush, and dogwood</i>)	G. Parviflora	Full Sun Height:20-40' Width:12-20' Citrus Scented White Flowers	
Koelreuteria (<i>Chinese flame tree, and golden-rain tree</i>)	K. Bipinnata	Full Sun Height:30-50' Width:30-40' Bloom Summer Live up to 150yrs Grow in Poor Soil	
Tristaniopsis (<i>water gum</i>)	T. Nerifolia	Full Sun Height:30-40' Width:20-30' Dense Branching	

MORE SHRUBS & GROUNDCOVER

Genus	Notable Species	Specifications	
Heteromeles (<i>Toyon, Christmas berry, and California holly</i>)	H. Arbutifolia	Part Sun Height:40-70' Width:20-40'	
Juniperus (<i>Junipers and Cypress</i>)	J. Chinensis, J. Communis, and J. Virginiana	Full Sun Height:8-20 Feet Width:10-40' Pest-Free	

SPECIMEN TREES

Genus	Notable Species	Specifications	
Cedrus (<i>Cedar</i>)	C. Deodara	Part Sun Height:40-70' Width:20-40' Scented Wood Moth-Repellant	
Olea (<i>Olive</i>)	O. Europaea	Part Sun Height:10-20' Width:10-15' Olive Fruit	
Ouercus (<i>Oak</i>)	Q. Robur and Q. Stellata	Full Sun Height:40-60' Width:40-50' Acorn	
Parkinsonia (<i>yellow paloverde, and foothill paloverde</i>)	P. Microphylla	Full Sun Height:15-20' Width:15-20' Slow Growth Branching Tree	
Schinus (<i>American pepper, and Californian pepper tree</i>)	S. Molle	Full Sun Height:25-40' Width:25-40' Culinary Medicinal	

Drought Tolerant Plants

ARTIFICIAL TURF

- *Not allowed in the City's parkways*
- *Front and Street-Side Yards:*
 - A maximum of 15% of artificial turf
 - 10 feet back from a sidewalk,
or 20 feet back from the curb if no sidewalk



Specifications (Recommended)

- Blade height – Min. 1.5 inch
- Style of the fiber, color, and texture should resemble fescue, rye, and other common natural grass blades
- Color of the grass must be green

SAMPLE LAWN TYPES (Warm Season)

Specie	Specifications
Bahia Grass	Full Sun Grows in Poor Soil Course and Thick Good Traffic Tolerance
Bermuda Grass	Full Sun Needs Lots of Mowing Good Traffic Tolerance
Buffalo Grass	Full Sun Tolerates Cold and Hot Temperatures Slow Grower Moderate Traffic Tolerance
St. Augustine Grass	Dappled Shade Requires Low Maintenance Moderate Traffic Tolerance

RECOMMENDED LOW WATER USE PLANT LIST

BOTANICAL NAME	COMMON NAME
<u>Medium to Tall Evergreen Shrubs</u>	
Berberis 'Golden Abundance' or nevinii	Golden Abundance or Nevin Barberry
Carpenteria californica	Bush Anemone
Leonotis leonurus	Lion's Tail
Prunus ilicifolia	Catalina Cherry
Rhamnus californica	California Coffeeberry
Rhus Ovata or Integrifolia	Sugarbush, Lemonadeberry
Rosmarinus officinalis 'Tuscan Blue' or 'Blue Spires'	Upright Rosemary
Westringia fruticosa	False Rosemary
<u>Low Flowering Shrubs & Perennials</u>	
Anigozanthos species & cultivars	Kangaroo Paw
Arctotis hybrid	African Daisy
Callistemon viminalis 'Little John'	Dwarf Bottlebrush hybrid
Encelia californica	California Sunflower
Limonium perezii	Sea Lavender
Penstemon heterophyllus 'Margarita BOP'	Native Penstemon hybrid
Punica granatum 'Chico'	Dwarf Carnation-Flowered Pomegranate
Salvia greggii	Autumn Sage
Santolina species	Lavender Cotton
<u>Ground Covers</u>	
Achillea species	Yarrow
Arctostaphylos 'Pacific Mist'	Pacific Mist Manzanita
Baccharis pilularis 'Pigeon Point'	Coyote Brush hybrid
Dymondia margaretae	Silver Carpet
Erigeron glaucus	Beach Aster
Gazania cultivars	Trailing Gazania
Lantana montevidensis or 'White Lightning'	Trailing Lantana (purple or white)
Rosmarinus officinalis 'Huntington Carpet'	Prostrate Rosemary hybrid
Lantana montevidensis or 'White Lightning'	Trailing Lantana (purple or white)
Lessingia filaginifolia 'Silver Carpet'	Silver Carpet
Teucrium x lucidrys	Wall Germander
<u>Ornamental Grasses (not lawn grasses)</u>	
Bouteloua gracilis	Blue Grama Grass
Festuca californica	California Fescue (green foliage)
Festuca idahoensis	Idaho Fescue (bluish foliage)
Leymus condensatus 'Canyon Prince'	Canyon Prince Wild Rye
Muhlenbergia capillaris	Pink Muhly
<u>Succulents</u>	
Agave 'Mateo'	Mateo's Agave (thornless)
Aloe striata Coral Aloe	
Echeveria elegans	Elegant Hen and Chicks
Hesperaloe parviflora	Red Yucca
Senecio mandraliscae	Blue Chalksticks
<u>Vine</u>	
Hardenbergia violacea	Lilac Vine
<u>Evergreen Canopy and Coniferous Trees</u>	
Acacia stenophylla	Shoestring Acacia
Arbutus 'Marina'	No common name
Pinus torreyana	Torrey Pine
Rhus lancea	African Sumac
<u>Deciduous Flowering Accent Trees</u>	
Brachychiton acerifolius	Australian Flame Tree
Chilopsis linearis	Desert Willow
Cotinus coggygria	Smoke Tree
Parkinsonia x 'Desert Museum'	Palo Verde hybrid