WATER EFFICIENT LANDSCAPE ORDINANCE

Landscape Documentation Package
Full Compliance
Landscapes over 2,500 sq. ft.

City of Wasco
Planning and Community Development Department

764 E St.
Wasco, CA 93280

APPLICABILITY

Use the table below to determine if the Water Efficient Landscape Ordinance applies to your project. Answer the questions in the left-hand column and use the yes or no answers to the right to guide your assessment. If you have any questions about your assessment, please review your project with City planning staff.

Question	Yes	No
1. Does the project require a building permit, plan check or design review from the City?	Answer question #2	Does not apply
2. Is new or rehabilitated landscaping either provided and/or required as part of the building plans or conditions of approval for the project?	Answer question #3	Does not apply
3. Is this a new (residential, commercial, industrial, or institutional) development project with 500 sq. ft. of landscape area?	Applies -Prescriptive Compliance Option if less than 2,500 sq. ft. -Full compliance mandatory for projects equal to or greater than 2,500 sq. ft.	

*If WELO applies to your project and you are subject to full compliance you **must** submit a Landscape Documentation Package. Prescriptive compliance is easier for small projects.

Community Development Department (661) 758-7250 Fax (661) 758-7239
764 E Street, Wasco, CA 93280

Landscape Documentation Package Application Form

I. Submittal Requirements

All items identified below must be included in the application packet. If any items are missing, the application will not be accepted. **ACCEPTANCE OF AN APPLICATION DOES NOT GUARANTEE PROJECT APPROVAL.**

- ❑ Completed Landscape Documentation Application Form
- ❑ Completed Water Efficient Landscape Worksheet (Hydrozone Information Table and Water Budget Calculations: MAWA and ETWU)
- ❑ Soil Management Report
- ❑ Landscape Design Plan (see checklist for requirements)
- ❑ Irrigation Design Plan (see checklist for requirements)
- ❑ Payment of filing fees - $330.00
- ❑ Signed Indemnification Agreement
- ❑ Signed Copyright Agreement

CONSENT OF APPLICANT AND PROPERTY OWNER: The consent of the applicant and property owner, if not the applicant, is required for filing an application for a land use development permit within the City of Wasco. The signatures of the applicant and property owner(s) below constitute consent for filing of this application.

INCOMPLETE APPLICATIONS: The completeness of this application, which includes accompanying plans, shall be subject to the review of the Community Development Department. Applications for action by the Community Development Department, shall be considered incomplete pending a completeness review.

II. General Information

Project Information - (attach additional sheets if necessary)

Project Type (e.g. commercial or residential):_____

Address(es):_____

APN(s):_____ Total Landscape Area:_____

Water Supply type (e.g. potable, recycled, well):_____

Property Owner Information

Name of Property Owner:_____

Address:_____ Email Address:_____

Phone Number:_____ Fax Number (optional):_____

Signature:_____

Applicant Information

Name of Applicant:_____

Address:_____ Email Address:_____

Phone Number:_____ Fax Number (optional):_____

Applicant's Statement:

I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package.

Signature:_____

For Staff Use Only:

Application No.:	Related Files:
Date Received:	Received By:
Fee Amount:	Receipt No.:

City of Wasco
Community Development Department
764 E Street Wasco, CA 93280
(661) 758-7200 phone (661) 758-7239 Fax

CHECKLIST FOR LANDSCAPE DOCUMENTATION PACKAGE SUBMITAL
Commercial and Industrial Projects
(IN COMPLIANCE WITH THE STATE OF CALIFORNIA WATER EFFICIENCY LANDSCAPE ORDINANCE (WELO) AND THE CITY OF WASCO MUNICIPAL CODE)

	Required Elements of the Landscape Documentation Package	
1.	**Completed Application Form**	❑
2.	**Completed Water Efficient Landscape Worksheet**	❑
3.	**Hydrozone Information Table**	❑
4.	**Water Budget Calculations (MAWA & ETWU)**	❑
5.	**Soil Management Report (if not submitted as part of the grading or construction plans)**	❑
6.	**Landscape Design Plan - the landscape design plan must comply with the City of Wasco Municipal Code, the State of California Model Water Efficiency Landscape Ordinance, and at a minimum, shall:** a. Delineate and label each hydrozone by number, letter or other method; b. Identify each hydrozone as low, moderate, high water, or mixed water use. Temporarily irrigated areas of landscape shall be included in the low water use hydrozone for the water budget calculation; c. Include a schedule of plant materials indicating the following: • Botanical and common names; • Size in height; • Size of container; • Growth characteristic: Evergreen, Deciduous, Perennial; • Graphic symbols for each type of material • Location, type and size at planting of all plant materials, area and type of top dressing, and mounding. d. Parking Area Shade Analysis e. Identify recreational areas; f. Identify areas permanently and solely dedicated to edible plants; g. Identify areas irrigated with recycled water; h. Identify type of mulch and application depth; i. Identify soil amendments, type, and quantity; j. Identify type and surface are of water features; k. Identify hardscapes (pervious and non-pervious); l. Identify location, installation details, and 24-hour retention or infiltration capacity of all on-site retention and infiltration of stormwater. On-site stormwater retention is required for all new projects in the City of Wasco. Stormwater best management practices are encouraged in the landscape design plan and examples are provide in the City's Landscape Design and Stormwater Best Management Practices handout. m. Identify any applicable rain harvesting or catchment technologies and their 24	❑

	hour retention infiltration capacity. n. Identify any applicable graywater discharge piping, system components and area(s) of distribution; o. Contain the following statement: *" I have complied with the criteria of the ordinance and applied them for efficient use of water in the landscape design plan"*; and p. Bear the signature of a licensed landscape architect, licensed landscape contractor, landscape designer or any other person authorized to design a landscape.	
7.	**Irrigation Design Plan – the irrigation design plan at a minimum shall include:** a. Location and size of separate water meters for landscape; b. Location, type and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices; c. Static water pressure at the point of connection to the public water supply; d. Flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station; e. Recycled water irrigation systems as specified in Section 492.14 of the State Model Water Efficient Landscape Ordinance http://www.water.ca.gov/wateruseefficiency/landscapeordinance/docs/Title%2023%20extract%20-%20Official%20CCR%20pages.pdf f. The following statement: *"I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the irrigation design plan";* and g. The signature of a licensed landscape architect, certified irrigation designer, licensed landscape contractor or any other person authorized to design an irrigation system.	❑
8.	**Grading Design Plan (if not submitted with construction plans)**	❑
9.	**Certificate of Completion (To be completed after installation prior to Certificate of Occupancy)**	
10.	**Certificate of Installation (To be completed after installation prior to Certificate of Occupancy)** Bear the signature of a licensed landscape architect, certified irrigation designer, licensed landscape contractor or any other person authorized to design an irrigation system.	

ATTACHMENT A: CIT OF WASCO ZONING CODE

17.51.020

C. Landscaping. If landscaping is required and/or proposed, landscape and irrigation plans shall be submitted to the City of Wasco Planning Department prior to or concurrent with building plan submittal. All landscape and irrigation plans shall be compliant with the City of Wasco Water Efficient Landscape Ordinance as reflected in Appendix A of this Title. In addition, the following design standards shall apply to all districts unless superseded by a design district item listed in Sections 17.51.030 through 17.51.060, and or Chapter 17.55.

1. General Landscaping Requirements.

a. All areas within a required setback shall contain living ground cover or a combination of living and nonliving ground coverings. Parking shall not be allowed within the front or street side setback in any zone including mobilehome space setbacks except as provided for in section 10.36.190 or the City of Wasco Municipal Code..

i. Definition. "Living groundcover" means low-growing plants or shrubs that after being planted will grow together to form a minimum of 50% coverage in one year or less.

ii. Definition. "Nonliving groundcover" means forest humus or walk-on bark, rock, decomposed granite and other similar materials. iii. All soil surfaces are to be covered by plant materials or nonliving groundcovers as defined in subsection (C)(1)(a) of this section.

2. Commercial, Industrial and Multi-Family Landscaping

a. Islands of a minimum area of eighty square feet shall be established at a maximum separation of ten continuous parking stalls. The islands shall be landscaped with groundcovers and with a minimum of one fifteen-gallon tree planted in each island. Actual numbers of trees will be based on the size of the project as determined by the planning director.

c. All landscaping as required in this chapter shall be reviewed by the planning director as to the type, density of planting and size of plants intended for use. All landscaped areas shall be permanently maintained in good condition by the property owner.

d. All landscaped areas in commercial, industrial, and multifamily projects shall be surrounded with six-inch high concrete curbing, unless waived by the site plan review committee.

e. All landscaping on public property and parks shall conform to standards adopted by the City of Wasco and Wasco Recreation and Parks District.

f. Buffer planting shall occur along freeways and major arterials in order to visually screen uses and provide noise reduction. The landscaping shall be in addition to screening requirements set forth in this chapter.

2. Trees.

a. Spacing of trees to be variable depending on type and eventual size, but that there be a general minimum standard of one tree with a minimum trunk diameter of two inches at four feet above finished grade at time of planting, for each twenty feet of frontage of a required landscaped setback, exclusive of vehicular site lines.

b. Trees to be used in parking lots shall be of a type that will form a full head on a single trunk, i.e., Chinese Elm, Chinese Pistache, Golden Rain, Valley Oak or other approved species. All trees planted within public right-of-way shall be consistent with the City Street Tree Master Plan.

c. Where trees are planted in paved areas which are unprotected by curbs they shall have a protective tree grate or equivalent device. Tree grates shall be cast iron with a natural finish. A deep root-directing device shall also be used.

d. Landscape setback areas, (excluding driveway approaches, maneuvering areas, and public sidewalks) shall be landscaped. Within this area, trees shall not be planted more than twenty feet apart, and shall not be planted within five feet of any curb, sidewalk or driveway unless a root-directing device is used. No plant that will grow to a height of more than eighteen inches shall be planted in the street right-of-way or with sight triangles unless approved as a street tree consistent with the City Street Tree Master Plan.

3. Shrubs.

a. At least seventy-five percent of shrubs planted shall be of five-gallon minimum size.

b. Shrubs within a required setback shall be spaced in such a way so that at maturity the plants will provide fifty percent ground coverage.

4. Mounding.

a. Mounding shall not be proposed for landscape areas which are ten feet, or less, in width.

b. Mounds shall be compacted prior to planting to prevent excessive settlement.

c. Black plastic shall not be used under wood chips on mounds, or slopes in general.

d. Mounds may not be used within site triangles, or in areas that will create hazards to pedestrians or motorists.

5. Parking Lots.

a. Trees shall be planted in all parking lots at a 1:5 ratio of trees to parking stalls.

b. Such tree planters shall contain approved trees on twenty-foot centers or in such a manner as to have fifty percent shade coverage of the parking lot in ten years.

c. Shrubs and trees to be arranged in such a way as to avoid damage from the front of parked cars extending into the planter areas.

d. All landscaped areas shall be irrigated.

6. Turf.

a. Installation of turf shall be in accordance with the requirements of the City of Wasco Water Efficient Landscape Ordinance as reflected in Appendix A of this Title.

7. Irrigation Plans.

a. Irrigation plans shall be required to be submitted along with landscape plans. All proposed irrigation systems shall be in accordance with the requirements of the State of California Model Water Efficient Landscape Ordinance as reflected in Appendix A of this Title.

8. Residential Landscaping

a. All new residential landscaping shall be installed in accordance with the City of Wasco Water Efficient Landscape Ordinance as reflected in Appendix A of this Title.

b. New front yard landscaping shall include a minimum of two drought tolerant shade trees.

c. A maximum of forty percent of the required front yard setback area may be paved for access to off-street parking or driveway access to off-street parking. An additional maximum of ten percent may be paved for walkways or uncovered patio use.

d. Paved / hardscape courtyards are permitted in the front yard and may exceed the 40% maximum paving requirement, provided that there is a solid barrier preventing vehicular access to the courtyard area. Barrier screening for paved courtyard areas shall be located a minimum of 5 feet behind the back of the sidewalk and shall be no taller than 4 feet. Barrier screening materials shall be limited to natural stone, masonry or block walls, wooden fencing that is stuccoed to match the residence, and/or wrought iron fencing. The courtyard area shall have a minimum of 20% permeable paving materials to allow for water infiltration. Paved areas shall not drain onto adjacent properties. The area between the fence and sidewalk shall be landscaped with drought tolerant plants and ground cover.

d. Turf shall not exceed 25% of the total landscaped area of the lot.

e. All plant materials shall have a WUCOLs water rating of low or very low.

f. Living plant material shall provide coverage of not less than 50 percent of the landscaped area in front yards within one year of planting.

9. Park Strips

a. Parks strips shall be developed in accordance with the City of Wasco Water Efficient Landscape Ordinance, the City of Wasco Subdivision Ordinance and the following standards:

i. Drought tolerant trees shall be planted every 30 feet and shall be drip irrigated.

ii. Drought tolerant ground cover shall be installed in all new park strips. Drought tolerant ground cover shall be either permeable pavers or decomposed granite. Drought tolerant ground cover shall not include bark, gravel or any other material that may be easily relocated outside the park strip area.

WATER EFFICIENT LANDSCAPE WORKSHEET SAMPLE

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.

Reference Evapotranspiration (ETo) _____

Hydrozone # /Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (sq, ft,)	ETAF x Area	Estimated Total Water Use (ETWU)[e]
Regular Landscape Areas							
				Totals	(A)	(B)	
Special Landscape Areas							
				1			
				1			
				1			
				Totals	(C)	(D)	
						ETWU Total	
						Maximum Allowed Water Allowance (MAWA)[e]	

[a] ***Hydrozone #/Planting Description***
E.g
1.) front lawn
2.) low water use plantings
3.) medium water use planting

[b] ***Irrigation Method***
overhead spray or drip

[c] ***Irrigation Efficiency***
0.75 for spray head
0.81 for drip

[d] ***ETWU*** **(Annual Gallons Required) =**
Eto x 0.62 x ETAF x Area
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year.

[e] ***MAWA (Annual Gallons Allowed)*** = *(Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]*
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and 0.45 for non-residential areas.

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	(B)
Total Area	(A)
Average ETAF	**B ÷ A**

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

All Landscape Areas

Total ETAF x Area	(B+D)
Total Area	(A+C)
Sitewide ETAF	**(B+D) ÷ (A+C)**

Reference Evapotranspiration (ETo) Table*													
County and City	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Annual ETo**
KERN													
Arvin	1.2	1.8	3.5	4.7	6.6	7.4	8.1	7.3	5.3	3.4	1.7	1.0	51.9
Bakersfield	1.0	1.8	3.5	4.7	6.6	7.7	8.5	7.3	5.3	3.5	1.6	0.9	52.4
Bakersfield/Bonanza	1.2	2.2	3.7	5.7	7.4	8.2	8.7	7.8	5.7	4.0	2.1	1.2	57.9
Bakersfield/Greenlee	1.2	2.2	3.7	5.7	7.4	8.2	8.7	7.8	5.7	4.0	2.1	1.2	57.9
Belridge	1.4	2.2	4.1	5.5	7.7	8.5	8.6	7.8	6.0	3.8	2.0	1.5	59.2
Blackwells Corner	1.4	2.1	3.8	5.4	7.0	7.8	8.5	7.7	5.8	3.9	1.9	1.2	56.6
Buttonwillow	1.0	1.8	3.2	4.7	6.6	7.7	8.5	7.3	5.4	3.4	1.5	0.9	52.0
China Lake	2.1	3.2	5.3	7.7	9.2	10.0	11.0	9.8	7.3	4.9	2.7	1.7	74.8
Delano	0.9	1.8	3.4	4.7	6.6	7.7	8.5	7.3	5.4	3.4	1.4	0.7	52.0
Famoso	1.3	1.9	3.5	4.8	6.7	7.6	8.0	7.3	5.5	3.5	1.7	1.3	53.1
Grapevine	1.3	1.8	3.1	4.4	5.6	6.8	7.6	6.8	5.9	3.4	1.9	1.0	49.5
Inyokern	2.0	3.1	4.9	7.3	8.5	9.7	11.0	9.4	7.1	5.1	2.6	1.7	72.4
Isabella Dam	1.2	1.4	2.8	4.4	5.8	7.3	7.9	7.0	5.0	3.2	1.7	0.9	48.4
Lamont	1.3	2.4	4.4	4.6	6.5	7.0	8.8	7.6	5.7	3.7	1.6	0.8	54.4
Lost Hills	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
McFarland/Kern	1.2	2.1	3.7	5.6	7.3	8.0	8.3	7.4	5.6	4.1	2.0	1.2	56.5
Shafter	1.0	1.7	3.4	5.0	6.6	7.7	8.3	7.3	5.4	3.4	1.5	0.9	52.1
Taft	1.3	1.8	3.1	4.3	6.2	7.3	8.5	7.3	5.4	3.4	1.7	1.0	51.2
Tehachapi	1.4	1.8	3.2	5.0	6.1	7.7	7.9	7.3	5.9	3.4	2.1	1.2	52.9

HYDROZONE INFORMATION TABLE

Please complete the hydrozone table(s) for each hydrozone. Use as many tables as necessary to provide the square footage of landscape area per hydrozone.

Hydrozone*	Zone or Valve	Irrigation Method**	Area (Sq. Ft.)	% of Landscape Area
	Total			**100%**

**** Hydrozone***
HW = High Water Use Plants
MW = Moderate Water Use Plants
LW = Low Water Use Plants

*****Irrigation Method***
MS = Micro-spray
S = Spray
R = Rotor
B= Bubbler
D= Drip
O = Other

Community Development Department (661) 758-7250
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CERTIFICATE OF COMPLETION

This certificate is filled out by the project applicant upon completion of the landscape project.

PART 1. PROJECT INFORMATION SHEET

Date		
Project Name		
Name of Project Applicant	Telephone No.	
	Fax No.	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

Project Address and Location:

Street Address		Parcel, tract or lot number, if available.
City		Latitude/Longitude (optional)
State	Zip Code	

Property Owner or his/her designee:

Name	Telephone No.	
	Fax No.	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

Property Owner

"I/we certify that I/we have received copies of all the documents within the Landscape Documentation Package and the Certificate of Completion and that it is our responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule."

_____

Property Owner Signature Date

Please answer the questions below:

1. Date the Landscape Documentation Package was submitted to the local agency_____
2. Date the Landscape Documentation Package was approved by the local agency_____
3. Date that a copy of the Water Efficient Landscape Worksheet (including the Water Budget Calculation) was submitted to the local water purveyor_____

PART 2. CERTIFICATION OF INSTALLATION ACCORDING TO THE LANDSCAPE DOCUMENTATION PACKAGE

"I/we certify that based upon periodic site observations, the work has been completed in accordance with the ordinance and that the landscape planting and irrigation installation conform with the criteria and specifications of the approved Landscape Documentation Package."

Signature*	Date	
Name (print)	Telephone No.	
	Fax No.	
Title	Email Address	
License No. or Certification No.		
Company	Street Address	
City	State	Zip Code

*Signer of the landscape design plan, signer of the irrigation plan, or a licensed landscape contractor.

PART 3. IRRIGATION SCHEDULING

Attach parameters for setting the irrigation schedule on controller per State Ordinance Section 492.10.

PART 4. SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE

Attach schedule of Landscape and Irrigation Maintenance per State Ordinance Section 492.11.

PART 5. LANDSCAPE IRRIGATION AUDIT REPORT

Attach Landscape Irrigation Audit Report per State Ordinance Section 492.12.

PART 6. SOIL MANAGEMENT REPORT

Attach soil analysis report, if not previously submitted with the Landscape Documentation Package per State Ordinance Section 492.6.

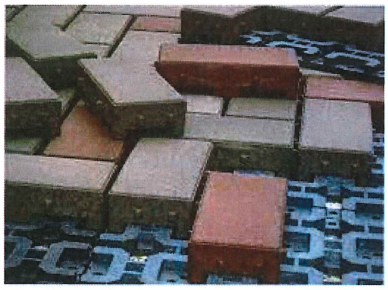
Attach documentation verifying implementation of recommendations from soil analysis report per State Ordinance Section 492.6.

SAMPLES OF DROUGHT TOLERANT LANDSCAPING MATERIALS

Silver Carpet *(Dymondia margaretae)* - Makes a flat, very drought tolerant ground cover and good lawn replacement.

Woolly Thyme *(Thymus pseudolanuginosus)* - Best as a small area ground cover or filler between stepping stones. Will sprawl over small rocks or over ledges.

Creeping Thyme *(Thymus praecox arcticus)* - Best as ground cover in small spaces and is very low maintenance.



Flagstone, Pavers, Permeable Pavers

Decomposed Granite

Artificial Turf

City of Wasco Street Tree List

Quercus buckleyi/Texas Red Oak

Growth Rate: Moderate **Drought Tolerant:** Yes

Root Damage Potential: Low **Foliage:** Deciduous

Application: Street, Parking, Park

Characteristics: Susceptible to caterpillars, borer, aphids, scales, leaf miner and insect galls, anthracnose, canker, leaf spot, powdery mildew and root rot. Can grow up to 65 feet in height.

Geijera parviflora/Australian Willow

Growth Rate: Moderate **Drought Tolerant:** Yes

Root Damage Potential: Low **Foliage:** Evergreen

Application: Street, Parking

Characteristics: Resistant to oak root fungus. Dry fruit litter. Grows up to 30 feet in height.

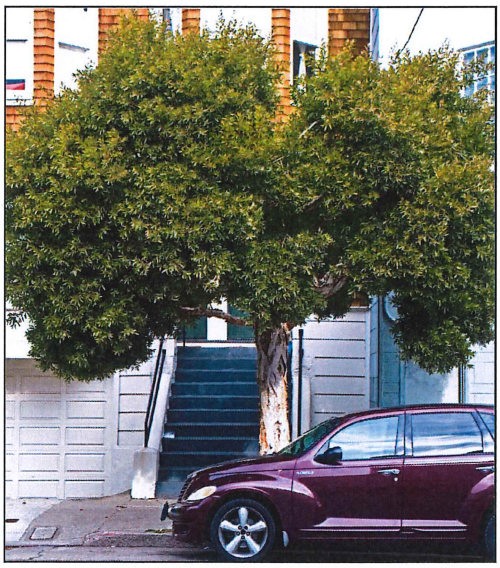
Pistacia chinensis/Chinese Pistache

Growth Rate: Moderate **Drought Tolerant:** Yes

Root Damage Potential: Low **Foliage:** Deciduous

Application: Street, Parking, Park

Characteristics: Lifespan of 150+ years. Susceptible to Root Rot and Verticillium. Resistant to Oak Root Fungus. Can grow up to 65 feet in height.



Melaleuca quinquenervia/Cajeput Tree

Growth Rate: Moderate **Drought Tolerant:** Yes

Root Damage Potential: Low **Foliage:** Evergreen

Application: Street, Parking

Characteristics: Susceptible to phytophthora and root rot. Dry fruit litter. Grows up to 35 feet in height.

City of Wasco Street Tree List

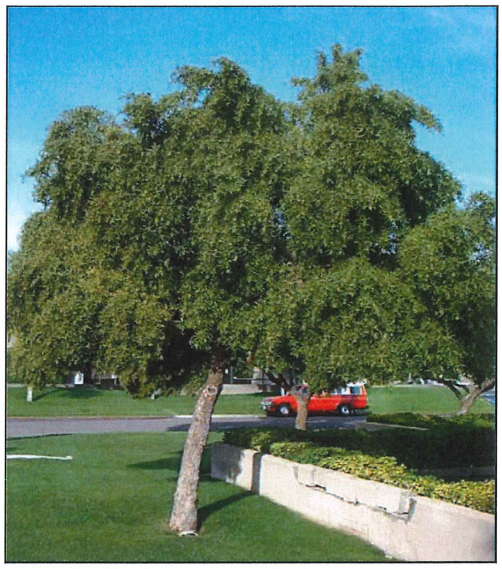
Arbutus Marina/Marina Madrone

Growth Rate: Slow **Drought Tolerant:** Yes

Root Damage Potential: Low **Foliage:** Evergreen

Application: Street, Parking, Park

Characteristics: Susceptible to scales & thrip, anthracnose, phytophthora, root rot and rust. Resistant to oak rot fungus. Wet fruit litter. Grows between 40-50 feet in height.



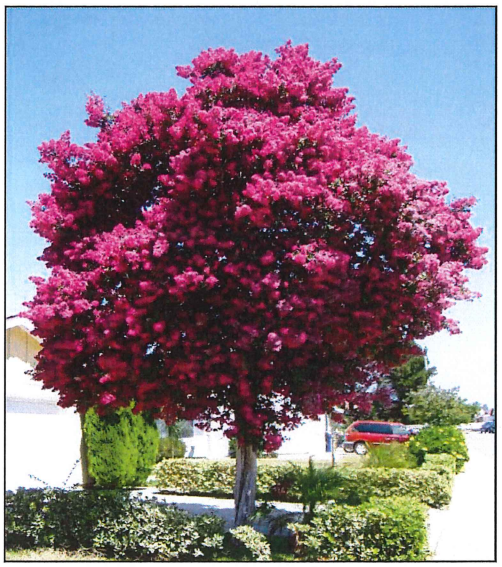
Rhus lancea

Growth Rate: Moderate **Drought Tolerant:** Yes

Root Damage Potential: Low **Foliage:** Evergreen

Application: Street, Parking, Park

Characteristics: Susceptible to root rot and verticillium. Dry fruit litter. Grows up to 25 feet in height.



Lagerstroemia indica/Crape Myrtle

Growth Rate: Moderate **Drought Tolerant:** Yes

Root Damage Potential: Low **Foliage:** Deciduous

Application: Street, Parking, Park

Characteristics: Susceptible to aphids, powdery mildew and sooty mold. Resistant to Texas root rot. Dry fruit litter. Grows up to 25 feet in height.