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CALIFORNIA
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Water and the *New* California Landscape

An integrated approach to creating attractive,
resource-efficient landscapes

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Plan Today for Tomorrow & Beyond the Drought

- What are the driving forces behind the New California Landscape?
- What principles & practices do we need to know?
- What is the New California landscape?
- What are some available resources?

Driving Forces

California Constitution

- Section 2 of Article X specifies:
 - **The right to use water is limited** to the amount reasonably required for the beneficial use to be served, and
 - **The right does not and shall not extend to waste or unreasonable method of use.**

Building Codes & Regulations

Common Interest Developments / HOAs

“... a provision of the governing documents shall be void and unenforceable if they:

- Prohibit or include conditions that have the effect of prohibiting the use of low water-using plants as a group.
- Shall not prohibit an association from applying landscaping rules... must comply with subdivision a.”

Water Conservation in Landscaping Act of 2006 (AB 1881)

- Local agencies required to adopt updated Model Water Efficient Landscape Ordinance (or develop their own as effective as ordinance) by January 1, 2010.
 - Applies to new and rehabilitated landscapes*
 - Permitted public/commercial and private development projects over 2,500 sq. ft.
 - Permitted homeowner projects over 5,000 sq.ft.
- * Refer to your jurisdiction to determine applicable ordinance and to the California Department of Water Resources for MWELO.

Traditional Landscapes

- Majority of potential water savings in urban landscapes relates to landscape water use
- Over-reliance on high water-use plants
- Irrigation system inefficiencies
- Poorly planned and installed = Difficult to maintain
- Lack of water management strategies
- Not resource efficient
- We must be the catalysts of change

Traditional Landscapes

Traditional landscaping can damage the environment

- Consumes fossil fuels
- Contributes to soil, air, and water pollution
- Burdens landfills
- Requires more water and maintenance



Traditional



River-Friendly



Plants & Landscape Irrigation Challenges

- Different type of plants
- Different stages of maturity
- Different sizes / heights
- Varying planting density
- Varying slopes
- Varying soil types

7 Principles Of River-Friendly Landscaping

An integrated approach to designing, installing, & maintaining landscapes:

1. Nurture the Soil
2. Landscape Locally
3. Create Wildlife Habitat
4. Landscape for Less to the landfill
5. Conserve Energy
6. Protect Water & Air Quality
7. Conserve Water



1. Nurture the soil



- Probe the soil – See, Smell, Feel
- Analyze the soil
- Feed soils naturally / avoid synthetic, quick release fertilizers
- Protect soil from erosion & compaction
- Use organic mulch on soil surface – wood chips, leaves, compost



2. Landscape Locally



- Evaluate climate, exposure, & topography
- Test drainage
- Consider the potential for fire / “firescaping”
- Use local plant communities as models

Invasive Species

- Do not purchase
- Do not plant
- Remove and replace with climate-appropriate plant

Big Periwinkle
Vinca major



Pampas Grass
Cortaderia selloana

English Ivy
Hedera Helix





3. Create Wildlife Habitat



- Diversify & choose California low-water-use natives first
- Provide water & shelter
- Provide year-round food sources
- Reduce the use of pesticides
- Conserve or restore natural areas & wildlife corridors



4. Landscape for Less to the Landfill



- Select appropriate plants
- Recycle, reuse, repurpose
- Grasscycle
- Prune selectively & properly
- Separate plant debris from other materials
- Produce mulch and compost on site from plant material



Give Plants Room to Grow



Day of planting

After 7 months



Regional Water Authority
Water-Smart Garden Makeover
Contest Winner, Carmichael, CA

The Mature Landscape



1-1/2 years later

5. Conserve Energy



- Avoid unnecessary outdoor lighting
- Light for safety & security
- Use deciduous trees to shade western facing buildings and pavement
- Reduce the heat island effect: Shade paved areas
- Shade air conditioners

6. Protect Water & Air Quality



- Minimize stormwater runoff
- Include bioswales & green roofs
- Reclaim & reuse water
- Educate yourselves & others
- Maintain a watershed perspective



What Is a “Watershed”?

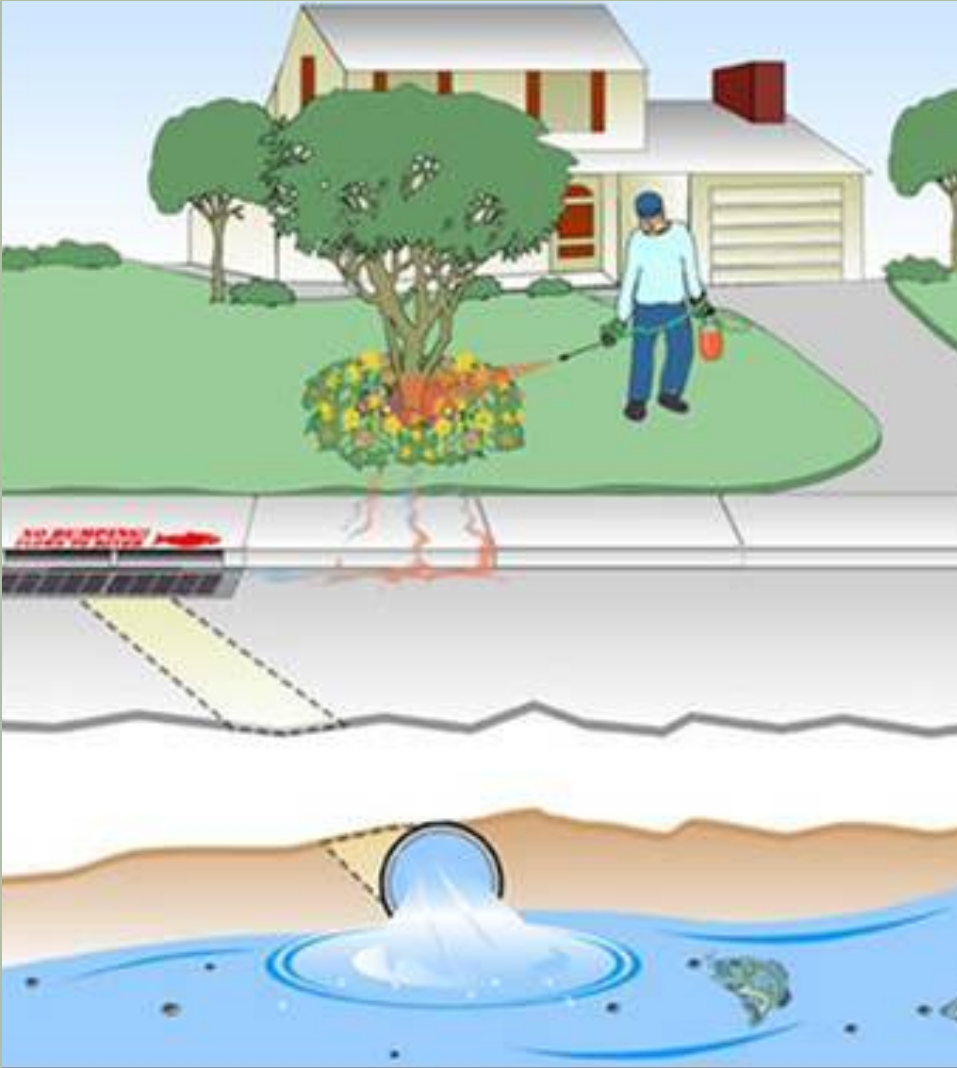
An area of land where all of the water that is under it or drains off of it goes into the same place.



Produced by Lane Council of Governments

U.S. Environmental Protection Agency

The Link Between Wastesheds & Watersheds



- Water from irrigation & rainfall washes pesticides, fertilizers, & other contaminants into gutters & storm drains
- Water in many storm drainage systems is not treated
- Polluted runoff flows into creeks & rivers

Adopt Integrated Pest Management Practices (IPM)

- Goal: Solve pest problems with least risk to humans & environment
- Use information about pest & landscape to prevent & solve problems
- Prevent pest problems by changing landscape so pest cannot survive
- More than just using low-hazard pesticides
- Use integrated approach to management

www.ipm.ucdavis.edu



The screenshot displays the UC IPM Online website interface. At the top, the header reads "UNIVERSITY OF CALIFORNIA AGRICULTURE & NATURAL RESOURCES UC IPM Online Statewide Integrated Pest Management Program". A navigation menu includes links for "What is IPM?", "Identify & Manage Pests", "Research", "Publications", "Training & Events", "Links", "About Us", "Contact Us", and "Subscribe". The main content area is divided into several sections: "Solve your pest problems with UC's best science", "Announcements" (with a link to "Upcoming workshops: Train-the-trainer"), "What's New" (listing "Pest Alert! Brown Marmorated Stink Bug (BMSB)", "Green Bulletin Newsletter: August 2012 issue", "Updated Pest Management Guidelines: Peppermint, Cucurbits", and "New Pest Notes: Deer Mouse, Black Scale"), "QUICK LINKS" (including "Newsletters", "Recursos en español", "Online training", "Weather, models, & degree-days", and "Subscribe (RSS)"), and four featured pest categories: "Home, Garden, Turf & Landscape Pests" (circled in red), "Agricultural Pests", "Natural Environment Pests", and "Exotic & Invasive Pests". Each category is accompanied by a representative image. The footer contains a disclaimer and contact information.

Low-Impact Development (LID) Stormwater Management

Goal: To mimic a site's pre-development hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source



7. Conserve Water



- Utilize rebate & incentive programs
- Select low-water-use CA natives & climate-appropriate, & drought-tolerant plants



Definitions

Low-water-use plants:

Plant species whose demonstrated water needs are compatible with local climate and soil conditions such that supplemental irrigation is not required to sustain the plant, once established.

Drought-tolerant plants:

Once established, plants can survive on natural precipitation with infrequent watering, or can withstand repeated dry periods and recover from repeated wilting.

Minimize or Remove Lawn



← Is this reasonable?

Is this functional? ↓



Prevent Runoff

No turf on:

- Slopes
- Irregular Shapes
- Narrow Medians
- Parking Strips



Utilize High Efficiency Irrigation & Water Catchment

- Install efficient, climate-based irrigation controllers
- Install irrigation sub-meter
- Rain barrels & rain gardens
- Maintain and monitor!



Conserve Water

Use alternatives to traditional turf species

“Mow Free” Fescue



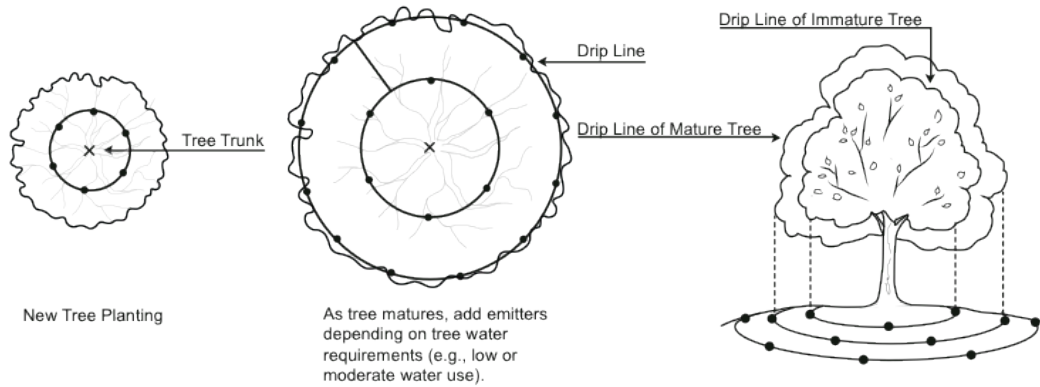
Install efficient irrigation systems



Irrigation: Roberts Landscaping
(Photo on right)

TREE EMITTERS - EXAMPLE PLACEMENT

●—● In-line / Dripperline Emitters

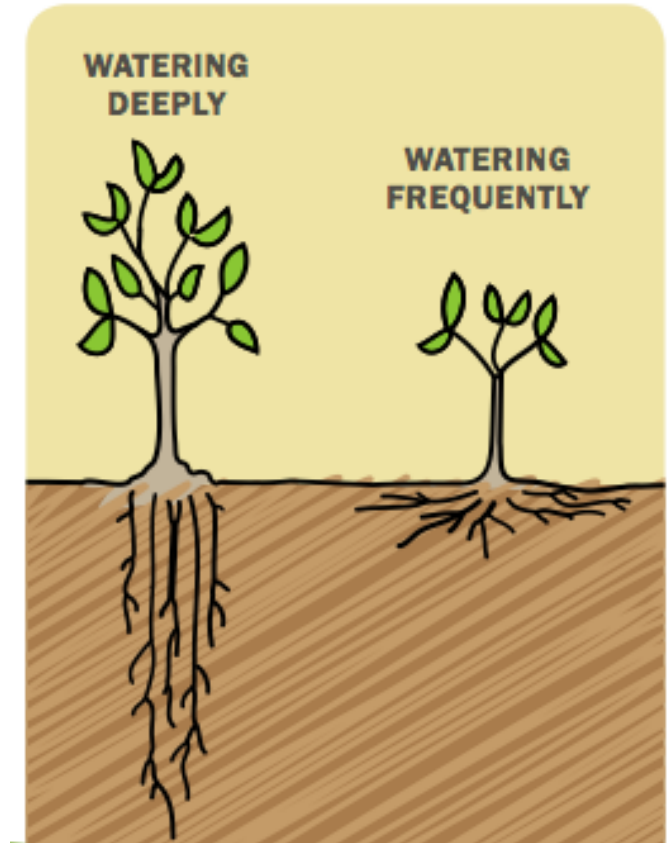
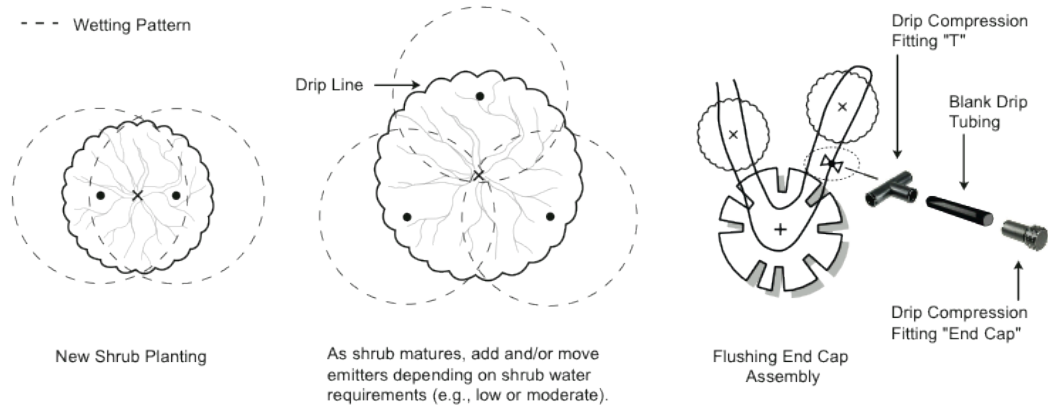


NOTE: - The spacing and number of emitters are examples. - Specific spacing and number of emitters will depend on plant size at installation, plant water requirements, soil type, and emitter flow rate.

SHRUB EMITTERS - EXAMPLE PLACEMENT

● Point-Source Emitters

- - - Wetting Pattern



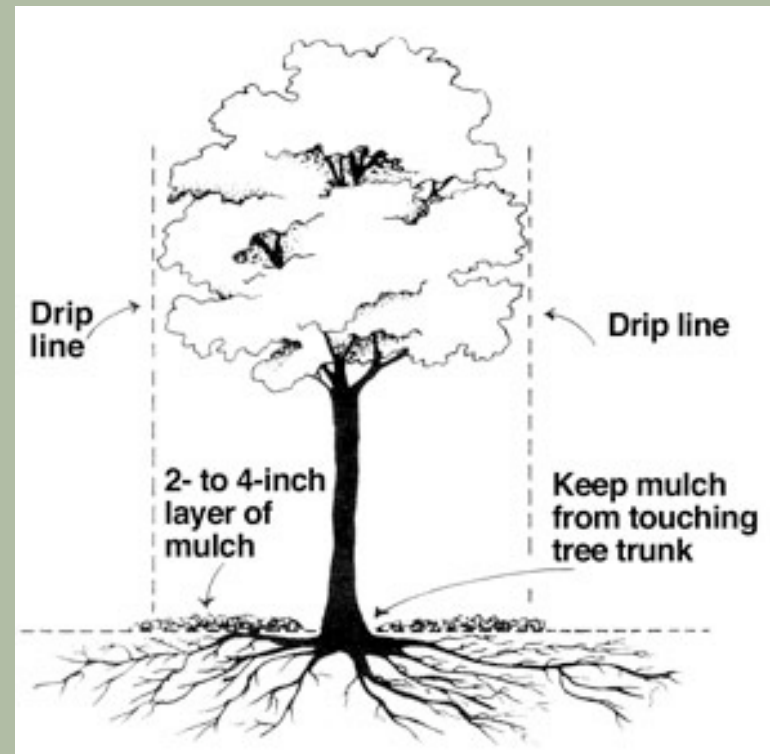
Utilize Mulch

- Utilize local, recycled, organic mulch
- Moderate soil temperature
- Reduce weeds that compete for resources
- Reduce evaporation, retain soil moisture



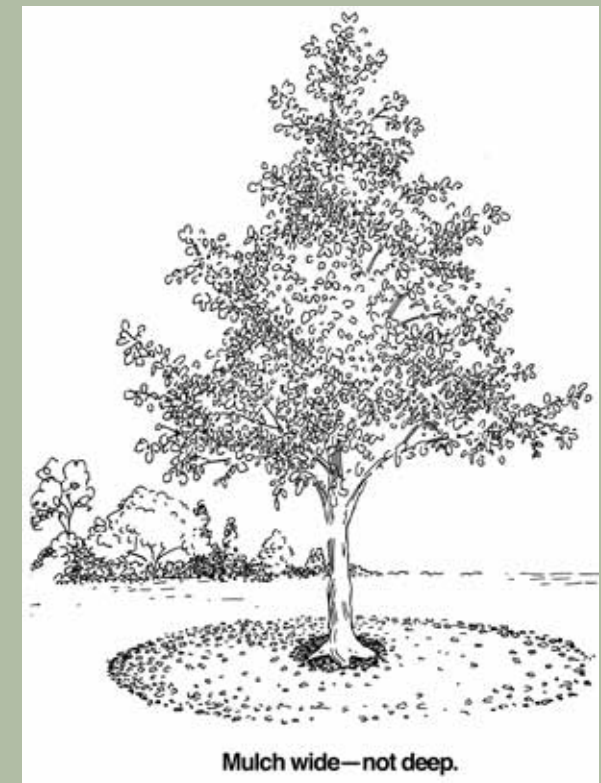
Proper Mulching

Improper =
“Mulch
Volcanoes”



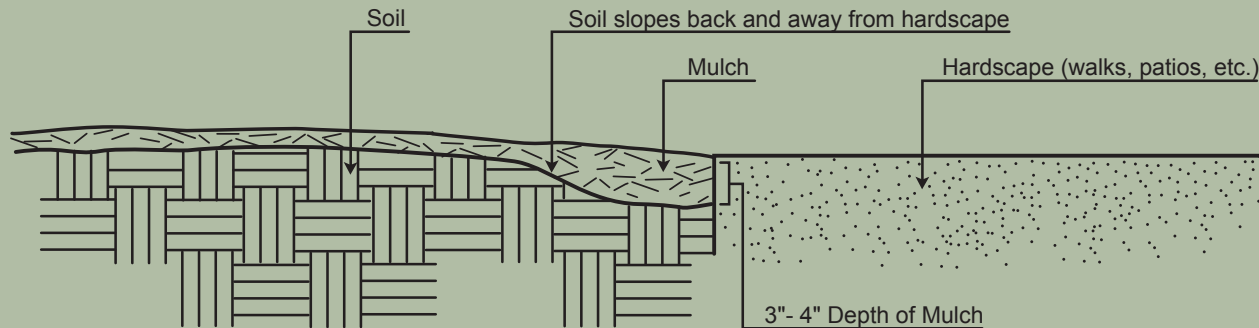
Courtesy International
Society of Arboriculture

Proper = Wide



How to Apply Mulch & Reduce Its Movement

MULCH



NOTE:

To prepare for the application of mulch, move soil that is next to hardscape back approximately one foot toward the planting area as shown above.

Soil is to slope up and away gradually from hardscape toward the planting area so the finished grade of the soil adjacent to hardscape is lower than hardscape to allow for the application of three-to-four inches of wood mulch.

When wood mulch is applied to the soil surface, it should be level or nearly level with the hardscape. This helps to avoid movement of mulch and soil onto the hardscape and into the street and drainage system.

Mulch is not to be in contact with the trunks and branches of trees and shrubs.

Making the Transition from a Traditional to the New CA Landscape

- Assess your site – Determine soil type, direction property faces (sun exposure), drainage, & topography.
- Identify wants, needs, must haves, & how you plan to use your landscape.
- Determine your budget.
- Create a plan – Can be as simple as a sketch.
- Decide your priorities – Do you want to do in phases or all at once.
- Be flexible & open to adjustments along the way.
- Utilize resources & seek professional help if needed.

The *New* California Landscape

- Promotes a balance between urban landscapes and the environment
- Enhances diversity & beautiful aesthetic qualities
- Offers added value, cost-effectiveness, resource efficiency
- Helps to educate and persuade us to upgrade & become stewards of our environment
- Provides example designs that can be adapted based on site-specific conditions

Principles Demonstrated in the New California Landscape

River-Friendly Landscaping's integrated approach:

- Ways to minimize negative impacts on water & air
- Use of water & other resources efficiently
- Include water-efficient irrigation systems, scheduling, & management
- Practices that nurture the soil
- Selection of climate-appropriate plants, including low-water-use CA natives, drought-tolerant & UC Arboretum All-Star plants
- Proper placing, spacing, & installation of plants

Four Themes

www.ecolandscape.org

<p>RIGHT AS RAIN 1</p> <ul style="list-style-type: none"> Raingarden Ultra sustainable Stormwater management Resource efficient 		<p>2 NEAT AND PETITE</p> 	<p>Small scale landscape Emphasis on recycled materials</p>
SHOW ME MORE			
<p>Worthy of Natural Wildlife Federation designation — Provides water, shelter, food & hiding spots for wildlife</p> <p>Family-friendly habitat</p> <p>Water feature</p> <p>Edible garden</p> <p>Composting, recycling</p>	<p>3 WHOLESOME HABITAT</p> 	<p>4 RECREATION DESTINATION</p> 	<p>Sophisticated</p> <p>Perfect for entertaining & parties</p> <p>Recreation / horseshoe pit</p> <p>Carefree landscape</p>

Eco-Friendly Landscape Design Plans for The New California Landscape

Drought-tolerant
Low water-use
Easy care
Low maintenance
Save money, reduce pollution & waste

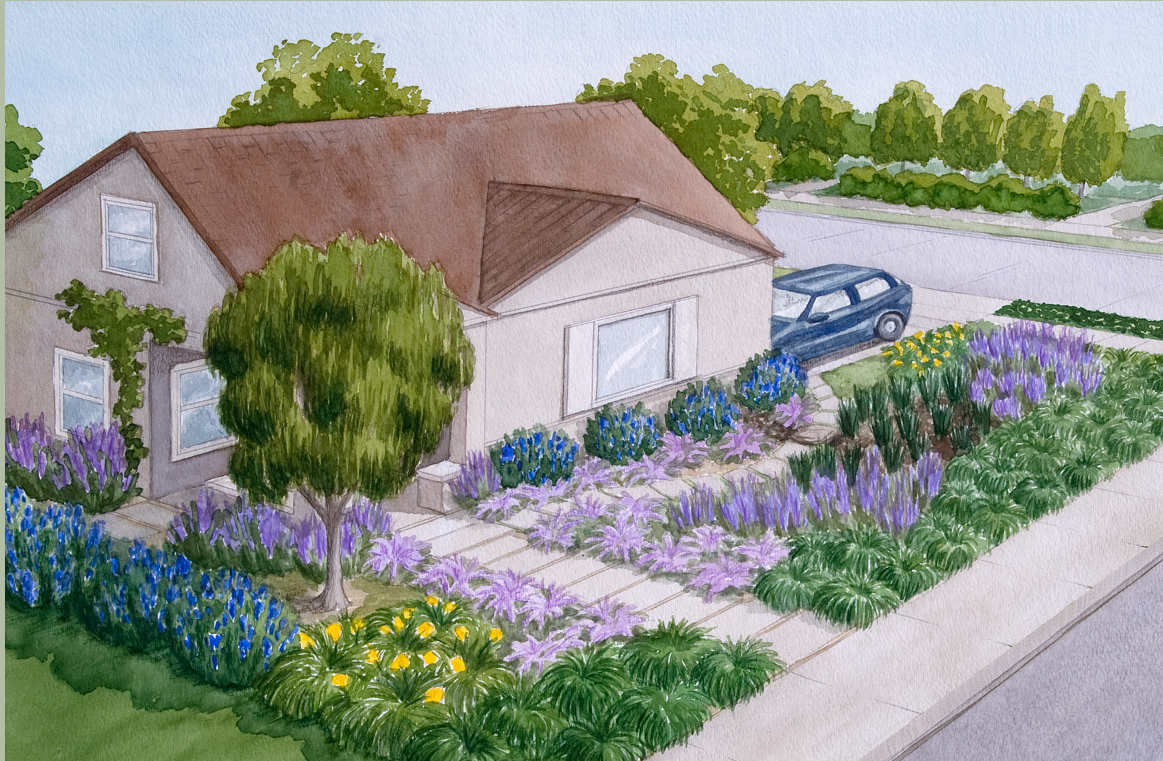
Tell me more!

FREE For Sacramento region residents

How can I participate?

Click on one of the landscapes above to learn

Right as Rain



- Capture and manage water on site
- Rain garden & rain chains
- Dry creek bed
- Permeable materials
- Meadow-like garden, year-round color

Wholesome Habitat



- Worthy of National Wildlife Federation designation -- Provides water, shelter, & food for wildlife
- Variety of features for the entire family
- Connects children with nature
- Edible gardens
- Abundance of textures & colors

Recreation Destination



- Something for everyone
- Sophisticated style
- Front yard's a "mini" park-like setting
- Entertainment extravaganza back yard
- Vibrant, colorful plant palette

Neat & Petite



- Small scale, bountiful beauty
- Lower maintenance
- Tidy, low-water-use plants
- Easy-care, resource-efficient lawn
- Recycled & repurposed materials

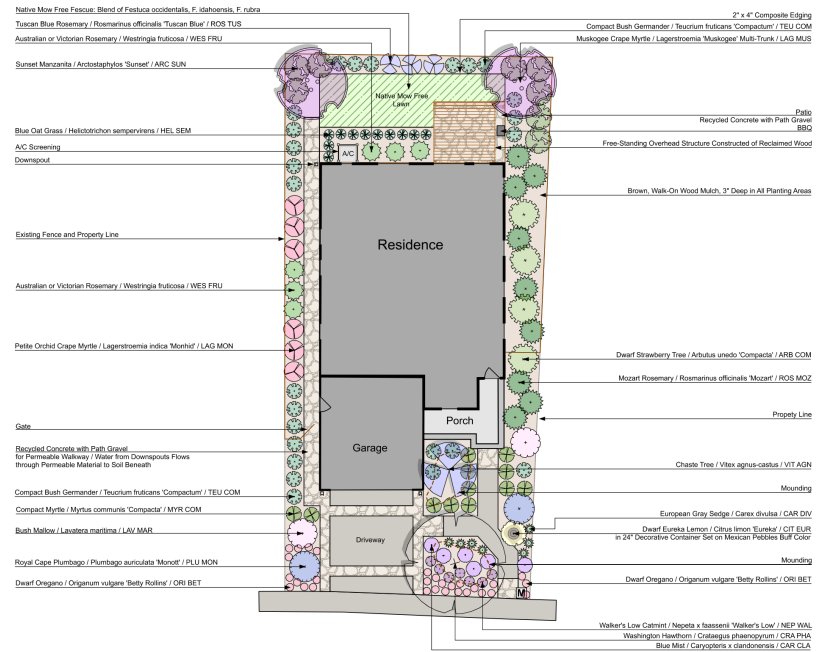
Note: The following slides for Neat & Petite include documents & information that are provided for each plan.

Neat & Petite

- ## Landscape Plan
- To scale
 - Can be down-loaded & printed
 - Project notes
 - Maintenance notes

Notes:

Refer to Project Notes for more information about this Conceptual Landscape Plan.
 Plants were specifically chosen and placed based on mature size.
 Plants with the same water and sun exposure requirements are grouped together and are on the same zone (value).
 If plant substitutions are made, select plants with the same cultural requirements and mature size.



Please note:

The information presented is provided as a public service. This information is not a substitute for the exercise of sound judgement in particular circumstances, and is not intended as recommendations for particular products or services.

This design, project notes, diagrams, resources, and any other information provided herein are for informational and illustration purposes only and in no way are they to be interpreted as construction details or specifications.

A site-specific design should be prepared by a qualified landscape designer and irrigation designer prior to any landscape installation. When hiring contractors to install a landscape or irrigation plan, contract with professionals who are licensed and insured for the work to be performed.

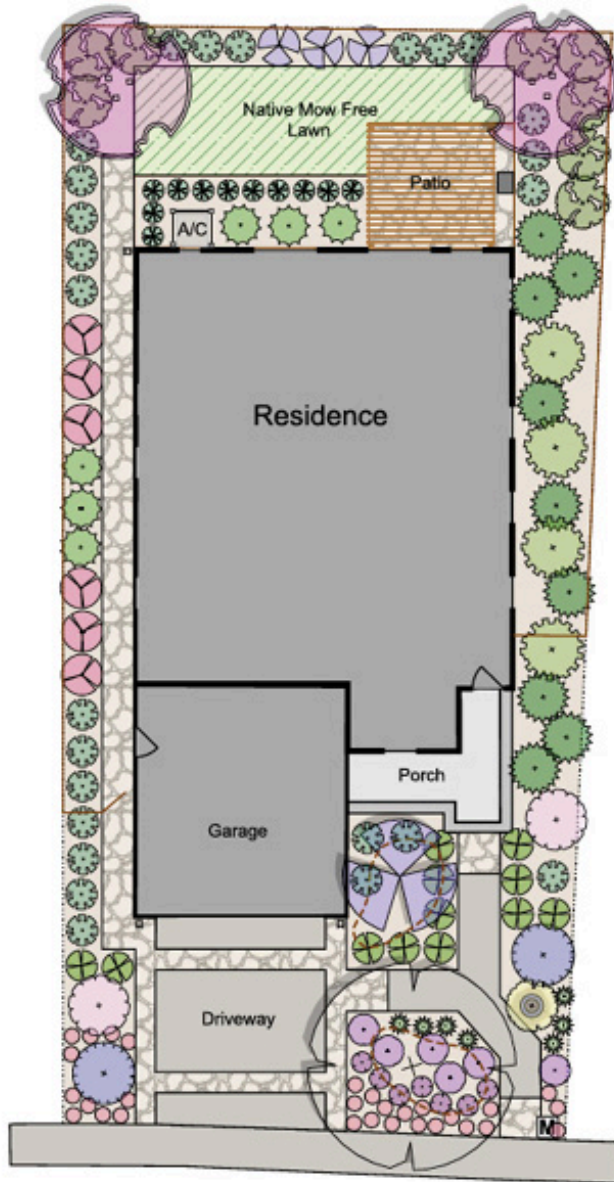


SHEET 1 OF 2	DATE: OCTOBER 2013	PROJECT: Neat & Petite The New California Landscape	SHEET DESCRIPTION: Conceptual Landscape Plan For Informational and Illustration Purposes Only	
	DESIGNER: M.P. DRAWN BY: E.L.C. CHECKED BY: E.L.C. SCALE: Not to scale			

NEAT & PETITE



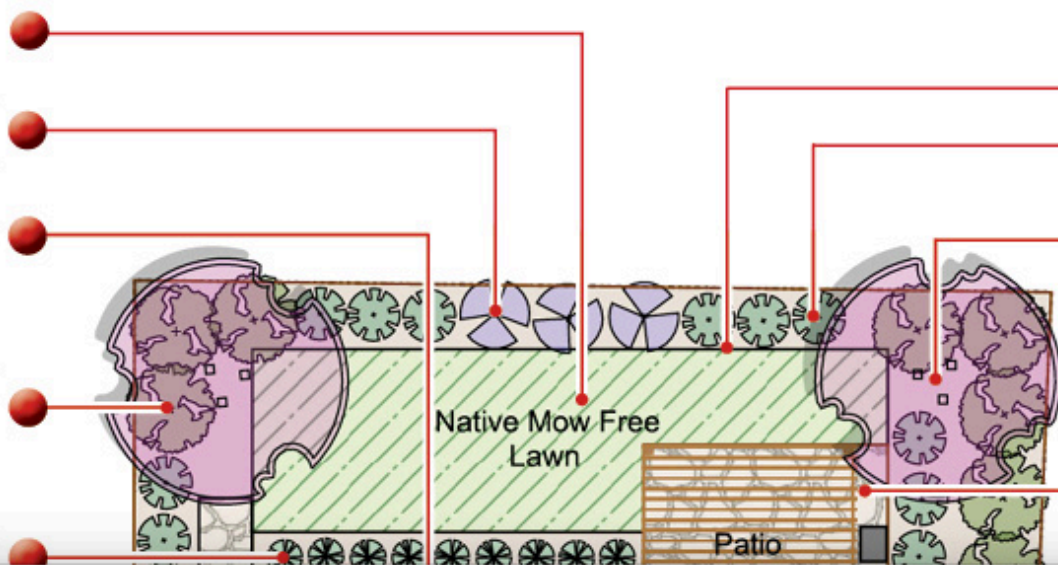
**Guided tour with designer
Cheryl Buckwalter**



NEAT & PETITE

Click to see plants & features

- Native Mow Free Fescue:
Blend of Festuca occidentalis,
F. idahoensis, F. rubra / LAWN
- Tuscan Blue Rosemary /
Rosmarinus officinalis 'Tuscan
Blue' / ROS TUS
- Australian or Victorian
Rosemary /
Westringia fruticosa / WES FRU
- Sunset Manzanita /
Arctostaphylos 'Sunset' /
ARC SUN
- Blue Oat Grass /
Helictotrichon sempervirens /
HE

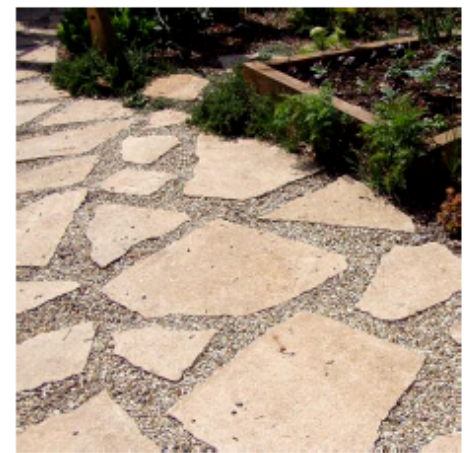


- 2" x 4" Composite edging
- Compact Bush Germander /
Teucrium fruticans
'Compactum' / TEU COM
- Muskogee Crape Myrtle /
Lagerstroemia 'Muskogee'
multi-trunk / LAG MUS
- Patio recycled concrete
with path gravel

www.ecolandscape.org/new-ca/images/int_land/links/recycled_concrete.pdf

standing overhead
structure constructed of
red med wood

RECYCLED CONCRETE PATHS AND PATIO



Walkway with Rock in Joints



Permeable Recycled Concrete Path

mulch, walk-on wood mulch,
4" deep in all planting

- Australian or Vi
Rose
Westringia fruticosa / WE
- Petite Orchid Crape M
Lagerstroemia Indica 'Mo
LAG

f Strawberry Tree / Arbutus
o 'Compacta' / ARB COM

Plant Profiles

- 75 Plant Profiles for entire project
- In addition to general maintenance notes, profiles provide species-specific information

Botanical Name: <i>Vitex agnus-castus</i> Common Name: Chaste Tree <i>Vye-tehks ahg-noos-ka-stuhs</i>	TREE
 <p>Spring</p>	 <p>Summer</p>
 <p>Fall</p>	 <p>Winter</p>
<p>Family: Lamiaceae Origin: Mediterranean to Asia central, coastal & streambanks Climate Zone: USDA 6-10 Sunset 4-24 H1-2 Mature Height: 15-25 feet or 8-10 feet Mature Width: 15-20 feet or 8-10 feet Plant Type: Deciduous Growth Habit: Upright, multi-branching Growth Rate: Fast Flower Color/Details: Fragrant tiny lavender-blue in spikes at branch ends and leaf joints, 7-8" long Flower Season: Summer to Fall Bark: Grayish Fruit: Tiny seed pods persist into winter Foliage: 5-7 leaves in a fan, paler green above, grayish white below, aromatic Use: As a small tree or large shrub, shrub border, courtyard, or specimen, gray garden, container Floral: May be used in flower arrangements Wildlife/Beneficials: Attracts butterflies, native and honeybees, hummingbirds, & many other birds Deer Resistant: Yes Fire Resistant: Yes Medicinal Uses/Edible: Traditional female herb, seeds harvested in winter; see herbal references Adverse Factors: None known</p>	<p>Soil: Well drained Exposure: Full sun, loves heat Water Requirements: Low to moderate, plants are very drought tolerant WUCOLS Water Needs: L L L M M M UC Davis Arboretum All-Star: No Description: Deciduous multi-trunk shrub or small tree with a soft lacy look, magnificent color in late summer, pleasant scented flowers & leaves. May look messy in late winter when seed pods are ravaged by birds and wind. Maintenance: Prune established shrubs high for a small shade tree. Deadhead flower spikes after blooming to encourage more blooms. In spring cut out dead wood and shorten last year's flower branches. Essentially pest free. Hardy to 0°F.</p>
	 <p>#1 Nursery Container</p>

Plant List

Neat and Petite
The New California Landscape

Code	Botanical Name	Common Name	Qty.	Size	Remarks	Water Use
	Trees					
CRA PHA	<i>Crataegus phaenopyrum</i>	Washington Thorn	1	#15	20' T / W	Moderate
CIT EUR	<i>Citrus limon</i> 'Eureka'	Dwarf Eureka Lemon	1	#5	6-10' T / 4-5' W	Moderate
LAG MUS	<i>Lagerstroemia indica</i> 'Muskogee' Multi-Trunk	Muskogee Crape Myrtle	2	#15	15-20' T / 15' W	Low
VIT AGN	<i>Vitex agnus-castus</i>	Chaste Tree	1	#15	15-25' T / 15-20' W	Low
	Shrubs					
ARB COM	<i>Arbutus unedo</i> 'Compacta'	Dwarf Strawberry Tree	4	#5	6-8' T / W	Low
ARC SUN	<i>Arctostaphylos</i> 'Sunset'	Sunset Manzanita	8	#5	4-5' T / 4-6' W	Low
CAR CLA	<i>Caryopteris x clandonensis</i>	Blue Mist Bluebeard	6	#1	3-4' T / W	Moderate
LAG MON	<i>Lagerstroemia indica</i> 'Monhid'	Petite Orchid Crape Myrtle	6	#5	5' T / 4' W	Low
LAV MAR	<i>Lavatera maritima</i>	Mediterranean Tree Mallow	2	#5	6' T / W	Low
MYR COM	<i>Myrtus communis</i> 'Compacta'	Compact Myrtle	12	#5	2-3' T / W	Low
PLU MON	<i>Plumbago auriculata</i> 'Monott'	Royal Cape Plumbago	2	#5	5' T / 6-8' W	Moderate
ROS MOZ	<i>Rosmarinus officinalis</i> 'Mozart'	Mozart Rosemary	9	#1	3' T / 6' W	Low
ROS TUS	<i>Rosmarinus officinalis</i> 'Tuscan Blue'	Tuscan Blue Upright Rosemary	3	#1	6' T / 4-5' W	Low
TEU COM	<i>Teucrium fruticans</i> 'Compactum'	Compact Bush Germander	25	#1	3' T / W	Low
WES FRU	<i>Westringia fruticosa</i>	Australian or Victorian Rosemary	6	#5	4-6' T / 5-8' W	Low
	Perennial					
NEP FAA	<i>Nepeta X faassenii</i> 'Walker's Low'	Catmint	7	#1	1.5-2' T / W	Moderate
ORI BET	<i>Origanum vulgare</i> 'Betty Rollins'	Dwarf Oregano	36	#1	6" T / 1-2' W	Moderate
	Ornamental Grass					
CAR DIV	<i>Carex divulsa</i>	Berkeley Sedge	7	#1	2' T / W	Moderate
HEL SEM	<i>Helictotrichon sempervirens</i>	Blue Oat Grass	11	#1	2-3' T / W	Low
	Turf					
LAWN	90 / 10 Tall Fescue Delta Bluegrass Co.	Turf			per sq. ft.	

Neat & Petite

Irrigation Plan

- To scale
- Can be downloaded & printed
- Project notes
- Summer watering schedule
- Maintenance & how to “grow the system”

Irrigation Legend

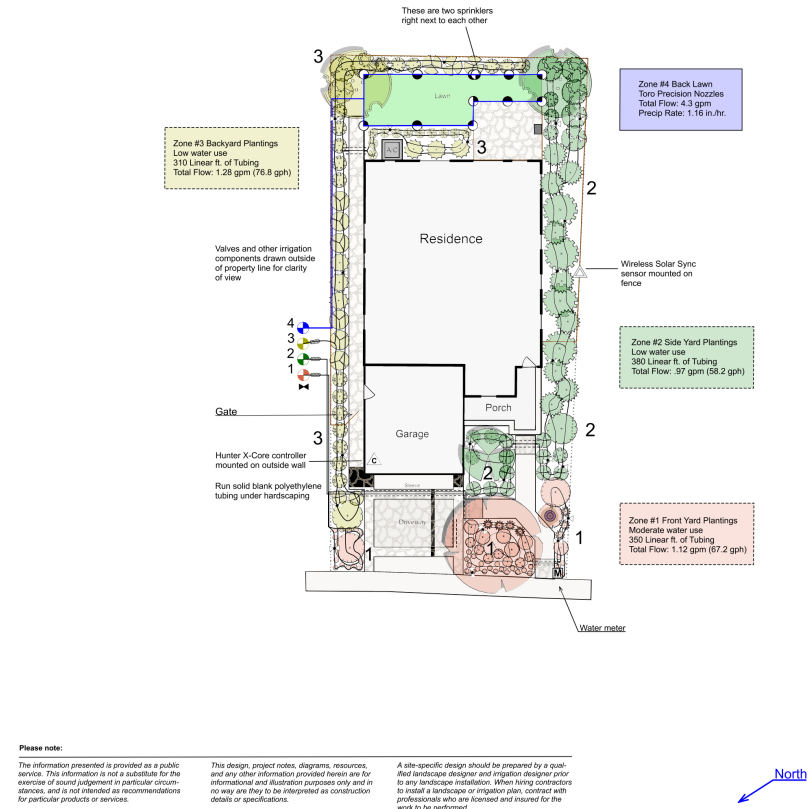
Quantity	Symbol	Description	Pressure	Flow	Radius
2	☼	Toro O-12H - 1806-SAM-PRS	30 psi	0.74 gpm	12 ft
4	☼	Toro O-12Q - 1806-SAM-PRS	30 psi	0.37 gpm	12 ft
2	☼	Toro O-8H - 1806-SAM-PRS	30 psi	0.33 gpm	8 ft
4	☼	Toro O-8Q - 1806-SAM-PRS	30 psi	0.17 gpm	8 ft
Meters/Pumps					
1	Ⓜ	5/8 inch meter			
Control Valves					
4	Ⓜ	Hunter ASV-101			
Y-Strainers / Filters					
3	Ⓜ	Rain Bird PRF-075-RBY			
Irrigation Accessories					
1	Ⓜ	Hunter WIRELESS SOLAR SYNC			
1	Ⓜ	Hunter XC-4500			
22	Ⓜ	Miscellaneous Manual Flush Valve			
2	Ⓜ	Nibco 1" isolation valve			
327	Ⓜ	Dripper Plug Ring			
Drip Tubing					
1040 ft	Ⓜ	Netafim TLDL6-18			
40 ft	Ⓜ	Blank 1/2" Polyethylene Tubing			
Lateral Line Pipe					
147 ft	Ⓜ	Schedule 40 3/4"			

Notes:

Refer to Project Notes for more information about this Conceptual Irrigation Plan.

The valve zones have been designed with careful consideration as to providing the "hydrozones" with plants of similar water needs grouped together. It is important to keep the integrity of these groupings when tailoring this template to a specific property.

Irrigation parts and materials were chosen specifically because of their ability to provide the optimum in irrigation efficiency. If parts are substituted for the ones specified, ensure they are both professional and at least as effective as the specified parts.



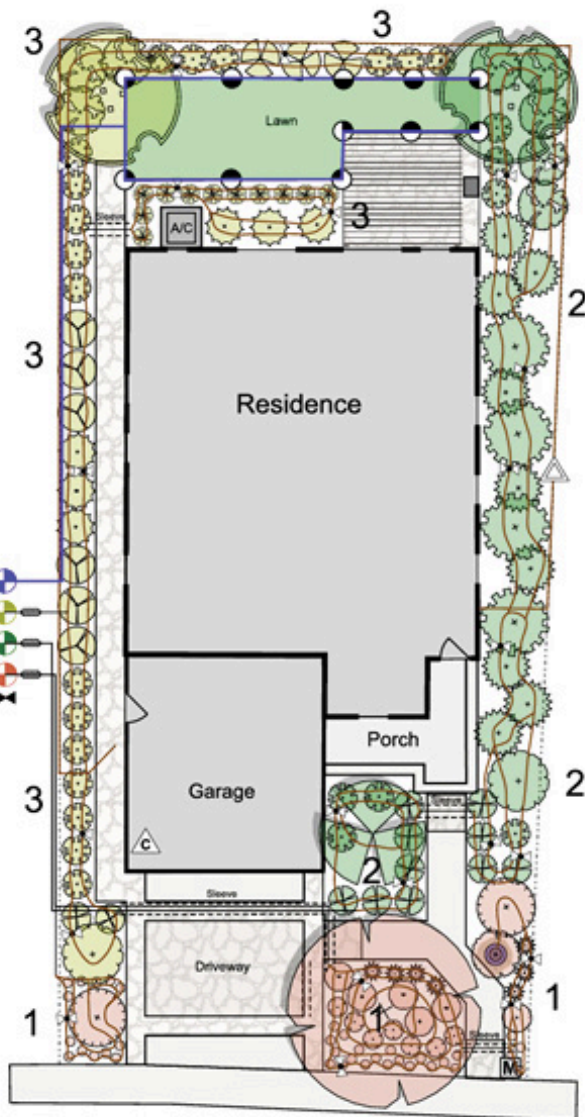
DATE:	July 2013
DESIGNED BY:	1
CHECKED BY:	E.L.C.
SCALE:	No scale
PROJECT:	Neat & Petite The New California Landscape

SHEET DESCRIPTION:	Irrigation Plan
--------------------	-----------------

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Guided tour with the irrigation designer, Lori Palmquist



Irrigation Tour

A video player interface showing a 'Sample irrigation design'. The main video frame shows a 3D architectural rendering of a house with a driveway, surrounded by a well-landscaped yard with various plants and trees. A large play button is centered over the video. Below the main frame are three smaller thumbnail images showing different views of the same property. The video player has a progress bar at the bottom showing '00:00 / 10:34' and a YouTube logo.

Sample irrigation design

Learn more!

Eco-Friendly Landscape Design Plans for The New California Landscape

MENU



1



2



3



4



5



6



7



8



9





10





11


About Drip Irrigation

 **3 Rain Bird Filters**
PRF-075-RBY

 **22 Miscellaneous Manual Flush Valves**

 **327 Dripper Plug Rings**

 **Netafim Drip Tubing**
1040 ft TLDL6-18

 **Polyethylene Drip Tubing**
40 ft Blank 1/2"

Items pictured above:
(Click on photo to enlarge)

1. Netafim tubing with dripper plug rings
2. Netafim fittings
3. Rain Bird Easy Fit Universal compression fittings
4. Jute netting staples
5. Manual flush valve for Netafim tubing (exploded)
6. Manual flush valve for Netafim tubing (assembled)
7. Manual compression flush fitting for standard 1/2-inch drip tubing
8. Figure 8 flush fitting for standard 1/2-inch drip tubing
9. Shut-off valve for Netafim tubing (exploded)
10. Shut-off valve compression fitting for standard 1/2-inch drip tubing
11. Rain Bird filter / pressure regulator

Other Video Resources

Drip Tutorial



Residence

Garage

Porch

Sleeve

3

4

3

2

1

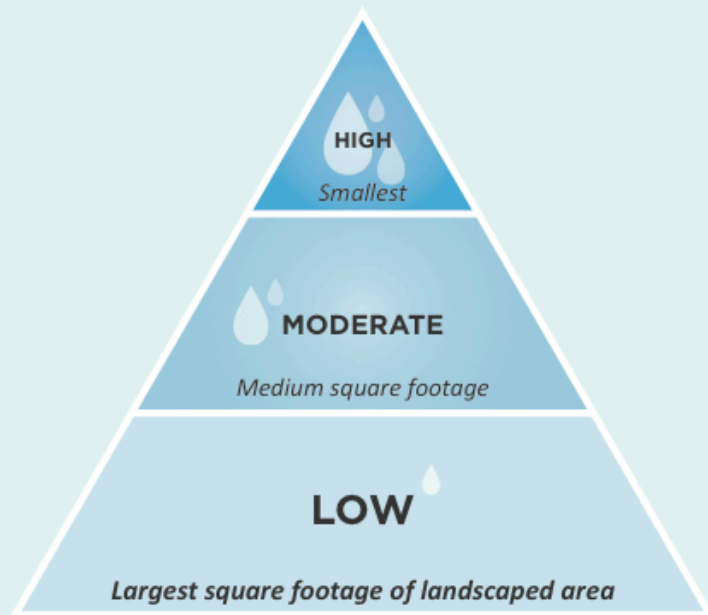
00:00 / 11:52

YouTube

Why Hydrozone?

HYDROZONE TRIANGLE

Hydrozone means the grouping of plants by their water requirements for efficient irrigation and plant health.



- Target irrigation
- Provide water where needed = root zone
- Each hydrozone on separate valve
- Reduce plant stress, non-beneficial growth, pest & disease problems

The Number Speak Volumes Water-Use Comparison

Estimated Landscape Water Use

“Traditional Landscape”

- 1,552 sq. ft.
high-water-use lawn
- 632 sq. ft.
moderate-water-use plants

Results:

48,767 gallons per year


The *New* California Landscape

- 1,552 sq. ft.
low-water-use plants
- 632 sq. ft.
moderate-water-use plants or
lower-water-use California
native lawn

19,611 gallons of water per
year

What are your landscape's numbers?

Visit www.riverfriendly.org




RIVER-FRIENDLY LANDSCAPING BENEFITS CALCULATOR

[Close](#) [Save](#) [Show tips](#)

[Location](#) [Landscape Design](#) [Maintenance Options](#)


Select the plant types, irrigation methods, and features for each section ⁱ of your landscape:

<input type="checkbox"/> Ground cover, low water 	Area <input type="text" value="600"/> square feet	<input type="checkbox"/> Fertilized	<input type="checkbox"/> Drip- Pressure Compensate
<input type="checkbox"/> Select Plant Types	Area <input type="text" value="600"/> square feet	<input type="checkbox"/> Fertilized	<input type="checkbox"/> Select Irrigation Method
<input type="checkbox"/> Select Plant Types	Area <input type="text" value="600"/> square feet	<input type="checkbox"/> Fertilized	<input type="checkbox"/> Select Irrigation Method <input type="button" value="x"/>

[+ Add a New Area](#) ⁱ

[← Back](#) [Next →](#)

Benefits Calculator


RIVER-FRIENDLY
LANDSCAPING
BENEFITS CALCULATOR

Close Save

Location
Landscape Design
Maintenance Options




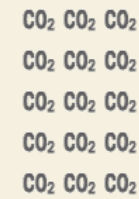



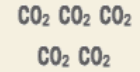
Results

How Did I Do?
How Do I Compare?
Irrigation
Water Requirements
Water
Waste
Emissions
Labor
Expense
Expense by

Summary Table
Suggestions
Assumptions

← Back
Next →

Your Landscape vs. a River-Friendly Landscape:

 <p>Water</p> <p style="font-size: 24px; font-weight: bold; color: #4F81BD;">48</p> <p style="font-size: 12px; color: #4F81BD;">gallons per day</p>	 <p>Labor</p> <p style="font-size: 24px; font-weight: bold; color: #C00000;">28</p> <p style="font-size: 12px; color: #C00000;">hours per year</p>	 <p>Waste</p> <p style="font-size: 24px; font-weight: bold; color: #008000;">210</p> <p style="font-size: 12px; color: #008000;">pounds per year</p>	 <p>Emissions</p> <p style="font-size: 24px; font-weight: bold; color: #000080;">28</p> <p style="font-size: 12px; color: #000080;">pounds CO₂ per year</p>	 <p>Water</p> <p style="font-size: 24px; font-weight: bold; color: #4F81BD;">15</p> <p style="font-size: 12px; color: #4F81BD;">gallons per day</p>	 <p>Labor</p> <p style="font-size: 24px; font-weight: bold; color: #C00000;">9.2</p> <p style="font-size: 12px; color: #C00000;">hours per year</p>	 <p>Waste</p> <p style="font-size: 24px; font-weight: bold; color: #008000;">59</p> <p style="font-size: 12px; color: #008000;">pounds per year</p>	 <p>Emissions</p> <p style="font-size: 24px; font-weight: bold; color: #000080;">8.6</p> <p style="font-size: 12px; color: #000080;">pounds CO₂ per year</p>
Your Landscape				River-Friendly Landscape			

Resources & Where to Get Help

- BeWaterSmart.info
- [EcoLandscape California www.ecolandscapes.org](http://www.ecolandscapes.org)
 - Eco-Friendly Landscape Designs for the New California Landscape
 - List of Qualified Green Gardener Professionals
- Refer to “Resource” handout
- Association for Professional Landscape Designers (APLD) www.apldca.org
- California Landscape Contractors Association (CLCA) www.clca.org
- River-Friendly Landscaping www.riverfriendly.org

BeWaterSmart.info

Plant Data Base, Garden Photos, & More

WATER-WISE GARDENING IN THE GOLD COUNTRY REGION



Find Your Water Provider

Want to contact your water provider about great rebates and programs?



Water Saving Tips:

Mulching and adding compost to soil can minimize evaporation and help soil absorb and store water.

Searchable Plant Water-Use Data Base ucanr.edu/sites/WUCOLS

WUCOLS IV

Water Use Classification of Landscape Species

Plant Search Database

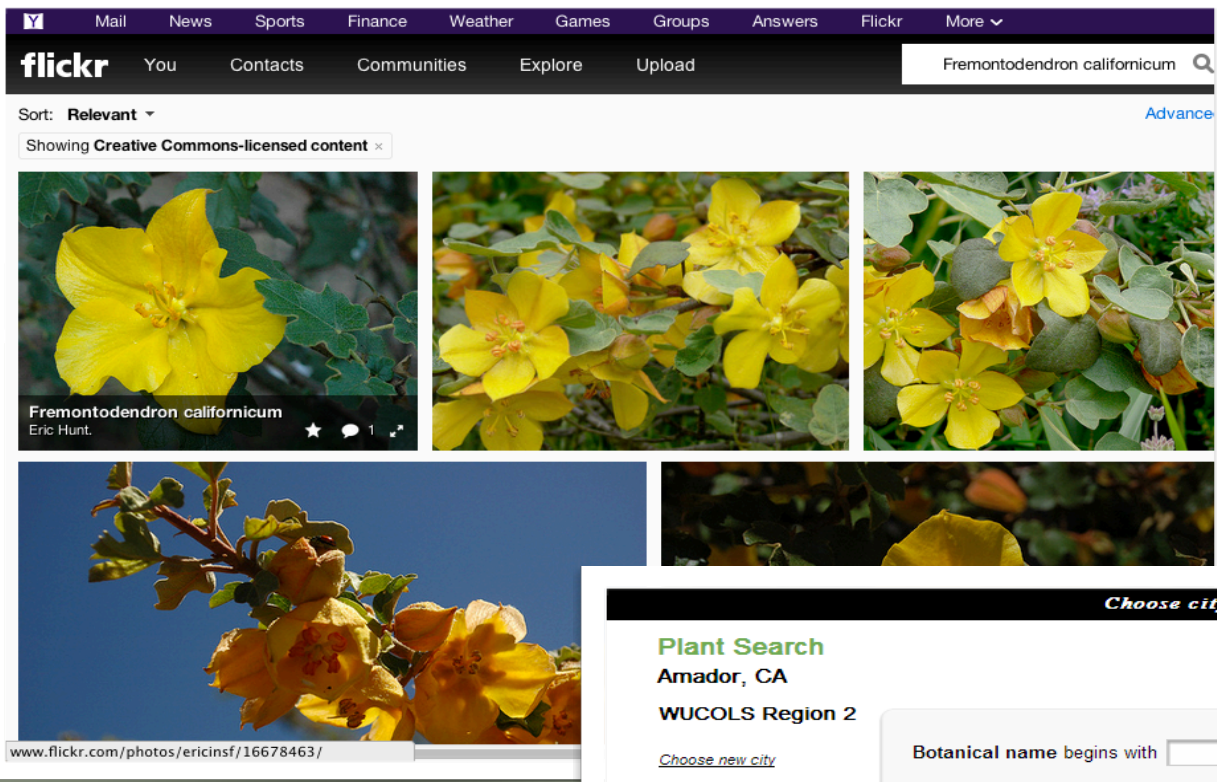
Results

Auburn, CA

153 results. ([Start Over](#) | [Search Again](#))

Add Selected to my List

Type	Botanical Name	Common Name	Water Use	Select for my List
T	<i>Abies pinsapo</i>	Spanish fir	Low	<input type="checkbox"/>
T	<i>Acacia baileyana</i>	Bailey acacia	Low	<input type="checkbox"/>
T	<i>Acacia cognata</i> (A.subporosa)	bower wattle	Low	<input type="checkbox"/>
S T	<i>Acacia constricta</i>	whitethorn acacia	Low	<input type="checkbox"/>



WaterWonk.us

Searchable plant data base

Choose city ► Plant search ► My Plant List Log in | Help

Plant Search

Amador, CA
WUCOLS Region 2

[Choose new city](#)

Botanical name begins with Find

Common name begins with Find

Plant Type

Gc Groundcover

P Perennial

S Shrub

T Tree

V Vine

California Native

Water use

Very Low

Low

Moderate

High

Unknown

Not appropriate for this region

Find

[Go to WUCOLS list for all 6 regions](#) All plants for this region Find

▲ New Search 🌿 California Native * Invasive species Add to list

Search Results

2069 plants:
[complete list for "Region 2"](#)

Type	Botanical Name	Common Name	Water Use	Flickr Photos	Select for My List
S	Abelia 'Sherwoodii'	Sherwood dwarf abelia	Moderate	See it	<input type="checkbox"/> Add
S	Abelia chinensis	Chinese abelia	Unknown	See it	<input type="checkbox"/>
S	Abelia floribunda	Mexican abelia	Unknown	See it	<input type="checkbox"/>
S Gc	Abelia X grandiflora	glossy abelia	Moderate	See it	<input type="checkbox"/>
T	Abies pinsapo	Spanish fir	Not App.	See it	<input type="checkbox"/>
T	Abies spp.	fir	Not App.	See it	<input type="checkbox"/>
S	Abutilon palmeri 🌿	indian mallow	Unknown	See it	<input type="checkbox"/>
S	Abutilon X hybridum	flowering maple	High	See it	<input type="checkbox"/>

New California Landscape Project Sponsors



Questions?

Thank you!

Cheryl Buckwalter
ecolandscape.org

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