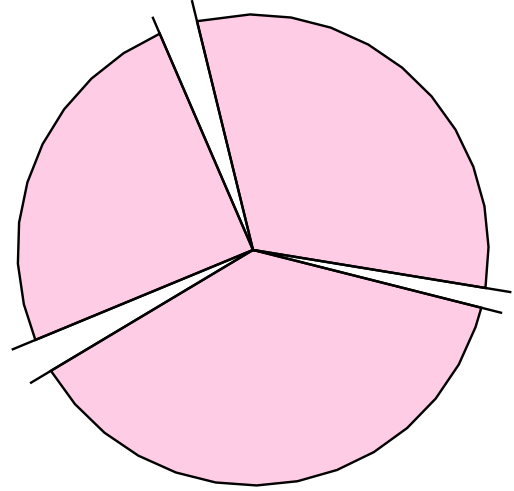


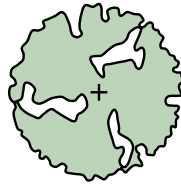
**PLANT KEY**

Symbol Botanical Name / Common Name

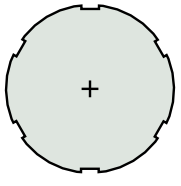


Chitalpa tashkentensis 'Pink Dawn'  
Chitalpa

**Large Shrubs**

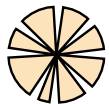


Arctostaphylos densiflora 'Howard McMinn'  
Howard McMinn Manzanita

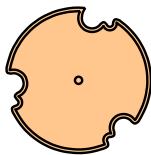


Frangula californica 'Eve Case'  
Eve Case Compact Coffeeberry

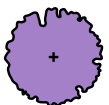
**Medium Shrubs**



Leonotis leonurus  
Lion's Tail



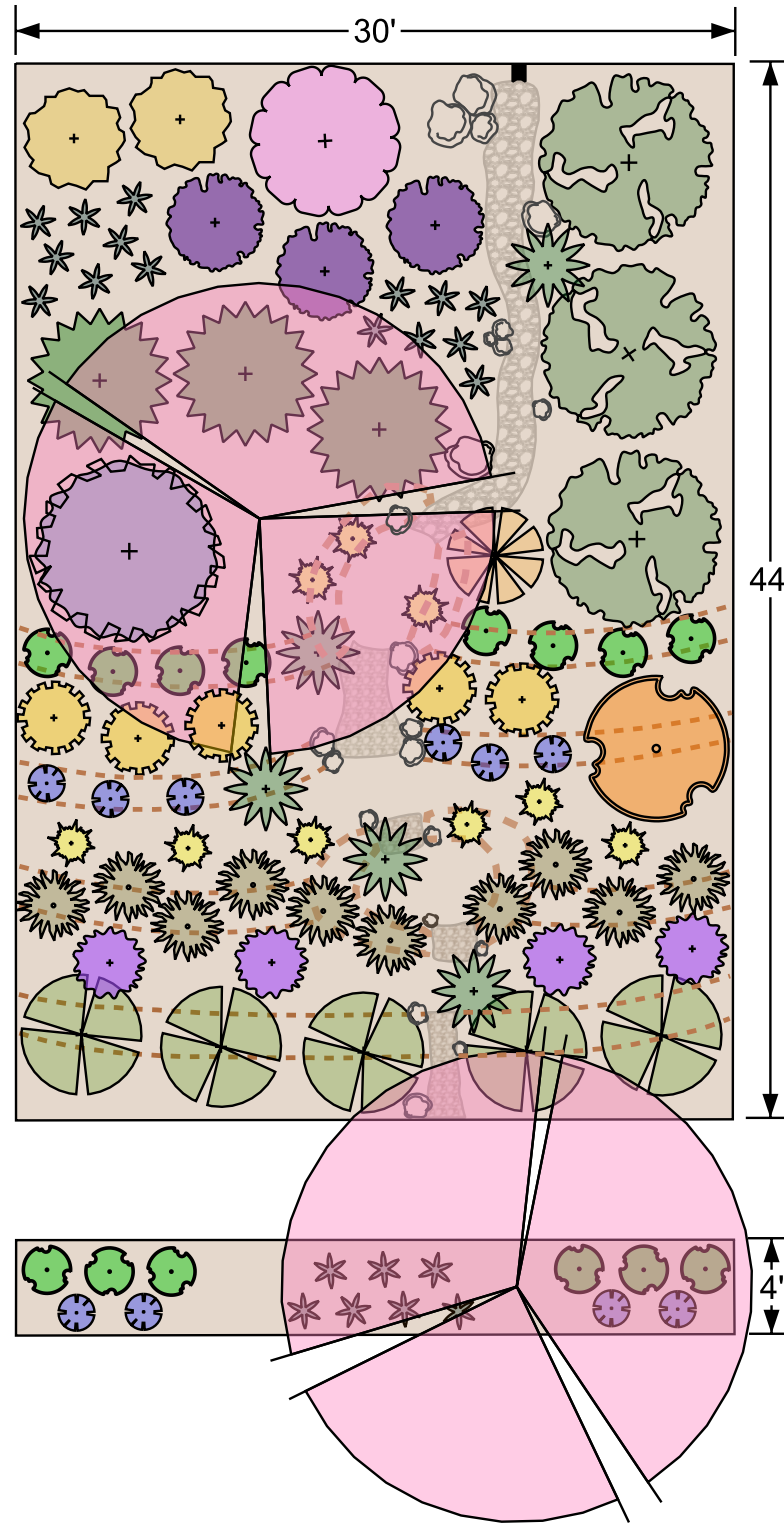
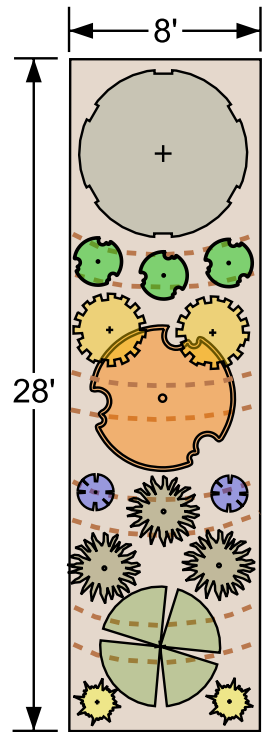
Mimulus aurantiacus  
Sticky Monkey Flower



Salvia clevelandii 'Winnifred Gilman'  
Winnifred Gilman Dark Blue Sage



Phlomis fruticosa  
Jerusalem Sage



**PLANT KEY**

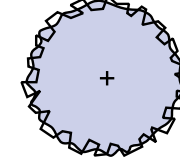
Botanical Name / Common Name Symbol

**Small Shrubs**

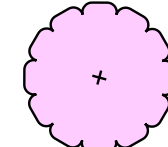
Mahonia repens  
Creeping Mahonia



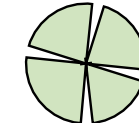
Ceanothus var. griseus 'Yankee Point'  
Yankee Point Ceanothus



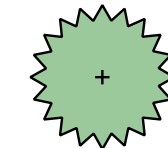
Cistus 'Sunset'  
Sunset Rockrose



Coprosma x kirkii  
Creeping Mirror Plant



Rosmarinus officinalis 'Prostratus'  
Prostrate Rosemary



**Perennials**

Achillea filipendulina 'Cloth of Gold'  
Moonshine Yarrow



Chondropetalum tectorum  
Cape Rush



Nepeta faassenii  
Catmint



Penstemon heterophyllus  
Foothill Penstemon



Teucrium x lucidrys 'Prostratum'  
Prostrate Trailing Germander

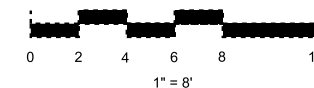


**Ornamental Grasses**

Festuca glauca 'Elijah Blue'  
Elijah Blue Fescue



Muhlenbergia rigens  
Deer Grass



**Lose the Lawn, Use the Rain**

Cheryl Buckwalter  
Landscape Liaisons  
Consultant, Educator, & Designer  
landscapeliaisons@gmail.com  
(916) 207-8787

**SHEET DESCRIPTION:**  
Lose the Lawn, Use the Rain  
Planting Plan

**PROJECT:**  
Water Smart Landscapes in Sacramento  
**CALIFORNIA**  
**AMERICAN WATER**

**REVISIONS:**  
N/A

**DATE:**  
2021 / 2022

**JOB NUMBER:**  
Theme #1

**DRAWN BY:**  
CB

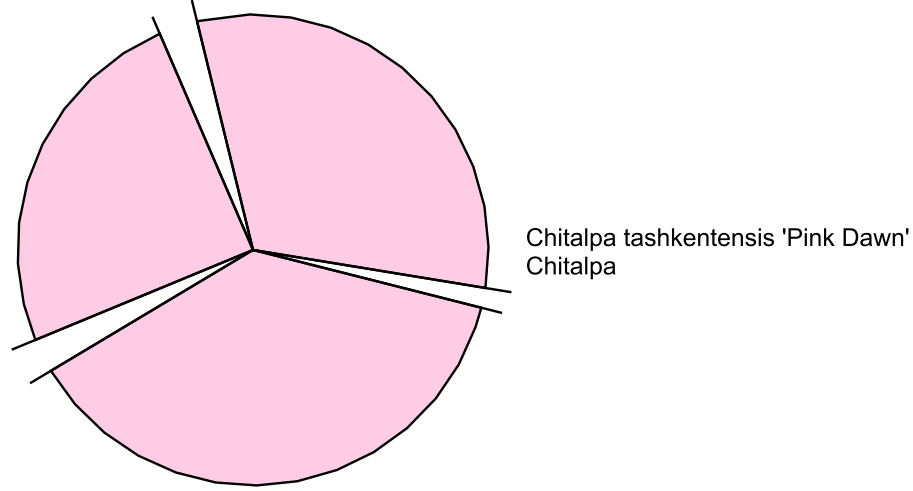
**CHECKED BY:**  
CB

**SCALE:**  
1" = 8'

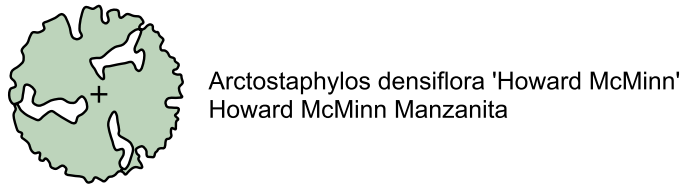
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1

**PLANT KEY**

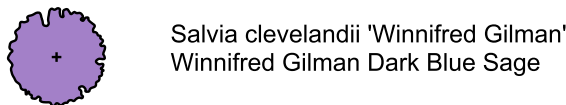
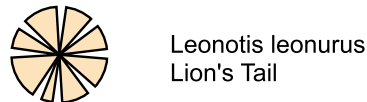
Symbol Botanical Name / Common Name



**Large Shrubs**

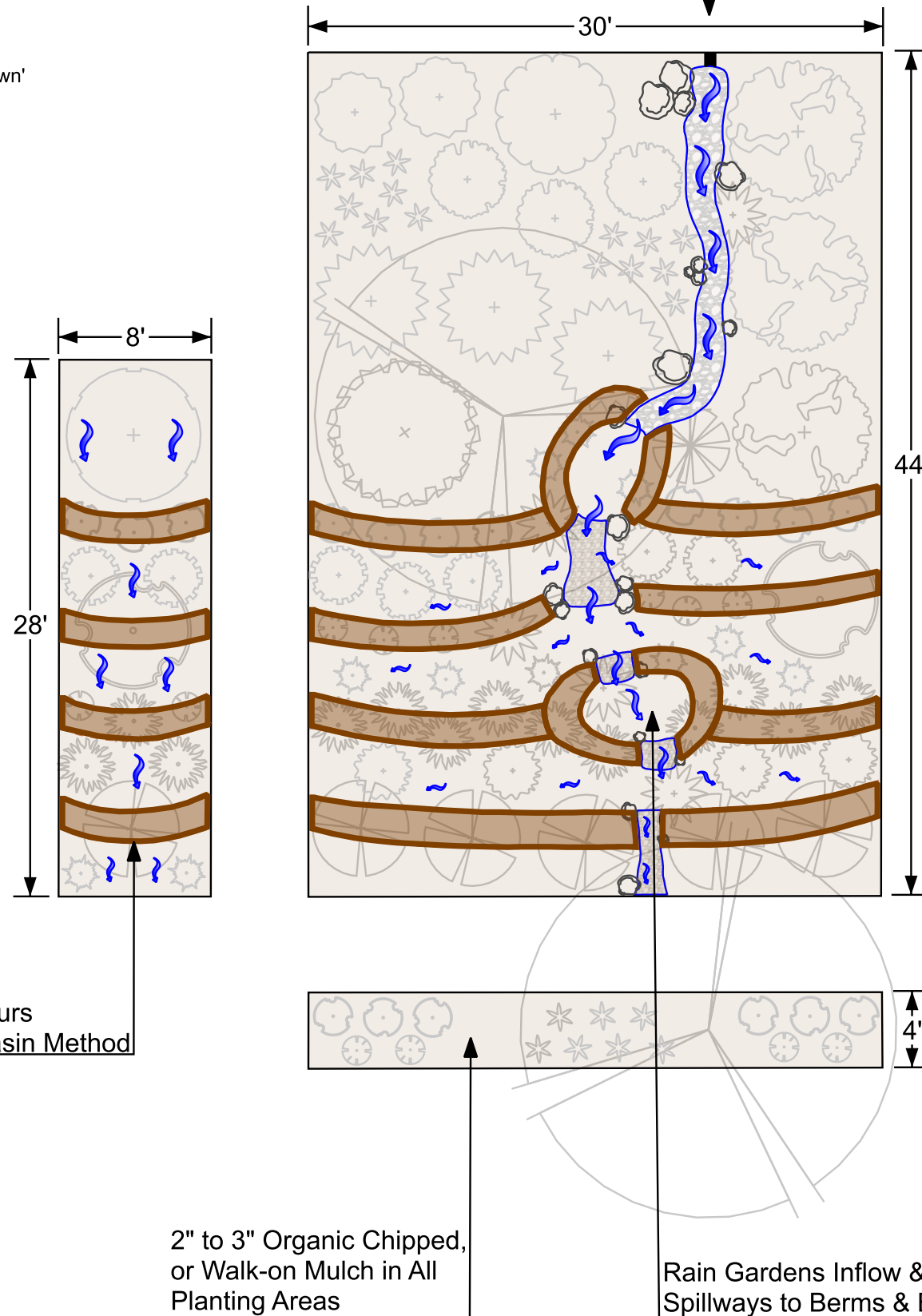


**Medium Shrubs**



**Slow the Flow of Rainwater with Berms, Basins, & Rain Gardens**

Rain Water from Downspout Directed to Creekbed with Riverbed Cobble Mixed Sizes & Boulders



**PLANT KEY**

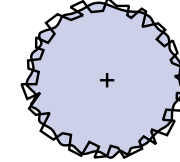
Botanical Name / Common Name Symbol

**Small Shrubs**

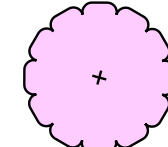
Mahonia repens  
Creeping Mahonia



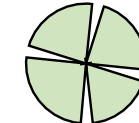
Ceanothus var. griseus 'Yankee Point'  
Yankee Point Ceanothus



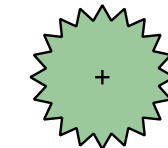
Cistus 'Sunset'  
Sunset Rockrose



Coprosma x kirkii  
Creeping Mirror Plant



Rosmarinus officinalis 'Prostratus'  
Prostrate Rosemary



**Perennials**

Achillea filipendulina 'Cloth of Gold'  
Moonshine Yarrow



Chondropetalum tectorum  
Cape Rush



Nepeta faassenii  
Catmint



Penstemon heterophyllus  
Foothill Penstemon



Teucrium x lucidrys 'Prostratum'  
Prostrate Trailing Germander

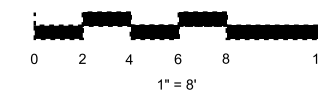


**Ornamental Grasses**

Festuca glauca 'Elijah Blue'  
Elijah Blue Fescue



Muhlenbergia rigens  
Deer Grass



**Lose the Lawn, Use the Rain**

Cheryl Buckwalter  
Landscape Liaisons  
Consultant, Educator, & Designer  
landscapeliaisons@gmail.com  
(916) 207-8787

**SHEET DESCRIPTION:**  
Lose the Lawn, Use the Rain  
Berms, Basins & Rain Gardens

**PROJECT:**  
Water Smart Landscapes in Sacramento  
**CALIFORNIA**  
**AMERICAN WATER**

**REVISIONS:**  
N/A

**DATE:**  
2021 / 2022




















**JOB NUMBER:**  
Theme #1














**DRAWN BY:**  
CB

**CHECKED BY:**  
CB

**SCALE:**  
1" = 8'

**SHEET:**  
2

California American Water					Lose the Lawn, Use the Rain					Water Smart Landscapes in Sacramento Low Water-Use Plant List						
Plant Symbol	Genus	Species	Variety / Cultivar	Common Name	Number of Plants - Container Size (gal.)	Plant Type	Exposure	Mature Size Tall (T) / Width (W)	Plant Coverage Value (Sq. Ft.)	Bloom Color / Season						
											Uses / Benefits					
Plants on this list are used in the example planting plan <i>Lose the Lawn, Use the Rain</i> . Plants were selected from the <i>Water Smart Gardening in Sacramento</i> plant database on California American Water's website Water Efficient Landscape Resources at <a href="https://www.amwater.com/caaw/Conservation/Conservation/Water-Efficient-Landscape-Resources">https://www.amwater.com/caaw/Conservation/Conservation/Water-Efficient-Landscape-Resources</a> . These plants are low water-use and appropriate for the Sacramento region, and they are considered to be water conserving because they perform well with less supplemental water, once established, than moderate water-use plants. The Plant Coverage Value is expressed in square feet for each plant at its mature width. Refer to the Water-Smart Landscaping Turf Exchange Rebate Program Terms and Conditions and the California American Water Resource document for <i>Lose the Lawn, Use the Rain</i> for more information.											Drought Tolerant	CA Native	Deer Resistant	Attracts / Supports Pollinators	Suitable for Rain Gardens	Tolerates Recycled Water
<b>TREES</b>																
	<i>Chitalpa</i>	<i>tashkentensis</i>	'Pink Dawn'	<a href="#">Chitalpa</a>	2 - 5 gal.	Deciduous	FS/PS	15-25' T / W	314	Pink / Spring	Y			Y		
<b>LARGE SHRUBS</b>																
	<i>Arctostaphylos</i>	<i>densiflora</i>	'Howard McMinn'	<a href="#">Howard McMinn Manzanita</a>	3 - 5 gal.	Evergreen	FS	5-8' T / 7' W	38	Light Pink / Winter, Spring	Y	Y	Y	Y		Y
	<i>Frangula (Rhamnus)</i>	<i>californica</i>	'Eve Case'	<a href="#">Eve Case Compact Coffeeberry</a>	1 - 5 gal.	Evergreen	FS/PS	6-8' T / W	38	Greenish White / Spring	Y	Y	Y	Y		Y
<b>MEDIUM SHRUBS</b>																
	<i>Leonotis</i>	<i>leonurus</i>		<a href="#">Lion's Tail</a>	1 - 1 gal.	Evergreen	FS	4-6' T / W	20	Orange / Summer, Fall	Y		Y	Y		
	<i>Mimulus</i>	<i>aurantiacus</i>		<a href="#">Sticky Monkey Flower</a>	2 - 1 gal.	Evergreen	FS/PS	4.5' T / W	16	Orange / Spring, Summer	Y	Y	Y	Y	Y	
	<i>Salvia</i>	<i>clevelandii</i>	'Winnifred Gilman'	<a href="#">Winnifred Gilman Dark Blue Sage</a>	3 - 1 gal.	Evergreen	FS	4-5' T / W	16	Lavender to Blue / Early Summer	Y	Y	Y			
	<i>Phlomis</i>	<i>fruticosa</i>		<a href="#">Jerusalem Sage</a>	2 - 1 gal.	Evergreen	FS/PS	4' T / W	13	Yellow / Spring, Summer	Y		Y			
<b>SMALL SHRUBS</b>																
	<i>Mahonia</i>	<i>repens</i>		<a href="#">Creeping Mahonia</a>	7 - 1 gal.	Evergreen	FS/PS	2-3' T / W	5	Yellow / Spring	Y	Y	Y	Y	Y	
	<i>Ceanothus</i>		var. <i>griseus</i> 'Yankee Point'	<a href="#">Yankee Point Ceanothus</a>	1 - 1 gal.	Evergreen	FS/PS	3' T / 6-10' W	50	Dark Blue / Winter, Spring	Y	Y		Y		Y
	<i>Cistus</i>		'Sunset'	<a href="#">Sunset Rockrose</a>	1 - 1 gal.	Evergreen	FS	2-3' T / 6-8' W	38	Pink / Late Spring, Summer	Y		Y	Y		Y
	<i>Coprosma</i>	<i>x kirkii</i>		<a href="#">Creeping Mirror Plant</a>	6 - 1 gal.	Evergreen	FS	1-3' T / 3-6' W	16	Not Applicable	Y		Y			Y
	<i>Rosmarinus</i>	<i>officinalis</i>	'Prostratus'	<a href="#">Prostrate Rosemary</a>	3 - 1 gal.	Evergreen	FS	1-2' T / 6-8' W	38	Blue / Year-round	Y		Y	Y		Y
<b>PERENNIALS</b>																
	<i>Achillea</i>	<i>filipendulina</i>	'Cloth of Gold'	<a href="#">Moonshine Yarrow</a>	11 - 1 gal.	Semi-evergreen	FS/PS	2' T / 1-3' W	3	Yellow / Spring, Summer, Fall	Y		Y	Y	Y	Y

Plant Symbol	Genus	Species	Variety / Cultivar	Common Name	Number of Plants - Container Size (gal.)	Plant Type	Exposure	Mature Size Tall (T) / Width (W)	Plant Coverage Value (Sq. Ft.)	Bloom Color / Season						
											Uses / Benefits					
	<i>Chondropetalum</i>	<i>tectorum</i>		<a href="#">Cape Rush</a>	4 - 1 gal.	Evergreen	FS/PS	2-3' T / 3-4' W	10	Brown / Summer, Fall	Y				Y	Y
	<i>Nepeta</i>	<i>faassenii</i>		<a href="#">Catmint</a>	4 - 1 gal.	Herbaceous	FS/PS	1-2' T / 3-4' W	10	Lavender / Summer	Y		Y	Y	Y	
	<i>Penstemon</i>	<i>heterophyllus</i>		<a href="#">Foothill Penstemon</a>	12 - 1 gal.	Evergreen	FS	1-3' T / 2' W	3	Blue Violet / Spring, Summer		Y	Y	Y		
	<i>Teucrium</i>	<i>x.lucidrys</i>	'Prostratum'	<a href="#">Prostrate Trailing Germander</a>	17 - 1 gal.	Evergreen	FS/PS	4-6" T / 2' W	3	Magenta / Summer	Y		Y	Y		
<b>ORNAMENTAL GRASSES</b>																
	<i>Festuca</i>	<i>glauca</i>	'Elijah Blue'	<a href="#">Elijah Blue Fescue</a>	22 - 1 gal.	Evergreen	FS/PS	1' T / 1-2' W	2	Green to Buff / Summer	Y		Y			
	<i>Muhlenbergia</i>	<i>rigens</i>		<a href="#">Deer Grass</a>	13 - 1 gal.	Evergreen	FS	2-3' T / W	5	Golden to Purplish / Fall	Y	Y		Y	Y	
<b>NOTES:</b>																
	Credit for use of symbol of pollinator OnLineWebFonts, onlinewebfonts.com.															
Verify number of plants on plant list with the number of plants on the planting plan or the number of plants needed for the size of your planting area before purchasing.																
Plant list is set up to print on 8-1/2" x 11" paper at 50%.																

### Drip Specs

Landscape area: 1,664 sq. ft.  
 Soil type: Assumed Clay loam  
 Static pressure: Assumed higher than 50 psi

Drip emitter flow: 0.6 gph  
 Drip emitter spacing: 12"  
 Drip row spacing: 18"  
 Drip application rate: 0.64 in/hr

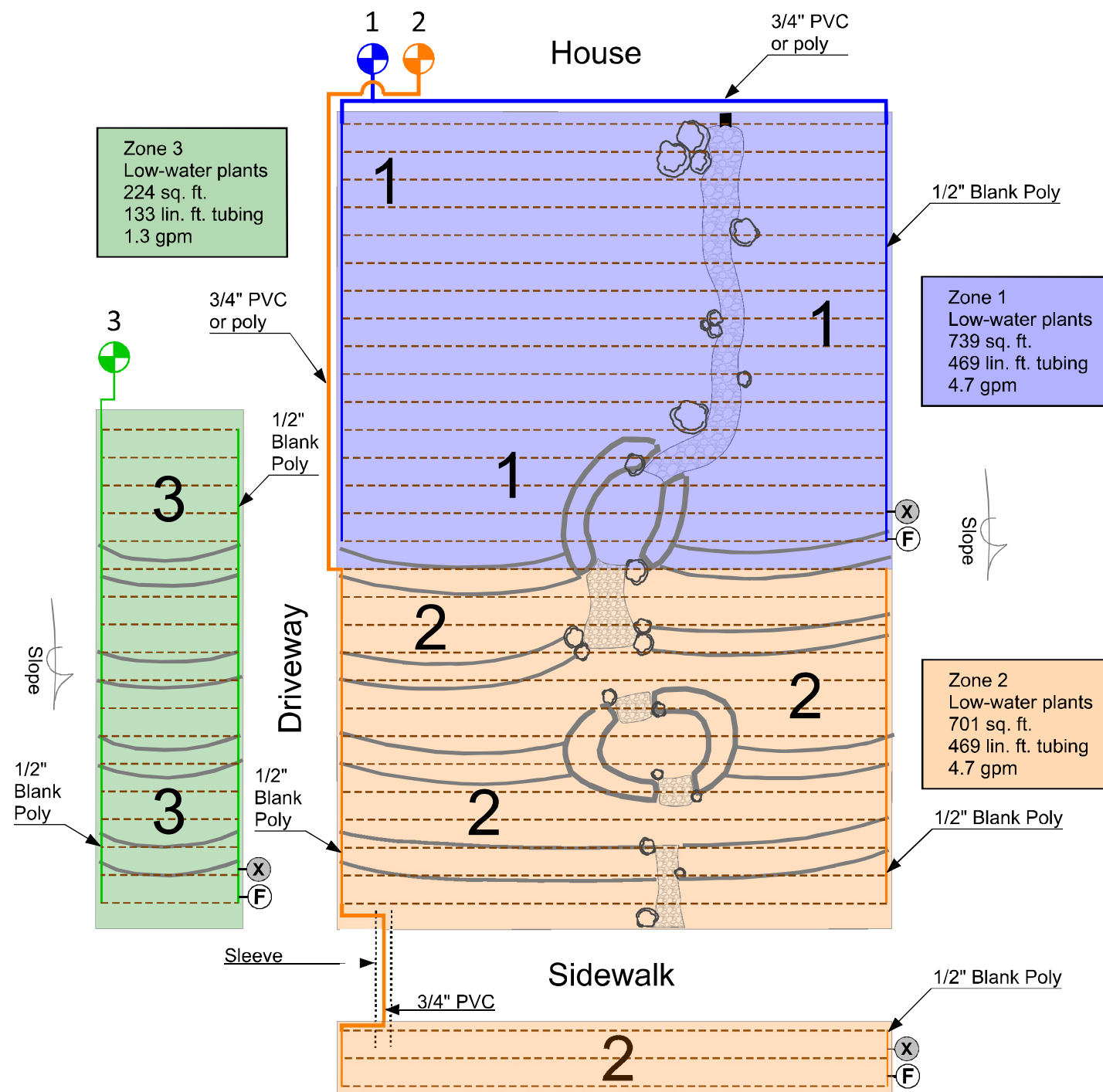
### Assumptions

This irrigation plan assumes the following:

1. There is a slope on the property of at least a five-foot difference between the street level and the top of the landscape. The house is the high point.
2. The rectangular area to the left (zone 3) is on the far side of the driveway, and thus has its own dedicated irrigation valve.
3. The soil type has a high percentage of clay.
4. The static water pressure for the property is at least 50 psi. Static pressure is the reading with no water running.

### Notes

1. This example irrigation plan was designed for a combined landscape area of 1,664 square feet. When applied to different sizes and shapes of landscapes, more or fewer valves could be needed.
2. Zones 1 and 2 have 3/4" PVC or poly tubing running from the valve to the grids. This is to support the 4.7 gpm flow of the zones.
3. Run drip tubing around and not under boulders.
4. See details sheet for more example grid layouts.
5. It's highly recommended to use dripline with check valves. These hold the water in the tubing when the water drip zone is finished watering. Most dripline products on the market will hold back water to at least 4.5 feet of elevation.
6. Anti-syphon valves must be installed 6 to 12 inches higher in elevation than the highest point they water.
7. Do not combine sprinklers and drip in the same irrigation zone.



### Irrigation Key

- Irrigation Valve
- PVC Lateral
- In-line Drip Tubing
- Blank Drip Tubing
- Drip Manual Line-Flushing Valve
- Drip Operation Indicator

Lori Palmquist  
 CID, CIC, CLIA, CLWM  
 Irrigation Design & Consulting  
 support@loripalmquist.com  
 510-374-6360



**SHEET DESCRIPTION:**  
 Lose the Lawn, Use the Rain  
 Color Irrigation Plan

**PROJECT:**  
 Water Smart Landscapes in Sacramento  
 CALIFORNIA AMERICAN WATER

**REVISIONS:**  
 N/A

**DATE:**  
 2021 / 2022

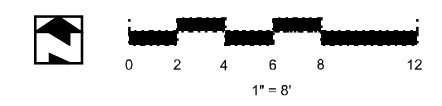
**JOB NUMBER:**  
 Theme #1

**DRAWN BY:**  
 LP

**CHECKED BY:**  
 CB

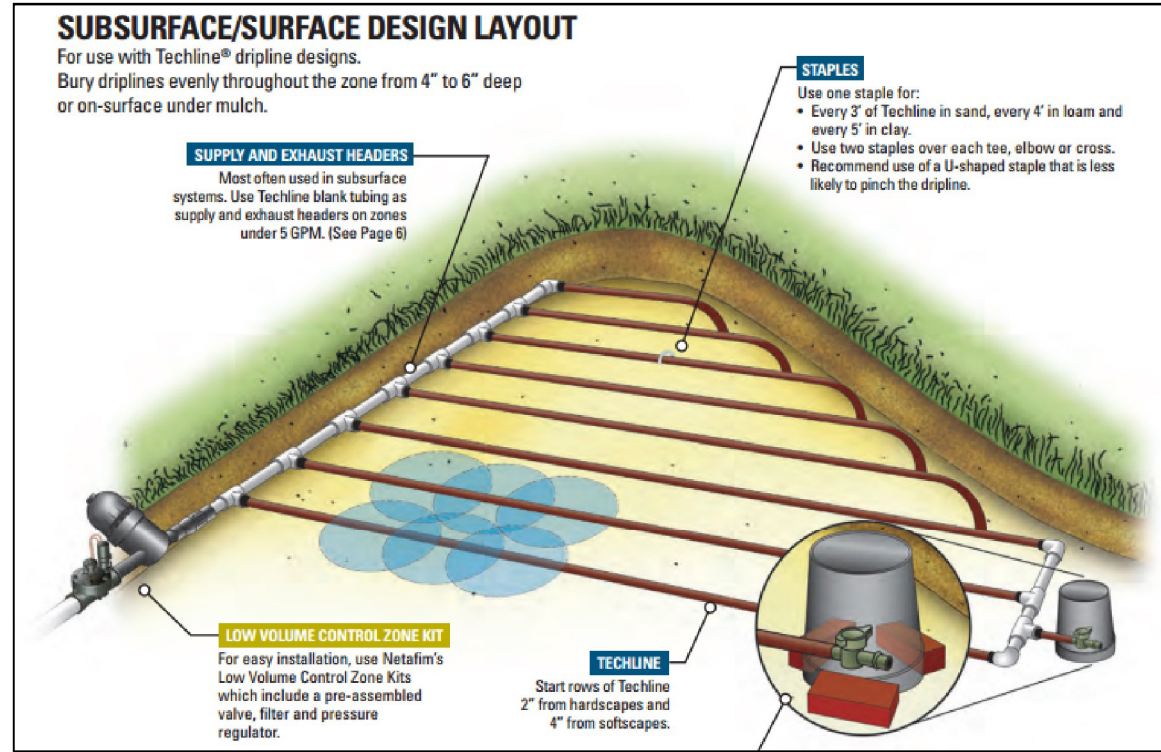
**SCALE:**  
 1" = 8'

**SHEET:**  
 3

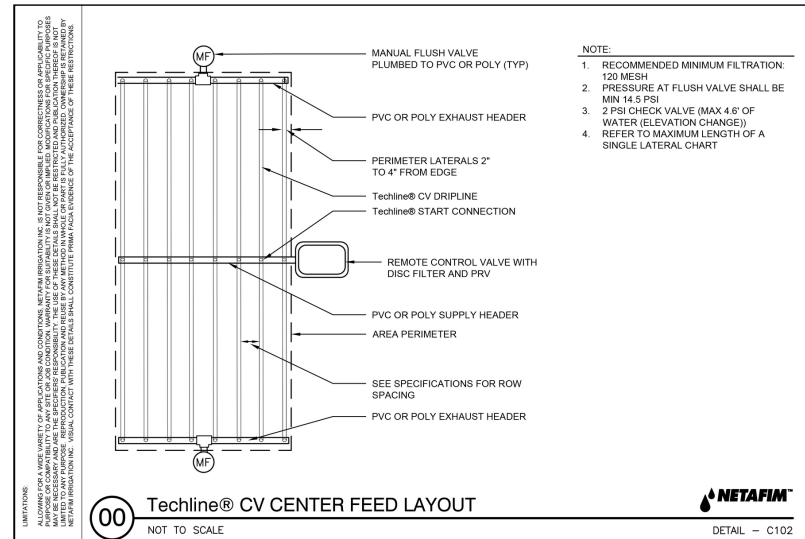


**Lose the Lawn, Use the Rain**

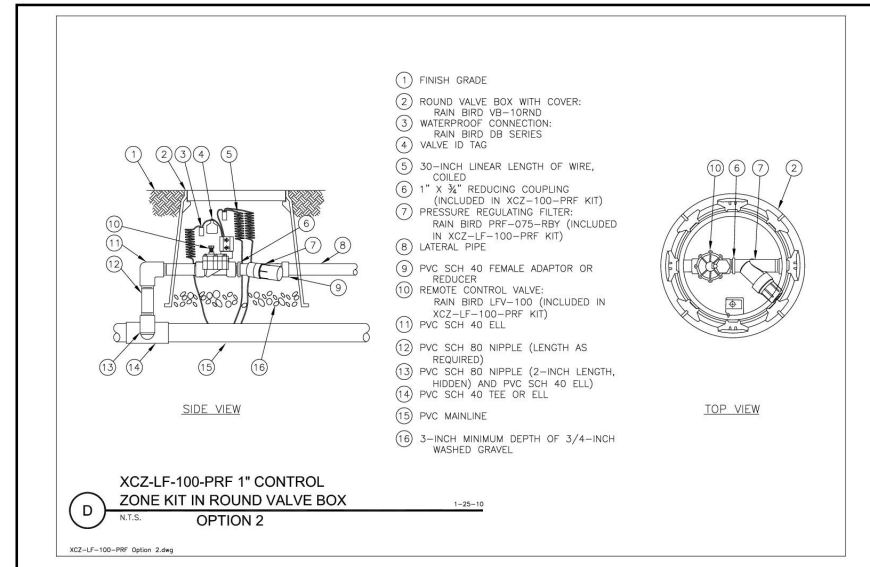
## Design Layout



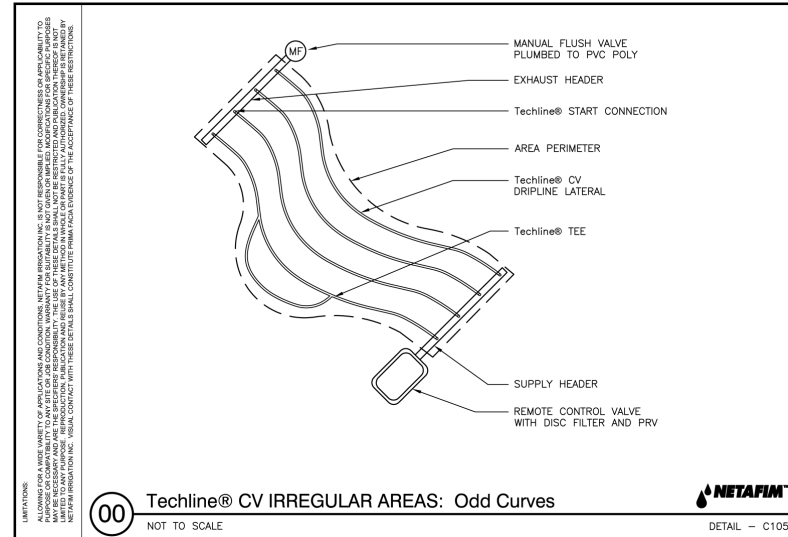
## Drip Grid Center Feed



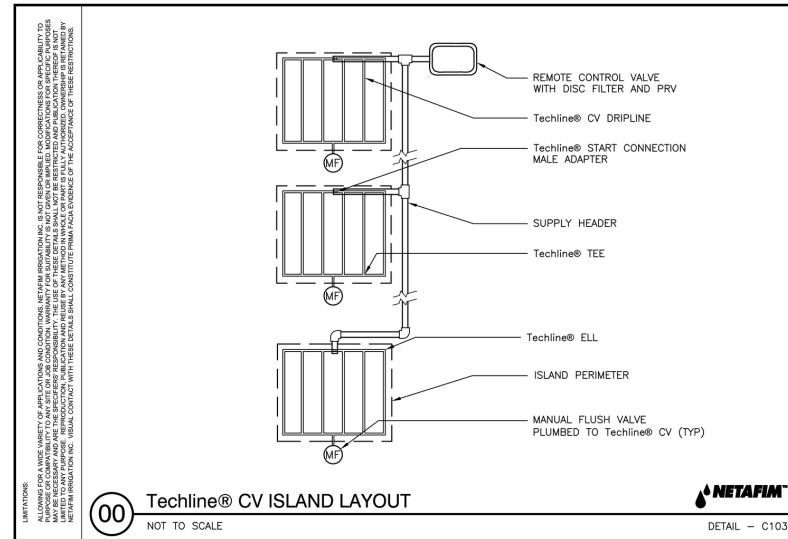
## Globe Valve Drip Control Zone Kit



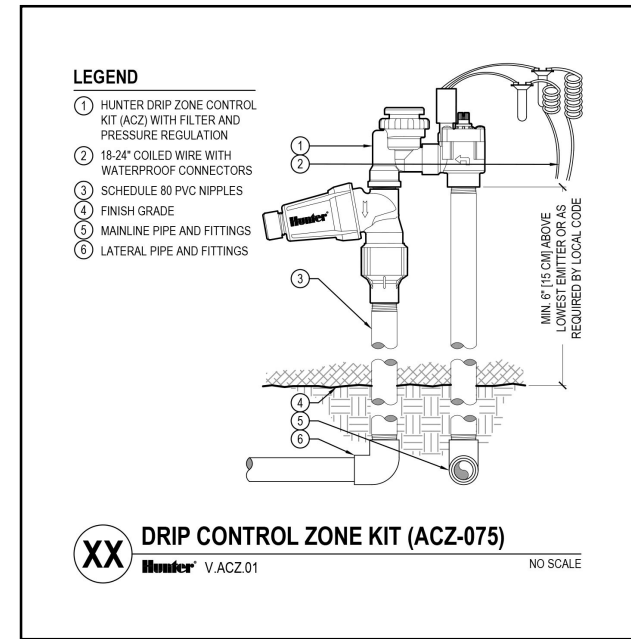
## Drip Grid Irregular Areas



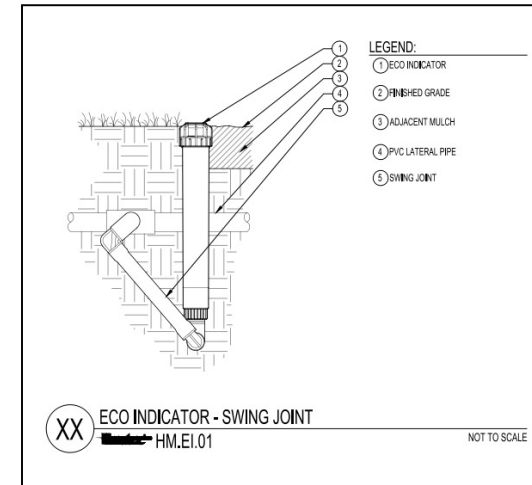
## Drip Grid Islands



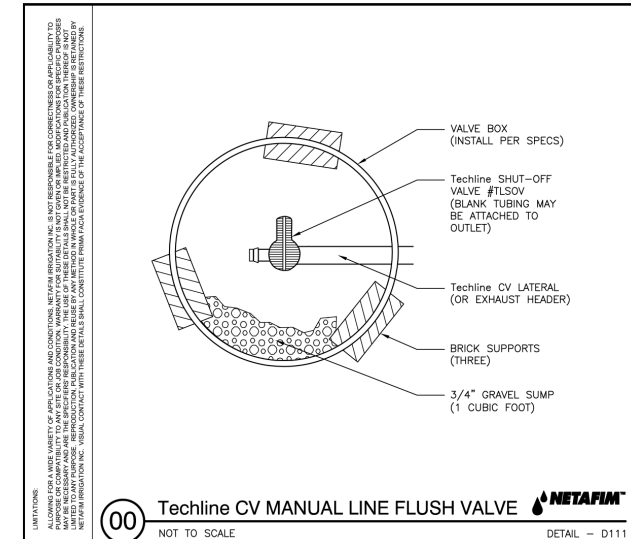
## Anti-Syphon Drip Control Zone Kit



## Drip Pop-Up Indicators



## Drip Shut-Off Valves



Lori Palmquist  
CID, CIC, CLIA, CLWM  
Irrigation Design & Consulting  
support@loripalmquist.com  
510-374-6360



**SHEET DESCRIPTION:**  
Lose the Lawn, Use the Rain  
Drip Details

**PROJECT:**  
Water Smart Landscapes in Sacramento  
CALIFORNIA  
AMERICAN WATER

**REVISIONS:**  
None

**DATE:**  
2021 / 2022

**JOB NUMBER:**  
1

**DRAWN BY:**  
LP

**CHECKED BY:**  
CB

**SCALE:**  
No scale

**SHEET:**  
4



## Resources

### Lose the Lawn, Use the Rain

California American Water

<https://www.cawsacramentogardening.com>

California Watershed Approach to Landscape Design

Association of Professional Landscape Designers, California Water Efficiency Partnership, Surfrider Foundation

<https://apldca.org/wp-content/uploads/2018/08/G3-APLD-CA-Watershed-Approach.pdf>

Creating a Water-Wise Garden  
Garden on Eden (video)

Sacramento Suburban Water District

<https://www.sswd.org/departments/conservation/water-efficient-landscape-gardens/creating-a-water-wise-garden-garden-on-eden>

Rain Garden Handbook for Western Washington  
Department of Ecology State of Washington,  
Washington State University Extension

<https://apps.ecology.wa.gov/publications/documents/1310027.pdf>

Convert! Sprinklers to Drip (video)  
Beyond the Drought

<http://beyondthedrought.com>

Identifying & Removing Lawn Types (video)  
Metropolitan Water District of Southern California (MWDSC)

<https://www.youtube.com/watch?v=3X0wAiOXAso>

Lawn Options, Turfgrass Alternatives and Substitutes Resource List

Regional Water Authority BeWaterSmart  
<https://bewatersmart.info/lawn-options/>

Plants for Parkways

California Native Plant Society (CNPS)

Benefits of Native Plants, Parkway Designs, Site Preparation and Turf Removal Methods, Watering, Installing, and Long-term Care of Native Plant Parkways

<https://www.cnps.org/gardening/parkways>

CalScape Native - Plant Database

California Native Plant Society (CNPS)

<https://calscape.org>

Municipal Water District of Orange County (MWDOC)

OC Friendly Landscapes

Example Landscape Plans

<https://www.mwdoc.com/oc-friendly-landscapes/>

Sacramento Region Smart Irrigation Scheduler  
Beyond the Drought

<http://beyondthedrought.com>

Sonoma – Marin Saving Water Partnership  
Landscape Design Templates

[https://www.savingwaterpartnership.org/programs\\_list/landscape-design-templates/](https://www.savingwaterpartnership.org/programs_list/landscape-design-templates/)

Photo Attributions From Thirsty to Thrifty: Bye-Bye, Lawn!

1. Water-Thirsty Front Yard: Courtesy of Dave Roberts
2. Water-Thrifty Front Yard: Courtesy of Dave Roberts
3. Ya Gotta Love It: Jeni Webber, landscape architect



## **Lose the Lawn, Use the Rain Definitions**

The following definitions are for terms and/or methods used in the planting plan, irrigation plan and videos for Lose the Lawn, Use the Rain. Please refer to the Resources for more information and how-to guidance.

**Berms and Basins** – A technique for slowing the flow of water, allowing it to be spread over an area. This method is useful on slightly sloped areas, such as those in many front yards. These low, rounded mounds of soil are created by excavating soil to create the basin and using that soil to create low mounds. The soil mounds are lightly compacted so each side of the mound is gently sloped for a natural look.

**Creekbeds** – Also referred to as streambeds, creekbeds are made of various sizes of rocks (stones, riverbed cobble, and boulders) to mimic a natural streambed in nature. When downspouts are directed to the creekbeds, the rocks help to slow the speed of the moving rainwater and disperse it to reduce erosion and direct it to rain gardens, berms and basins.

**Mulch** – Retains soil moisture, reduces weed growth, insulates roots from heat and cold, nourishes the soil, improves soil biology. Use organic (not synthetic), small to medium-sized, weed-free mulch. Apply mulch over the soil surface after planting. Replenish mulch in the spring and/or fall as needed to maintain a minimum layer of 3 inches. Keep mulch away from trunks of trees and the base of plants. Weed cloth (also known as landscape fabric) is *not* needed and prevents the cycle of air, water, and nutrients in the soil. It can interfere with the strategies used in these planting plans for letting rainwater soak into the soil and for keeping water in your landscape.

**Parkway** – Also referred to as parking strip, these narrow areas are between the street and front yard or street and sidewalk. Plants in these areas need to be low-growing so they do not obstruct the line of site when entering or leaving the driveway and at street corners. When the parkway is along the curb where vehicles park, leave some open space for walking through this planting area. Another option is to leave space along the curb, referred to as a step-out area, approximately 18 inches wide, depending on the width of the parkway.

**Plant Hydrozones** – The term hydrozone refers to the grouping of plants with the same water-use classification into its own section or zone. Moderate or medium water-use plants would be grouped into a separate hydrozone from the low-water plants. When installing irrigation systems, each hydrozone is on a separate valve so plants can be watered at the frequency and duration to meet their needs. Plants on these planting plans are all low water-use plants.



**Plant Selection and Placement** – Plants for these planting plans were selected from the [Water Smart Gardening in Sacramento](#) plant database on CAW’s website [Water Efficient Landscape Resources](#). Symbols on the plans represent plants at their mature size. Plants are placed and spaced to allow them to grow to maturity in their natural form, reducing the need for excessive pruning. Plants are low water-use and appropriate for the climate in the Sacramento region.

Check out the Plant List for more information about each plant’s characteristics. If substitutions are desired, select plants that suit your site’s conditions, such as sun exposure and soil conditions, and select low water-use plants so that all plants have the same water-use classifications and are appropriate for that hydrozone.

**Plant Establishment** - When plants and trees are first installed, they need a period of time to become established in their new environment. Proper plant establishment requires careful and proper planting, as well as careful watering and monitoring. Frequency of watering will vary based upon plant type, soil type, season, sun exposure, and root depth. Planting in the fall takes advantage of seasonal rains and cooler temperatures, reducing or eliminating the need to apply supplemental water. When planting in the spring or during an unusually dry fall, plants will require supplemental water.

**Plant Watering for Establishment and as Plants Mature** - Please note that even drought-tolerant and low-water-use plants require a thorough soaking when first planted, and all newly installed plants need the soil to be kept evenly moist. The root ball of newly installed plants and the surrounding native soil should both receive water, in part, to encourage roots to grow into the native soil. For plants other than trees (for example, shrubs, groundcovers, perennials, etc.), keep the root ball moist, but not soggy, during the first three months after planting.

Then gradually, over a period of approximately 1 to 1-1/2 years, reduce the water frequency (or stated another way, increase the amount of time between watering) based on the water-use classification for that specific species. Keep in mind, that some low, very low, and no water-use California native plants, once established, do not want supplemental irrigation during summer months. Before watering, check soil moisture with a soil probe or moisture meter.

**Sheet Mulching** – Also known as composting in place or lasagna composting. The process involves layering of compost, cardboard, and mulch on top of your lawn, depriving it of sunlight. It mimics nature by breaking down (decomposing ) organic materials that help to improve the structure of the soil, nourish soil organisms, and improve air and water movement. Composting your lawn in place reduces waste to the landfill.

**Rain Garden** - A rain garden is a planted, shallow depression in the soil designed to collect rainwater from roofs, pavements, and other impermeable areas, and hold it temporarily to let it sink into the soil. Spillways are created for the inflow and outflow of water. The outflow can be directed to other contours in the soil, such as berms and basins, to continue the spread of water in your landscape.

These strategies allow storm water and irrigation runoff to be used for plant growth and soil enrichment rather than allowing it to run directly in the storm drainage system, creeks, and rivers, carrying pollutants such as pesticides, fertilizers, oil, pet waste, and debris. Place rain gardens a minimum of 10 feet away from structures.

**Watershed** – An area of land that channels snowmelt and rainfall to creeks, streams, rivers, and eventually to outflow points, such as reservoirs, bays, and the ocean or to an interior body of water, such as a lake. Large watersheds can also encompass groundwater and aquifers. Your home and its landscape can be considered a mini watershed. During periods of heavy rain, water may run off of impervious surfaces such as your roof, driveway, and sidewalks, carrying pollutants and eroded soil into storm drains. So, using methods to slow, spread, sink, and store water in the soil on your property, as shown in these planting plans, help keep our waterways and the ecology of the watershed healthy.