

Save Our Water Supply: Avoid Runoff

When the water from our irrigation systems runs off the soil or gets sprayed onto paved areas, it washes contaminants off plants and paved areas into our storm drains. Contaminants such as fertilizers, insecticides, weed killers, oils and grease can get carried into our storm drain system and may end up in our drinking water. By eliminating irrigation runoff, we reduce the risk of contaminating our water which can lead to costly water supply cleanup. You can also protect our groundwater by using fewer pesticides and avoiding toxic products.

Tips For Avoiding Irrigation Runoff

Anyone who has ever seen a landscape being watered to the point where the water puddles and either runs down the sidewalk, into the gutter, or onto the street has witnessed "irrigation runoff." Runoff is often caused by sprinklers spraying onto paved areas and/or by running the irrigation system for too long of a cycle. Monitor the spray pattern of sprinklers and install nozzles that are appropriate for the area. Then determine how long to run your irrigation cycle by doing the following:

Step One: Detect the runoff point

Use a watch to determine the amount of time it takes to reach the runoff point from your irrigation system. Observe the beginning time on the watch; start your sprinklers and observe the irrigation until you see water accumulating (puddling) and/or running onto the sidewalks or gutters; again observe your watch. The runoff point is the length of time between when you first observed runoff and the beginning time. To prevent runoff do not exceed this short length of time during any one irrigation cycle.

Step Two: Set your controller to water cycle

Use the features on your sprinkler controller to your advantage. For example, if your landscape requires 12 minutes of irrigation and your runoff point is four minutes, then set three start times of four minutes each no more than two hours apart. Using short cycles not only stops runoff but allows time for the soil to absorb the water between applications.

Adjust your controller every month to allow for season changes. In the winter months, turn your controller to the "off" position and/or reduce the amount of irrigation. To help with water pressure set your controller start time(s) at odd times, such as 9:37 p.m. or 3:42 a.m., if your controller features allow you to do so.

Step Three: Replace old or broken equipment

It's easier to avoid runoff in your garden when you have the proper equipment in working order. Many irrigation manufacturers make low-flow pop-up sprinklers. These sprinklers spray larger droplets, reduce precipitation rates and regulate water pressure. Simply check your local irrigation supplier to discuss these sprinkler features. Spray nozzles come in 1/4, 1/3, 1/2, 3/4 or full circles. Make sure that all of your spray nozzles are at the proper angle for the area that you're watering. Adjustable arc spray nozzles are also available for odd-shaped areas.

Water-Wise Gardening Tips

Here are some ways to have a healthy garden while conserving water:

- Choose plants classified by water needs of very low, low and medium that are appropriate for the Central Valley.
- Aerate lawns that are on compacted or heavy clay soils to increase water penetration into the soil and to reduce runoff.
- Mulch all flower beds with up to 4 inches of organic (bark, wood chips, newspaper, straw) or inorganic (gravel, pavers, plastic, shredded tires) material to reduce evaporation, moderate soil temperature and suppress weeds.
- Plants with similar water needs should be planted together.
- Adjust your irrigation controller to allow for weather conditions, plant needs and soil conditions.
- Consider drip irrigation – the most efficient method of irrigation. It's easy to install, whether converting a sprinkler system or starting from scratch.
- Reduce lawn size or eliminate unused lawn areas. Consider replacing them with low water-use ground cover plants or decorative mulch.
- Mow lawn higher during summer months to reduce plant water needs, reduce water evaporation from the soil surface, and suppress weeds.
- Apply only slow-release fertilizers that stay available to the plant for longer periods of time and do not encourage succulent, water-hungry growth.
- Periodically manually turn on your irrigation system to check for leaks and broken equipment, then make repairs.
- Checking the system, monitor the spray pattern of sprinklers and install nozzles that are appropriate for irrigated areas to avoid spraying water on paved surfaces.
- Sweep sidewalks and patios instead of hosing them off.
- If installing a new landscape during the declared Stage 4 "Water Emergency", you may apply for a new plant establishment permit which provides a 21 day exception to the day-of-week watering restrictions while your new plants take root.



For more information, contact the City of Visalia Natural Resource Conservation Division at:

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Urban Tree
Foundation



SEQUOIA
COMMUNITY CORPS
A California Certified Conservation Corps

Creating A Low-Water Use Landscape

Plant Selection &
Water-Wise Gardening Tips



Save Our
WATER
Every Drop Counts



Plant Guide

For Low Water-Use Species

The plants listed in this brochure are water-wise, which means they require a minimal amount of water to thrive in the Central Valley as classified by Sunset's Garden Climate Zone 8 or 9. Because plants have many common names, the botanical names are also listed. For more information on each plant, you may consult the Sunset Western Garden Book or other reliable sources.

Visalia Low-Water Use Demonstration Gardens

Visit one of Visalia's local low-water use demonstration gardens to see actual gardens and native low-water use plants.

They are located at:

- Packwood Creek Trail (Caldwell to Cameron)
- Pinkham Basin (S. Pinkham between Victor and La Vida)
- St. Johns Botanical Garden (Off Riggin / North of 63)
- West Main Street Park (to County Center)



The following list of plants are low-water use and survive well in the Central Valley climate Zone 8 and Zone 9.

Trees

Palo Verde	Black Oak (Above 4000')
Strawberry Tree	Valley Oak
Italian Cypress	Interior Live Oak
Shoestring Acacia	Fruiting Pomegranate
Bailey Acacia	Mediterranean Fan Palm
Western Redbud	Pindo Palm
Desert Willow	Windmill Palm
Fruitless Olive	Sago Palm
Ponderosa Pine	

Groundcovers

Acacia Redolens	Japanese Garden Juniper
Prostrate Rosemary	Creeping Mahonia
Sage Leaf Rockrose	Bee's Bliss Sage
Dwarf Coyote Bush	California Fuchsia
Wild Lilac	California Poppy

Agaves, Succulents

Aloe	Spider Agave
Red Yucca	Hen n Chicks
Agave Parryi	Sedum
Blue Glow	Ice Plant

Large Shrubs

Powis Castle	Grevillea 'Long John'
Coyote Bush	Toyon (California Holly)
Coffeeberry	Flannel Bush
Manzanita	Texas Ranger

Medium Shrubs

Red Bird of Paradise	Purple Fountain Grass
Grevillea 'Bonfire'	French Lavender
Cape Plumbago	Lomandra Longifolia 'Breeze'
Rosemary	Orchid Rockrose
California White Sage	Rockrose
Autumn Sage	Lion's Tail
Hot Lips	New Zealand Tea Tree
Cleveland Sage	Manzanita 'Howard McMinn'
California Lilac	Dr. Hurd Manzanita
Yarrow	Santa Cruz Island Buckwheat
Deer Grass	Hybrid Flannel Bush
Allen Chickering Sage	Wild Lilac
Mexican Sage	Oregon Grape
Black Sage	California Holly Grape

Small Shrubs

Emerald Carpet	Ornamental Pomegranate
Catmint	Monterey Manzanita
Blue Fescue	Crimson Pygmy Barberry
Coastal Gem	Dwarf Coyote Bush
Powis Castle	Wild Lilac
Society Garlic	Red Buckwheat
Common Yarrow	Sulfur Buckwheat
Lavender Yarrow	Island Alumroot
Red Yarrow	Alum Root (Coral Bells)
Foothill Penstemon	Sticky Monkeyflower
Hummingbird Sage	Red Sticky Monkeyflower

Dry Shade

Bergenia	Oregon Grape
Kaffir Lily	Lomandra Longifolia 'Breeze'
Coral Bells	Flax
Heavenly Bamboo	

