JORDAN VALLEY WATER
CONSERVANCY DISTRICT

WATER-EFFICIENT LANDSCAPING

Best practices and considerations for creating low-water landscapes

These guidelines are intended to aid in the successful implementation of Jordan Valley Water's outdoor water efficiency standards and incentive programs. Designing, installing, and maintaining landscapes using these methods can prevent common pitfalls while creating more manageable maintenance and greater curb appeal.

IRRIGATION:

Jordan Valley Water's landscaping standards remove lawn from areas where it isn't functional and require drip irrigation in planted areas narrower than 8 feet—including park strips and parking lot islands. By using the right type of irrigation for each landscaped area, overspray, water waste, and sidewalk damage from roots can be minimized.

Drip Irrigation Benefits:

Today's drip technology has reached a state of high-level performance and is widely accepted as the standard for irrigating plant material other than lawn. Not only do drip systems use dramatically less water than overhead sprinklers, they also help reduce weed growth and eliminate problems from overspray. Many cities in California, Arizona, and Nevada now require drip irrigation for park strips, parking lot islands, and other narrow landscaped areas.

- Provides the exact amount of water needed by each plant or tree directly to the root zone
- Eliminates watering the sidewalk and street
- Reduces weeds by only watering the plants you want to grow
- Reduces plant stress caused by wet and dry cycles or soil temperature fluctuations
- Allows water to go deeper, helping to minimize surface rooting that can damage sidewalks

Types of Irrigation Systems:

Inline:
(Recommended for high density planting)

Use inline drip to create a grid pattern in planting beds or park strips. Where there are trees, a ring formation can be created under the tree canopy. Because inline systems water the entire planting bed evenly, they do not have to be adjusted as plants grow.

Point Source:
(Recommended for low density)

A point source system is designed to water individual plants. More emitters may need to be added as plants grow and mature. For large applications, consider using commercial grade products for extra durability.

Overhead Sprinklers:
(Recommended for lawn)

Lawn is the only place where overhead sprinklers should be used. For the most efficient watering, use rotary nozzles (ex. Hunter MP Rotator or Rain Bird R-VAN).

Irrigation Best Practices:

Seasonal weather patterns may require adjustments to these general recommendations.

Lawn:

- Landscapes in Salt Lake and Utah Counties often don't need water from irrigation before May 1 or after September. Delay watering as long as possible to save water and encourage deep root growth.
- **Water 2-3x per week during the summer and 1x per week in the spring and fall.** Adjust this schedule as weather requires.

Perennials And Trees:

- During the watering season, drip irrigate deeply once per week for 60 minutes in clay soil and twice per week for 30 minutes in sandy soils.

New Plants:

- **New plants will require extra water during their first season.**

  Weeks 1-4 (or if temperatures exceed 90 degrees): Water 3x per week

  Weeks 5-12: Water 2x per week

Smart Controllers:

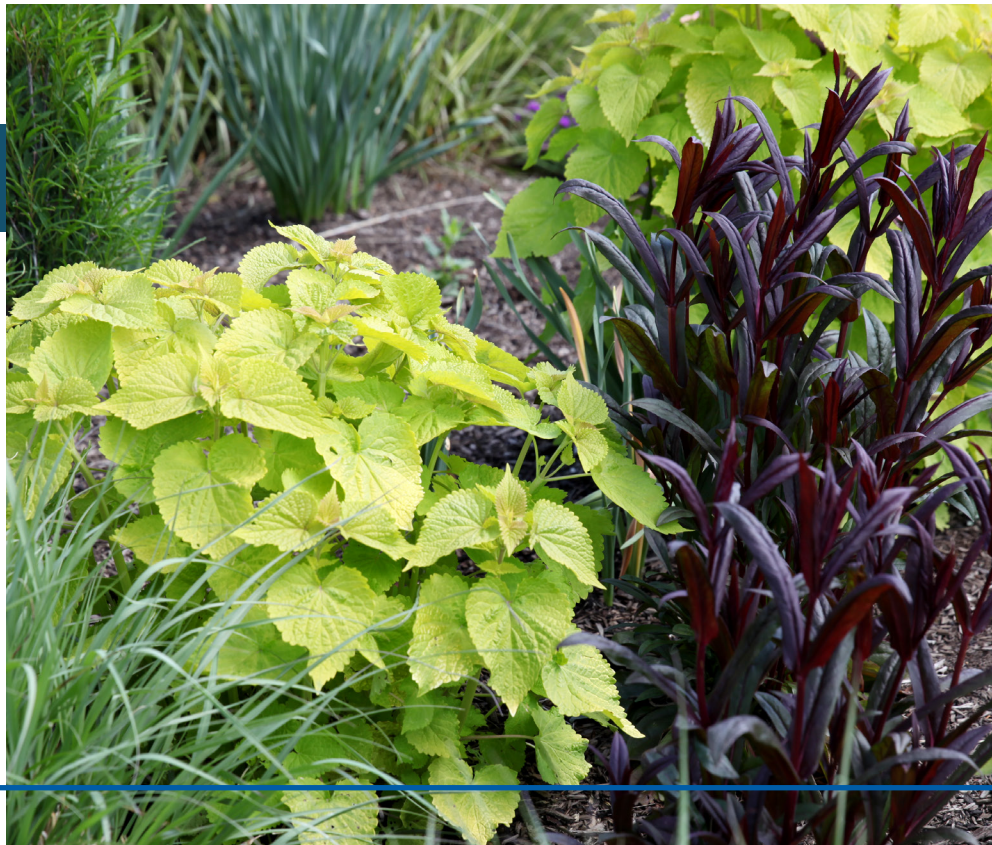
- Use smart controllers to adjust watering frequency and duration based on weather conditions and landscape needs.
- Smart central control systems are recommended for managing multi-site commercial, industrial, or institutional landscapes.

Drip Systems:

- **Use a filter and clean it regularly.** Good filters will keep your drip system running without clogging. If your system uses secondary water, more frequent cleaning and an additional or larger filter may be needed.
- **Minimize drip system leaks with a pressure reducer.** System leaks can occur when water pressure is too high—and since most drip systems are designed for lower pressure than sprinklers, pressure reducers are recommended.

DESIGN:

Considering irrigation, functionality, and maintenance requirements as part of landscape design can result in better landscapes that thrive with reduced work and expense. Jordan Valley Water's landscaping standards incorporate aspects of the Localscapes® design method to address challenges of landscaping in Utah's unique climate. The following tips may be helpful in creating water-efficient and low-maintenance landscape designs.



Design Best Practices:

- ### Create "No Maintenance" areas:

  Sections of lawn that do not serve a functional purpose can easily be replaced with outdoor seating, walking paths, or barbecue areas that add value while decreasing maintenance needs. Without lawn or plants, these areas will require no water and virtually no maintenance.

- ### Contrast Open Space with Dense Plantings:

  Contrasting open spaces with dense plantings can add structure to a landscape while requiring the least maintenance over time. Dense plantings will hide imperfect maintenance and hinder new weeds from growing.

- ### Keep Lawn Unobstructed:

  When lawn is used, it should be designed in an open shape unobstructed from trees, utility boxes, posts, or other obstructions. This will allow sprinklers to work efficiently instead of forcing them to water oddly-shaped or positioned lawn areas. The open shape also leaves a single edge to trim and maintain.

- ### Use Simple Designs:

  Use mass plantings. Sticking to a few types of materials and plants in landscapes make large-scale maintenance easier and keeps landscapes from looking too chaotic.

- ### Plant in Groups and Arrange by Height:

  Group plants in odd numbers and arrange with the shortest plants in front and the tallest in the back. Using this simple planting trick quickly improves the look and feel of planting beds.

- ### Utilize Mulch:

  Designing planted areas with a thick layer of mulch will improve appearance, shade the soil, and reduce germination of weed seed. Jordan Valley Water's landscaping standards require at least 3-4" in planted areas.

- ### Get Inspiration:

  Free park strip plans and a searchable plant database are available through Jordan Valley Water. Get ideas at ConservationGardenPark.org/plants.

Park Strip Considerations:

Park strips should allow for vehicle and pedestrian traffic without impeding vision or causing root damage to curbs and sidewalks. Because of this, we recommend the following for successful park strip plantings:

- **Use plants shorter than 24 inches at maturity.** Taller plants block views, impede safety, and can interfere with maintenance.
- **Avoid conifers and other trees with weak or low branching, shallow roots, or high water needs—**any of these characteristics could increase the chance of roots causing damage to curbs and sidewalks.
- **Include paths** between planting areas for foot traffic between the street and sidewalk.
- **Use heavier materials** that do not float and cannot blow away are recommended for mulch in park strips.

MAINTENANCE:

Like any landscape, water-efficient landscapes need regular maintenance to be successful. Making time to complete annual maintenance tasks in the spring and fall can reduce weekly maintenance requirements and keep water-efficient landscapes looking good all year long.

Maintenance Best Practices:

Annual Maintenance: (Target the spring and fall for these tasks)

Ornamental Grasses

- Cut back 6-12 inches above the ground.
- If the centers are starting to die out, dig up, divide and replant the grasses.

Perennials

- Cut back 2-6 inches above the ground.

Trees and Shrubs

- Remove any dead, crossing, diseased, or excessive branches from trees and shrubs (wait two years after planting new trees before pruning).

Lawn

- Aerate and fertilize.

Mulch

- Replenish every other year or as needed to maintain 3 to 4-inch thickness.

Herbicide

- Apply pre-emergent herbicide to reduce weed seed germination.

Irrigation

- During a watering cycle, disturb the mulch where drip system emitters are located and check for moisture.
- Check sprinkler heads for leaks and proper spray patterns.

Weekly Maintenance:

- Pull weeds or spot spray as necessary. Avoid spraying on windy days or getting too close to plants you want to keep.
- Remove dead flowers or stems.
- Remove any trash that has accumulated.
- Mow and edge lawns as needed. Avoid cutting shorter than 3 inches. Taller lawn will help shade roots and discourage weeds.
- Clean drip system filters and inspect emitters as needed.

ADDITIONAL TRAINING OPPORTUNITIES:

Jordan Valley Water will provide staff training for anyone installing or maintaining landscapes using its outdoor efficiency standards. Additional training opportunities can be found through the following resources:

QWEL:

Become a Qualified Water Efficient Landscaper with training from QWEL—an EPA WaterSense certification program. This training and certification prepares participants to successfully install and maintain water-efficient landscapes. Register at qwel.net

UNLA:

Join the Utah Nursery and Landscape Association at its annual Green Conference for classes on sustainable landscaping and other industry trends. More information is available at UtahGreen.org

Conservation Garden Park:

Tour Conservation Garden Park to see examples of water-efficient landscaping and more than 1,000 Utah-friendly plants. The Garden is operated by Jordan Valley Water and is located at 8275 S. 1300 W. in West Jordan. ConservationGardenPark.org

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