# EFFECTIVE PRACTICES FOR WATER EFFICIENT LANDSCAPING

Jordan Valley Water Conservancy District



# WATER EFFICIENT LANDSCAPING

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# DESIGN & INSTALL

Considerations for Water Efficient Landscaping

## **LAWN:**

Lawn is best when used in functional and water-efficient ways.

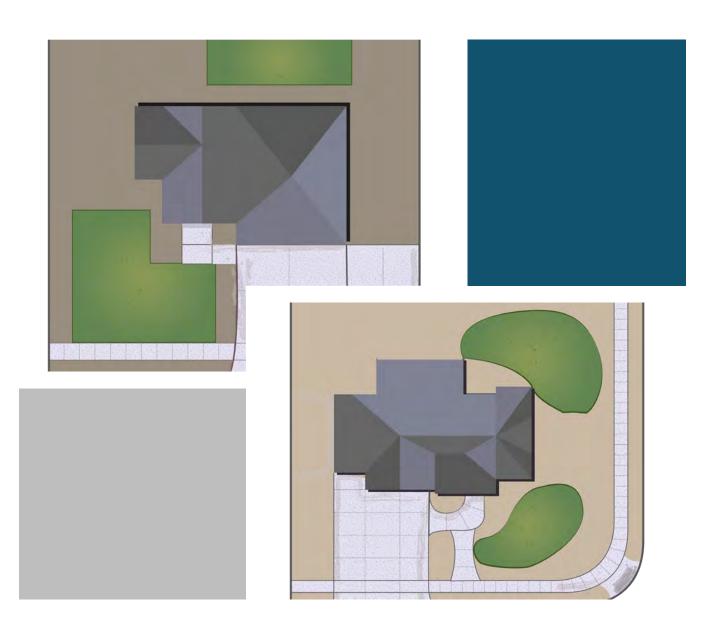
The following guidelines can help you decide where to use lawn in your landscape design.



O1

Design lawn with a purpose in mind and not as a default ground cover.

Typically, lawn works best for active recreation areas.



Keep lawn unobstructed.

Obstructions may cause:

- Blocked sprinkler heads
- Tree and lawn root competition
- Increased mowing and trimming maintenance around obstacles

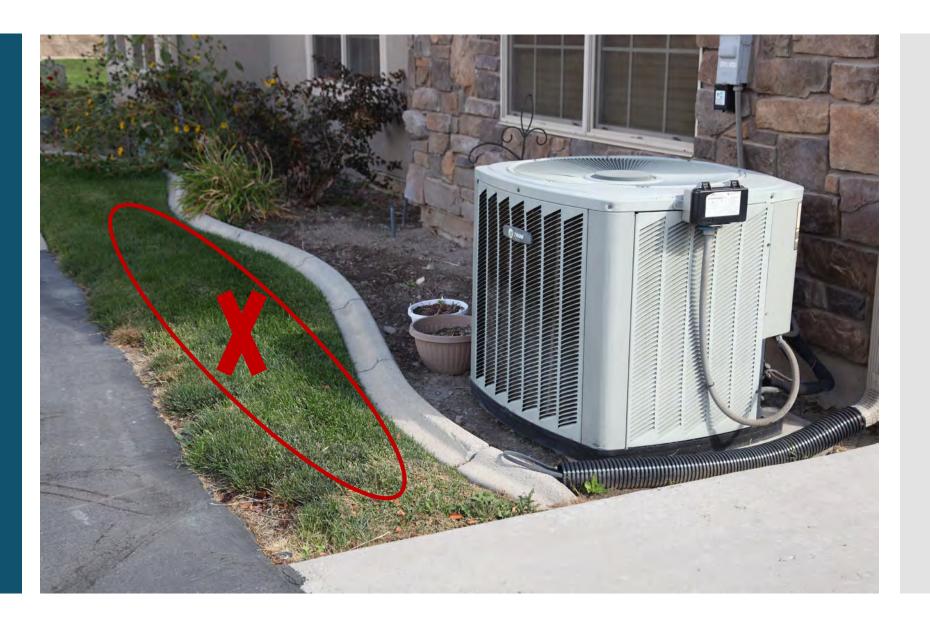


Avoid lawn on steep slopes where it is difficult to maintain and water runs off easily.



Keep lawn in areas that are at least **8 feet wide**.

Irrigation systems are unable to efficiently water areas less than 8 feet wide.



Lawn should not be used for Paths.

Well-traveled areas are best designed with a more permanent surface.



WHAT TO USE
WHERE LAWN
DOESN'T MAKE
SENSE

Hardscape

**Activity Areas** 

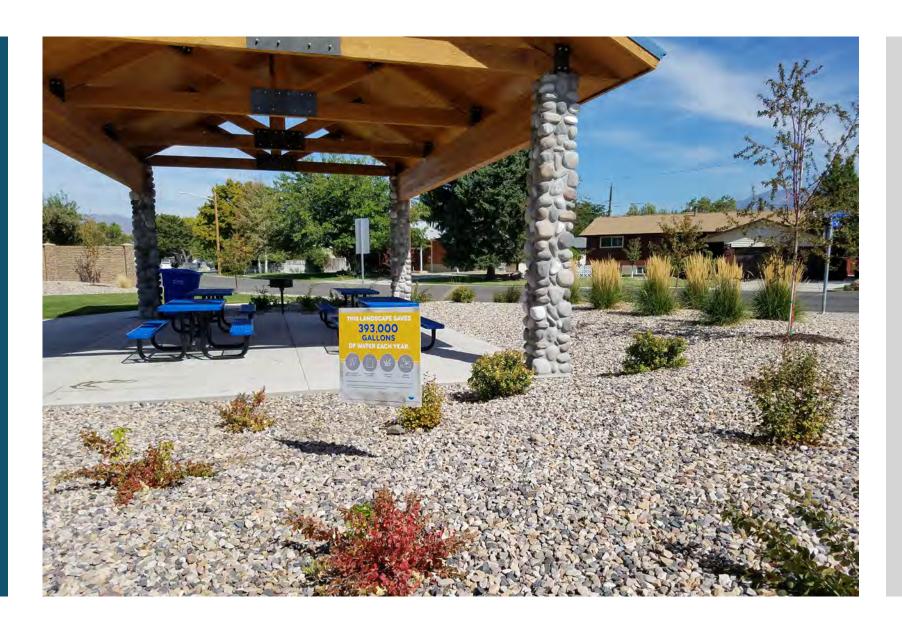
**Ground Cover** 

**Planting Beds** 

# **HARDSCAPE**

Incorporating Hardscape areas creates "No Maintenance Zones" that require no water and virtually no regular maintenance.

Examples: Gathering Areas, Patios, Paths, etc.



# **ACTIVITY AREAS**

Activity areas are another great way to incorporate low maintenance areas that require no extra water.

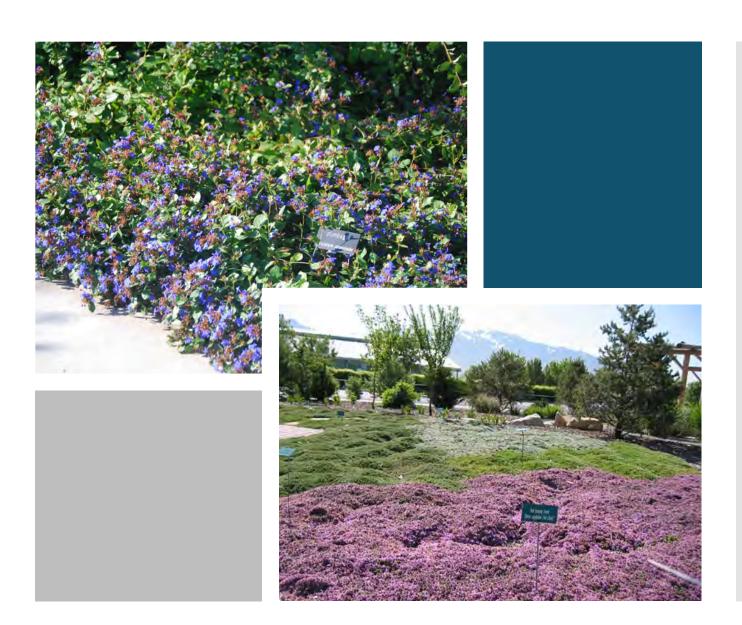
Examples: Playgrounds, sport courts, walking trail, etc.



# **GROUNDCOVER**

Easy to maintain—especially compared to lawn or planter beds.

Because the area is full of growth it is much harder for weeds to grow. Groundcover is basically a living mulch.



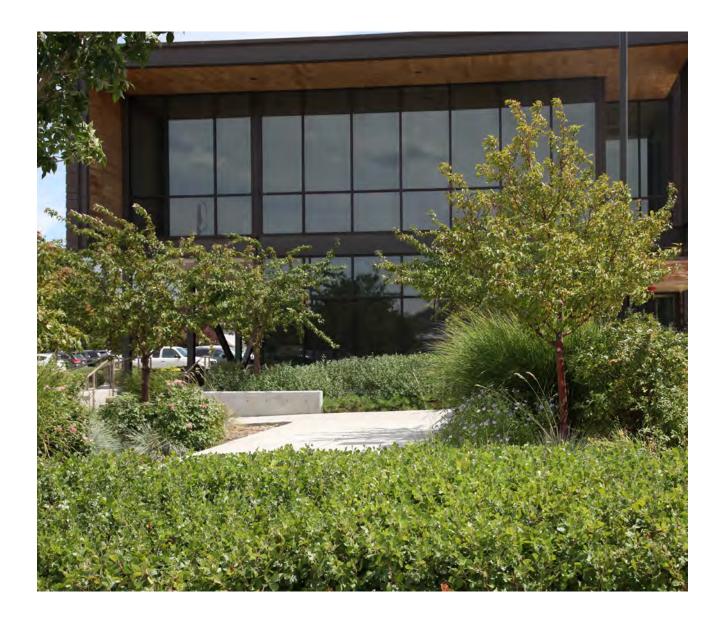
# **PLANTING BEDS**

Areas not filled by designed elements become Planting Beds, which easily fit any size or shape.



# PLANT SELECTION

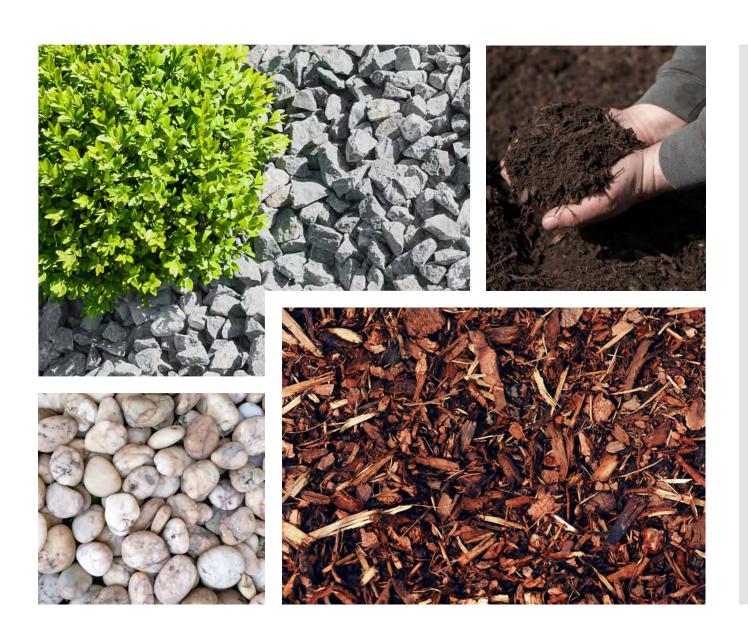
- Select plants suited for their location.
- Designing dense planter beds can hide imperfect maintenance and hinder weeds from growing.
- Sticking to a few types plants that are used in multiple work sites can make large-scale maintenance easier.



# MULCH FOR PLANTING BEDS

A thick layer of mulch (3-4 inches) in all planted areas will help control weeds, shade the soil, reduce water needs, and improve appearances.

Many varieties of mulch are available depending on your price point or aesthetic preference.

























## **IRRIGATION**

Using the right irrigation can increase water savings and reduce weed growth.

Spray irrigation is great for lawn, but is inherently inefficient because of overspray, wind drift, and evaporation.



## **DRIP IRRIGATION**

#### Planting Beds should be irrigated with a drip system:

- Eliminates the watering of sidewalks and streets.
- Applies water directly to plant's root zone
- Reduces weeds by only watering plants you want to keep.
- Minimizes surface rooting that can cause sidewalk damage.



# **DRIP IRRIGATION**

- Issues with drip systems are most often caused by incorrect installation or lack of maintenance.
- Drip irrigation is widely accepted as the standard for irrigating plant material other than lawn.
- Many cities in California, Arizona, and Nevada are now requiring drip irrigation for park strips, parking lot islands, and other narrow landscaped areas.



# **INLINE DRIP**

Inline Drip Systems include pressure compensating emitters inside drip tubing. Blank tubing can be used to connect irrigated areas.

Best option for high-density planting areas and trees.



# **INLINE DRIP**

For trees, create a ring formation under the tree canopy.



# **POINT SOURCE DRIP**

Point-source drip includes individual emitters that are installed externally.

Best option for low-density planting areas.



### **IRRIGATION**

Smart controllers can reduce site visits by making it easy to check sprinklers.

Many cities use a central irrigation control system to monitor multiple sites from a single mobile device.

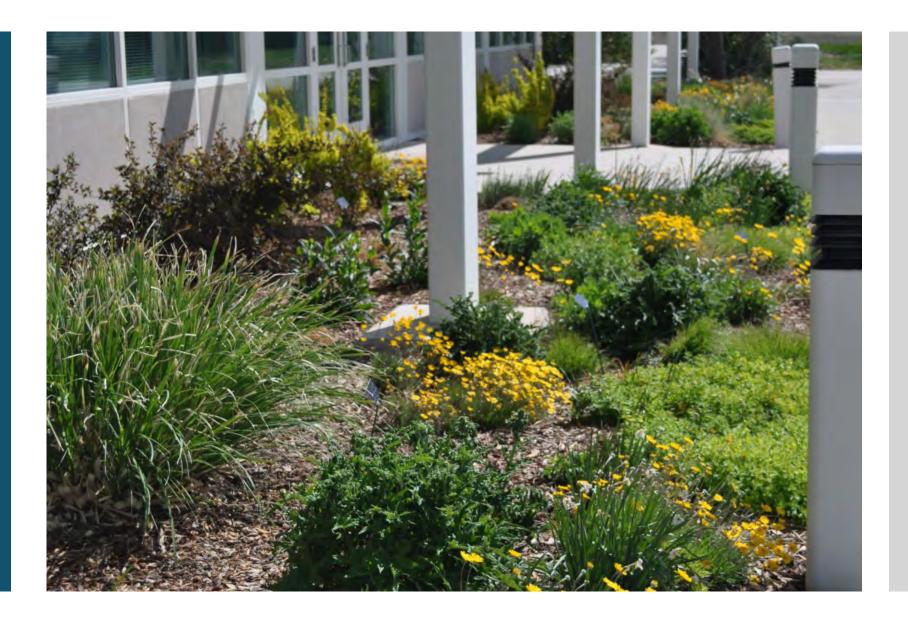
Remember, even with a smart controller, you are the frontline for monitoring plant health and watering needs.



# A NOTE ABOUT COST

Cost is determined by what you put into a landscape.

While the cost of mulch, hardscape, and plants may be higher for your water-efficient landscape, some cost is offset by less expensive sod and irrigation elements.



# LANDSCAPE MAINTENANCE

Considerations for Water Efficient Landscaping

# ORNAMENTAL GRASSES

#### **What To Do:**

- Cut Back about 2/3 of the plant.
- If the center of the plant is starting to die, divide it and replant.

#### When?

Fall or spring.



# **PERENNIALS**

#### **What To Do:**

- Cut back 2-6 inches above the ground
- Remove any dead or diseased parts. If it is brown, brittle, or dry, it is dead.
- Apply pre-emergent to reduce weed seed germination.
- Apply post emergent as necessary.

When?

Fall or Spring.





## **TREES AND SHRUBS**

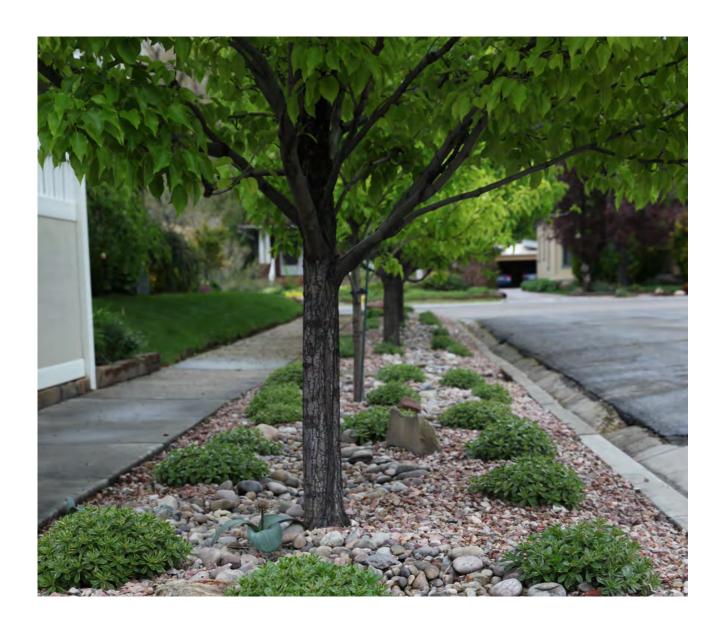
#### **What To Do:**

- Remove dead, diseased, crossing or excessive branches
- Prune as necessary.

If a shrub needs to be pruned every year for size, consider replacing it with a smaller shrub and save yourself the maintenance.

#### When?

Between January and March



### **PRUNING**

Pruning opens the plant canopy, increasing light and air movement.

- Remove dead, diseased, crossing or excessive branches
- Maintain the natural form of plants. No shearing
- Thinning cuts will help maintain the natural growth habit of the plant.

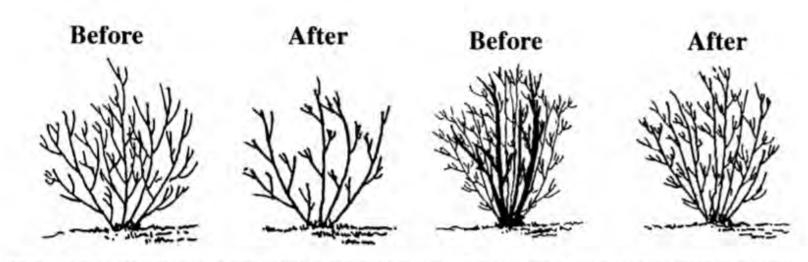


Figure 1. Selective thinning removes the branches back to the point of attachment (left) or to the base of the plant (right) and preserves the natural shape of the plant.

# **GROUNDCOVER**

#### **What To Do:**

- Remove trash and debris (A blower is a great tool)
- Replant dead or bare areas
- Trim edges along sidewalks and paths.

#### When?

As needed.



# **MULCH**

#### **What To Do:**

- Replenish to maintain thickness of 3-4 inches.
- Remove excessive debris and clippings with light raking, light blowing, or by hand.

#### When?

As needed.



### **IRRIGATION**

#### **What To Do:**

- Check plants and soil for signs of under or over watering
- Inspect irrigation controller
- With the system on, visually inspect for leaks, damage to emitters or tubing, clogs, or high flow.
- Bury exposed lines
- Check filter and pressure regulator.

#### When?

Periodically or with each site visit.



## **IRRIGATION**

#### **What To Do:**

- Flush your drip system to remove any debris that may have accumulated inside the lines:
  - 1. Open the flush cap at the end of the line.
  - 2. Run water for several minutes to flush it out.

#### When?

Prior to irrigating in the spring.



# A NOTE ON COST

The cost of maintenance for water efficient landscapes is reduced by fewer equipment needs, more flexible maintenance schedules, and less fertilizer and lawn.



# **CREW SPECIALIZATION**

Some cities have found it helpful to use specialized crews for specific tasks like pruning, weeding, mulching, or applying chemicals.

While these tasks are more specialized, they can be completed on a flexible maintenance schedule and require less frequent upkeep.



## A NOTE ABOUT ESTABLISHMENT

New plantings need a little extra water and care to help them establish.

#### **Shrubs and Perennials**

Weeks 1-4: Water 3 times per week

Weeks 5-12: Water 2 times per week

When temperatures exceed 90 degrees during the first growing season, increase watering to 3 times per week.



### A NOTE ABOUT ESTABLISHMENT

#### **Trees**

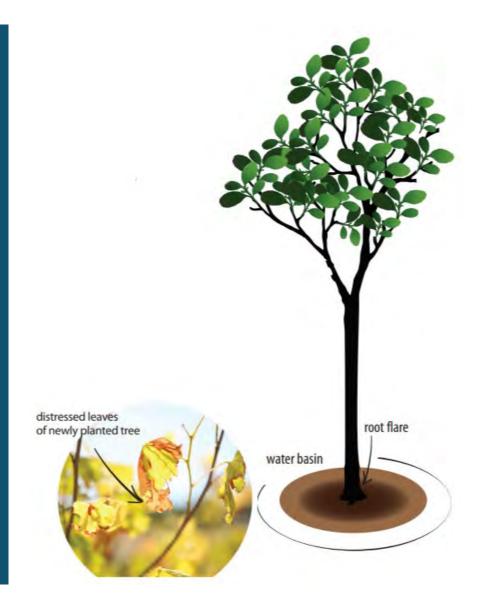
Create a water basin by forming a ridge of soil (up to 6 inches high) around the perimeter of the root ball.

#### **Months 1-3:**

Fill the water basin with a 5-gallon bucket of water twice per week. If temperatures are above 90 degrees, increase to 3 times per week.

#### Season 2:

Fill the water basin with a 5-gallon bucket of water once a week.



# TRAINING AND RESOURCES

Considerations for Water Efficient Landscaping

## TRAINING RESOURCES

- Classes
- Workshops
- Certification Courses
- Tours























