

Introduction

Congratulations! You've taken the first step towards saving thousands of gallons of water in your own yard and being an example of conservation in your neighborhood. You are also on the way to saving money on your water bills.

Since 2005 over 5,000 people have pledged to Rip Their Strip!

This site is designed to give you the instructions, examples, and confidence you'll need to convert your traditional parking strip into an exciting and beautiful example of what low water-use landscaping can be.

What Is Xeriscaping? It Means Beautiful, Water-Wise Landscaping!

Put simply, xeriscaping is landscaping that uses less water. Xeriscaping uses drought-tolerant plants, practical lawn areas, efficient watering systems, mulches, and proper maintenance to obtain impressive water savings.

Parking strips offer a unique opportunity to try xeriscaping—you can try different methods, see what you like, and prepare to retrofit bigger parts of your yard. Later you can move on to larger parts of your yard to realize more savings, and you'll already be familiar with the techniques and styles that you like.

Step 1: Plan

This is where a great project really happens—in the planning phase. Making the right plan not only saves you money and time, but it can save you the aggravation of trying to install a new parking strip with no clear idea of what you're trying to achieve.

We've included in this section some GREAT designs by local professionals for you to consider. Look them over, and see what suits you. Each design is simple enough for you to adapt it to your own needs, but if you'd prefer to hire them to make your own custom design, their contact information has been provided.

1.1 Read local landscape ordinance

Before you do anything, you need to **familiarize yourself with your city's landscaping ordinance**, and any restrictions they might have on what is allowed in parking strips.

The Utah Rivers Council is not responsible for any expenses, fines, or other damages you may incur by failing to meet your ordinance requirements.

Types of restrictions may include:

- Types of plants or trees allowed (i.e. no thorned plants)
- Types of non-plants allowed (i.e. no concrete)
- Size or height of plants/trees limits
- Sight line preservation
- Caliper of tree required
- Percent of plants required
- Grass requirements (some places actually <u>require</u> grass)
- Historic area preservation

1.2 Look over sample designs

The following pages contain sample parking strip designs done by local landscape designers who are very familiar with xeriscaping principles and Utah's semi-arid climate. Feel free to experiment a bit, or make your very own design from scratch.

Example 1 -

Waterwise Design & Landscapes, L.C. (801) 274-6580 | waterwise-utah.com

Example 2 -

Sage's Way Landscape & Design (801) 573-8934 | sagesway.net

1.3 Create your own parking strip plan

Plants- Drought tolerant plants are mostly *perennials*, or plants that live through the winter and rebloom every year. *Annuals*, or plants that die at the end of autumn, never get really well-established roots and typically have higher water requirements.

For a great database of waterwise plants for Utah, see <u>waterwiseplants.utah.gov</u>. Click on "Search" to search by plant size, flower color, sun exposure, drought rating, bloom season, etc. Additionally, a short list of plants has been included in the packet for you.

Choose plants that work for your needs. If your strip bakes in the sun, choose full sun plants. If you get a lot of snow (with salt) piled on it the winter, choose tough, salt-tolerant plants. Use varying heights as allowed by your ordinance. Look into the maintenance requirements of each plant. If you're after hummingbirds or butterflies, plan accordingly. Call nurseries to see if they carry the plant you're after. Most should be locally available; more and more drought tolerant varieties are becoming available each year. Don't be afraid to ask a nursery professional about plants, or research it online.

Non-Plants- Why not use stone or decorative rock? They're pretty cheap, but if you don't want to haul them around, don't put them in your plan. Large rocks should be used as accents, not as the bulk of the design.

Maintenance- This should be a major factor in your plans. Look at the characteristics of plants you select. Do they require much maintenance? Will you constantly be hacking them back from the sidewalk?

Colors- What colors look good with your home and current yard? Try fixing in on one or two accent colors, with a third background color. Don't forget that leaves also provide color, not just blooms. Some beautiful colors never flower.

Seasons-Bulbs are great for spring, but plan for color all year round. Coordinate so that as one plant fades from bloom, another is just beginning.

Nature vs. Right Angles_- Nature grows plants in clumps and wavy lines, not in straight lines. If you like a more natural look, avoid rows. If you like a formal look, straight lines help accomplish that.

It's time! Get out a piece of paper, and draw your current parking strip dimensions. Graph paper makes creating a scale model easier. Look at your list of characteristics, the plants you like, and your ordinances...and make your plan!

Step 2: Remove Existing Materials

Before you can plant new stuff, you have to get rid of the old. But how? Where do you put it? And how much do you get rid of? This may not be the most fun part of the project, but it's certainly one of the easiest. Rip out what's gotta' go.

2.1 Figure out how much you have to remove.

All of your old parking strip does not have to be removed. If your new plan calls for keeping the old trees, then you'll want to be careful as you dig out other materials so you don't harm the trees' roots. Schedule plenty of time to remove the existing strip. This is where the lion's share of the work will come.

Be aware of where sprinkler lines may be. If you have spring bulbs that you plan on keeping, be careful not to dig them up.

Before you do any kind of major digging, make sure you investigate the requirements of your local utility locating service (**Blue Stakes**). This is covered in Action Item 4.2.

2.2 Verify you will not dig up gas, water or sewer lines

<u>VERY IMPORTANT</u> Before you do any kind of digging, you will need to verify if you should call your local utility locating service, **Blue Stakes**, or call 1-800-662-4111.

2.3 Remove your old parking strip.

Get ripping! If you have large amounts of grass, plants, weeds or trees you are removing you may want to contact your local city government. Many municipalities have dumpster programs, where you pay a nominal fee for a dumpster rental, and they will deliver and pick up the dumpster for you.

If you are removing grass:

The best and most direct way is with a shovel and some hard work. Depending on the root depth of the grass, digging out your lawn can be tiresome, but it does ensure that the grass is really gone.



Start by cutting a line across the grass, with a shovel. Cut deep enough that you can wedge the shovel in the line and underneath the grass, to lift the lip of the grass up. Now grab the lip of the grass and pull back and away from the ground at about 45° angle. With some effort, the grass should "peel" back off of the ground like pulling a sticker away from its backing.

If you can't "peel" the grass away, you may just have to cut out small sections at a time. Using a shovel, cut out small portions of grass and lift them out. In all cases, make sure you shake the pieces of grass thoroughly to put as much soil back in the parking strip as possible.

There are also sod cutting machines that do this very thing available for rental, however they are sometimes difficult to operate and may be impractical in such a small area as your parking strip. If you have an extremely large parking strip, or are removing the lawn in a larger part of your yard at the same time as you're doing your parking strip, renting one of these machines may be advantageous. Most major equipment rental outlets have them available.

If the direct removal of grass doesn't appeal to you, perhaps you can let mother nature do the work for you. Remember when you were a kid and you would leave your "kiddy pool" out on the lawn in the summer? After a few days, you go and move it, and the grass underneath is a different color. If left long enough, that grass would die completely.

That same principle can be applied to eliminating grass intentionally. Large sheets of black or clear plastic are available at many hardware stores or some nurseries. Cover the areas of grass you want to get rid of tightly with a sheet of black or clear plastic, and make sure it's secure. Then, just wait for the sun to do the work of killing your grass naturally. This may take 4-6 weeks, or even a couple of months, and isn't always as effective as direct removal with a shovel, but it's certainly a lot easier.

Once the grass is dead and you remove the plastic, you'll need to turn the soil with a shovel or tiller to loosen it and work in the dead grass.

If you are removing weeds:

Pull up as many (roots and all) by hand as you can. You may want to wet the soil thoroughly the day before to make this process easier. After you've weeded the area by hand, turn the soil with a shovel or tiller.

If you are removing plants/shrubs:

Small plants are easy enough to remove; just dig them out. Larger plants and shrubs require extra digging, but should be removed the same way. Wherever possible, remove the plants entirely—roots and all.

If you are removing trees:

Trees can be an important part of a water-wise parking strip—we've even included a sample design that has large trees in it. Large trees provide excellent shade that reduces not only water needs, but electricity (to run the air conditioning) needs too. Don't be too hasty to remove them!



Large tree removal is best left to the experts. Although it can be expensive, it's a lot cheaper than buying your neighbors a new roof because "that limb didn't fall like I had planned." Check your city ordinance before removing trees; some cities require a permit.

Step 3: Set Up Sprinklers

If you have a sprinkling system, you may have to make some changes. Decide whether you can modify a current sprinkling system and how, or how else you might water your new parking strip.

If You Don't Have a Sprinkling System

If your parking strip doesn't currently have a sprinkling system, then you have the easiest transition. Once your new plants are established (after the first year), you'll still have to water your parking strip by hand, but only once or twice a month. Those who have selected the extremely high drought-tolerant option (Plan 1) won't have to water at all once the plants are established.

If You Have a Sprinkling System that DOES Water the Parking Strip as its Own Station

- 1) Most sprinkler clocks are not sophisticated enough to water one station on a "once or twice a month" basis, and the rest of the stations once or twice weekly. If yours is capable of this, your first and best option is to adjust the clock to accommodate the new strip's low water requirements.
- 2) Your second option is to replace your old sprinkler timer box with one that can run two different kinds of programs. These programs are independent of each other, and are flexible enough to water just once every 28 days.
- 3) Your third option is to just leave the sprinklers in place and manually run the parking strip station only when it's needed. You can either leave the same kind of sprinklers in place, or you can retrofit the sprinklers in you parking strip with drip irrigation. In either case, you'll end up removing that station from the automatic cycle by turning it off at your timer box, and just run it manually once or twice a month as needed.

If You Have a Sprinkling System that DOES NOT Water the Parking Strip as its Own Station

If the sprinklers in your parking strip are tied to a station with sprinklers that are in other parts of your yard, the only real option is to cap off the existing sprinklers and water the strip by hand. If you leave the sprinklers attached, you will either drown your new strip, or dry out your old yard. You might consider installing xeriscaping in the other part of your yard on the same sprinkler zone. That way, you could use one of the options above and keep the sprinklers.

While the long-term solution would be to redo the sprinkling system and make the parking strip one dedicated sprinkling station, instructions for that measure would be above and beyond the scope of the Rip Your Strip program.

About Drip Irrigation

Drip irrigation, sometimes called low-pressure irrigation or microirrigation, is the method of slowly delivering water in small drops directly to a plant's base. Soaker hoses, drip emitters, dribblers, bubblers, and drip tubing are all common components in drip irrigation. Using drip irrigation, evaporation and runoff are drastically reduced, and water is only delivered to plants—after all, why water the weeds? With a basic understanding of some fundamentals, it's very easy to install and actually quite affordable. For a crash course in drip irrigation, see http://www.irrigationtutorials.com/dripguide.htm. Any sprinkler supply company would probably be willing to spend few minutes explaining the basics and get you the materials you need.

REMEMBER – 'Rip Your Strip' is about saving water.

The key to this is ensuring that your watering system is adapted to the low water requirements of your new parking strip. Leaving in place your old sprinkler system watering schedule would both drown your new plants and not save any water!

Step 4: Prepare Soil

Drought-tolerant plants have different soil preferences than traditional plants. Before you plant, you have to know what kind of soil you have, and what kind of soil you'll need.

The ideal soil is loose enough to breathe and drain well. It's a mixture of sand, silt and clay—three different kinds of soil. Drought tolerant and Utah native plants may not require "high quality" soil, but good draining soil helps ensure that more water gets into the ground and less runs off the parking strip into the gutter.

4.1 Determine what kind of soil you have

The best way to determine your soil type is to have it tested. Home test kits are notoriously inaccurate, so we recommend sending away for the test

If you don't want to pop for the soil analysis, there are some basic tests you can do to check your soil. To test for drainage, dig a hole about a foot deep and fill it with water. If there's still water in the hole 12 hours later, your soil needs some help to enhance drainage. See Action Item 6.3 for ways to help the soil.

4.2 Determine what kind of soil you will need

If your new parking strip will be mostly plants

Look at the plant descriptions and any soil requirements they might have. Probably most will say, "requires loose, well-drained soils." In soil that drains too slowly, the water sits on the roots and can rot them, especially in plants that already have low water requirements.

If you have a clay or slow-draining soil (as determined in Action Item 6.1) you'll need to amend the soil so you end up with looser, quicker-draining, soil. Also, if you've done the USU soil test, they can

tell you what kind of nutrients you will need to put into the soil. Most drought-tolerant plants do pretty well on what would traditionally be called "poor" soil.

If your new parking strip will be plants plus other materials

You'll still need to have well drained soil. Don't fall into the trap of just making well-drained soil in the small pockets where there will be plants. By only working on these small pockets, you create small "buckets" that hold water. It moves freely within the loose soil, but still cannot escape the immediate area. You will need loose soil in the entire parking strip area as well to ensure proper drainage.

4.3 Treat, amend, or otherwise adjust the soil as needed

If your soil has a high clay percentage or doesn't drain well otherwise, you may need to break apart the soil throughout your parking strip, or add in organic matter. There are products designed to make soil drain better or add organic materials (compost, etc.) and work them into the soil. Nurseries often carry these products, and can help you determine what kind and how much you may need.

You may be tempted to add sand to your clay soil, with the intention of loosening the mixture. Avoid that temptation. Sand worked into clay soil is a recipe for bricks. A few days in the sun and your soil will be impenetrable.

If your soil is quite sandy, you can add some good topsoil with organic matter, or just compost or other organic soil conditioners. Don't get carried away, because sand drains quite quickly and is more forgiving on drought-tolerant plants.

When working these additives in, the rule is for every inch of compost or other material added, you should work it into the soil two inches. Work two inches of compost four inches into the soil, three inches worked six, etc.

Well-prepared soil is often the difference between plants thriving and plants just surviving. Do yourself a favor and spend enough time on getting your soil ready.

Step 5: Plant & Install

5.1 Purchase plants

It's time! You've planned, prepped, and ripped. Time to head to the nursery for your plants. You should have a list of each plant that you need, and how many of each you'll need. Bring it with you to the nursery—or it's game over. Once you're in a nursery, you can become like a kid in a candy store, picking randomly "one of those" and "two of these."

Plant Size:

Buying bigger plants means you have to wait less time to see your parking strip really fill in. It also means more money. Here's a simple equation: size=money. If you don't mind waiting a few years for

things to fill in, go with the smallest size available. Smaller plants need more attention at first, as their roots are small and can't survive long without proper watering, but they'll save you a bundle.

You may want to review your local ordinances before heading to the nursery. Besides prohibited plants and restrictions on plant quantity and characteristics (discussed in Step 3), some ordinances may require a certain size of plant or caliper of tree/bush be planted.

Plant Quality:

If you find a plant that you think is questionable, it's probably best not to buy it. It may be inexpensive and you may be tempted to "nurse it back to health," but more often than not it's already on an irreversible course to the garbage bin.

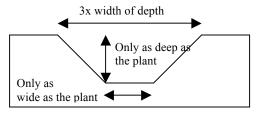
5.2 Add nonplant material

You should install non-plant items like stone pavers or landscape rocks and boulders first. Many ordinances require an easement across your parking strip, and stones are a great choice. Installing these items can be more disruptive to the whole area as you roll, slide, or plop them into place.

5.3 Plant Plants – Do It Right!

"Dig a \$20 hole for a \$2 plant" means that the preparation you make for a plant is much more important than you think. Here's a quick guide to planting:

- 1. Set out all your plants (in their containers) where they will eventually be planted. Adjust and rearrange them until you're happy with their placement.
- 2. Starting with the biggest tree, shrub or plant, work your way down to the smallest.
- 3. When you dig a hole, dig it three times as wide as it is deep at the top, and let the sides slope in to the bottom in a "V" shape only as wide as the plant at the bottom. Dig the hole only as deep as the plant is—that is to say, so that when you plant it, the soil level in your parking strip and the soil level of the plant are even. (See figure below)



- 4. Remove the plant from its container, and "tease out" the roots from the rootball, especially if they seem to wind around the plant.
- 5. Place the plant in the hole. If you've dug it too deep, fill back in with soil and compact it. If it's not deep enough, dig down so the plant's level will be even with the parking strip soil level.
- 6. Backfill the hole with the native soil you took out. Don't fill back in with compost or other additive (this makes a "holding bucket" for water). Don't put water in the hole. Just fill and press soil back in lightly.

- 7. Water the plant thoroughly after planting. If settling lowers the soil level around the plant, add more soil to bring the level back up.
- 8. Repeat!
- 9. After it's all planted, water the whole parking strip thoroughly. Watch for settling and make necessary adjustments.

Step 6: Mulch

Choosing the right mulch is largely personal preference, but using it right means your new parking strip will be extra water-wise. Put simply, "mulch" is any material that is put on the surface of soil and not worked into the soil. Often used examples are **chipped or shredded bark**, **peat moss**, **lawn clippings**, **gravel**, **or decorative stone**. Synthetic materials are also used as mulch. Plastic weed barriers or weed fabric could be defined as mulch as well.

Mulch has many purposes. First, it helps retain moisture in the soil. When water gets to the top of the soil, mulch is a protective layers that keeps it from evaporating as quickly, which keeps the soil a bit damp. This helps prolong the time between waterings.

Mulch also helps water percolate into the soil. Imagine walking across the same stretch of soil over and over again. Pretty soon, you'd have a near bullet-proof soil crust that actually couldn't absorb much water. Using loose mulch you can protect the soil crust from hardening, thus maintaining its capacity to absorb water. The exception to this use is sheets of plastic, which don't allow percolation.

In addition, mulch encourages plants to root nearer to the surface which makes them healthier, protects the base of plants, suppresses weeds, and moderates soil surface temperatures; it's an important component of any landscape. As always, check your local parking strip landscaping ordinance for possible restricted mulch materials.

Once you've selected what kind of mulch you'll be using, you need to figure out how much to buy. To calculate:

- 1. Find the total square footage of your strip
- 2. Figure out about what percentage will have mulch. To do this, just estimate how much area will be covered in large plants, rocks, pavers, or gravel. You will mulch all around plants, so be conservative deciding how much area to exclude.
- 3. Multiply your total square footage by the percentage that will have mulch to get your *mulched square footage* amount.
- 4. Figure out how many inches you want to put down (2-3 recommended) and find the corresponding number from the table below.
- 5. Divide your *mulched square footage* amount by the number you selected from the table below. That gives you the amount of mulch you'll need.

Desired Mulch Depth	By the Cubic Yard	By the 20lb. Bag
1 inch	320	50

2 inches	160	25
3 inches	110	17
4 inches	80	13

To apply, spread the mulch evenly around all the soil areas. You may want to start spreading a bit thin, and then come back and fill it all in when you're sure you have enough. You can use a rake to spread, but your hands work just as well. If it seems to be tumbling back into the sidewalk or gutter, just dig a small trench border next to the cement of the sidewalk or gutter for the mulch to fill and take footing.

Step 7: Maintain

Maintaining a xeriscaped yard and maintaining a traditional yard are two different tasks. Your new parking strip will have different maintenance needs than your old one; its own needs will be different this first year than in subsequent ones. Making a plan will help keep your parking strip beautiful.

All plants, even the most drought tolerant, require frequent watering when they're new. Their roots have been stressed in transport and in transplant, so they need time to get established in their new home. For the first few weeks, you should pay close attention to your plants. The smaller ones may need water every day; the larger ones every couple of days. After that, try to extend the time period between waterings, until you've eventually reached the target of once a twice or month—or even never. This may not happen in the first season, but after their first winter, your plants should be well-established.

It may sound corny, but you should actually create a schedule for the times you'll water and check up on your strip. Perhaps every day when you come home from work, or each morning when you go out to get the paper. Just give it a quick once-over. As your plants change and mature, so should your plan.

Watch your plants for signs of distress—especially wilting or yellowing. If you see them wimping out, water a bit more often. Caught early, water stress can be reversed, but once leaves and stems become crispy, the plant just shuts down. Keeping an eye on your new plants will help ensure that they become strong and independent later on.

Xeriscaping is a whole new ball game when it comes to maintenance. Gone are the days of Saturday morning mowing and trimming (at least in your parking strip). Your maintenance will depend largely on the kinds of plants you installed, how much non-plant material you used, and other factors you considered while planning. While xeriscaped yards may actually be more labor-intensive to maintain, most are usually not. Typically, you'll have a big spring cleanup and another in the fall. Your summers will be relatively low-maintenance, leaving you free to go out and enjoy Utah's renowned rivers!

Pruning. Don't prune your new plants. Wait until after they've gone through their first winter. After that, prune each plant according to its own needs. In the spring, remove the dead plant material that has died back from the previous year.

Fertilization. Don't fertilize new plants. Better just to water. Most drought-tolerant or native plants do well without much fertilization. A good compost in the fall (after year one) or as needed in the spring, will usually be sufficient.

Mulch. As mulches are scattered or decompose, they need to be replenished. Check the depth of your mulch in spring and fall, and augment as needed.

Weeds. A good mulch job, thick bountiful plants, and a drip irrigation system really keep most weeds from ever appearing. If they begin to sprout more plentifully, remove the weeds and then see if you can add more mulch for extra prevention. Stay on top of the weeds. A good attack in spring should help you get a leg up, and periodic weeding throughout summer and fall as needed, will be most helpful.

Deadheading. Or in other words, removing flowers that are spent. Ideally, you would do this on all your flowers...but it can be quite a task to stay caught up. Try to do this as much as possible, focusing on the most unsightly ones first.

Sprinklers. Check your system every so often to look for leaks, broken or clogged heads/emitters, accuracy, and general performance. Fix as needed.

Conclusion

That's all there is to it. Once you have a small parking strip under your belt, why not move on to larger parts of your yard? By saving water in your yard, where Utahns use 60% of their water, and *half* of that is wasted, you help accelerate the culture of conservation in your neighborhood and community.

Thanks for your interest and support in Utah Rivers Council Rip Your Strip. For more information please visit www.utahrivers.org or call (801) 486-4776.

With your help we can ensure Utah's rivers flow full and free for generations!