

Turf Conversion Instructions

Step One: Start with a good design. Incorporate water-saving drought-tolerant plants; attract pollinators, beneficial insects; create wildlife habitat; include rain gardens and water features.

Thoroughly inspect areas to convert.

- A. Is the lawn actively growing? If so, are there invasive weeds such as Bermuda grass, yellow nutsedge, or Japanese knotweed? If so, use appropriate methods to eradicate before converting from turf grass. You do not want to have to be pulling or spraying these in the new landscape.
- B. Is the lawn waning or dead? It may be good to start irrigating regularly to see if you can get the weed seed to germinate to be able to control them and exhaust the existing seed bank.

Step Two: Modify or Replace Irrigation System. Use most efficient techniques that will accommodate the current and future needs of the site.

Inspect the irrigation system.

- A. Will the existing system be able to be used for the new landscaping? If so, then check valves for leaks, check controller to see if it is functional and can accommodate the new number of valves. Fix any repairs needed.
 - 1. If the current system has spray heads or rotors, will these need to be raised or lowered to accommodate new design and plant requirements? Sometimes it is good to keep the existing overhead system functional to “dust off” Native and Mediterranean species from time-to-time.
 - 2. If current system is spray heads, consider switching to more efficient multi-stream rotary nozzles.
- B. If you are replacing the irrigation system, then start by determining the number of different zones needed. Group valves by plant water needs (hydrozones), sun requirements, and microclimate features of the site.
 - 1. Use low-volume drip emitters and in-line drip systems where possible to achieve greatest water savings.
 - 2. If using pop-up sprinkler heads, install multi-stream rotary nozzles. Make sure sprinkler are the right height for the mature size of the landscape being established.
 - 3. Single-stream rotors may be used effectively for large areas and if the site is to be densely planted (without many bare spaces) and when infrequent watering is needed. An example would be an all native landscape that needs deep watering monthly or less.

Step Three: Remove lawn

Consider using the existing dead lawn to create topography or swales/berms for rainwater infiltration. Alternatively, consider covering lawn with sheet mulch and leaving it in place.

- A. If topography of site allows for it, try to leave the lawn in place, but mow lawn first, leaving clippings in place and cover with sheet mulch. After irrigation and finished grading, follow the

sheet mulching methods below and do not cut into layers to plant for 4-6 months to eliminate most invasive weeds, except nutsedge which can take 18 months. Replenish mulch as needed and never allow the mulch layers to dry out. If chemical treatment is necessary, consult a licensed or certified professional.

1. Dig out the first foot or so of grass next to hardscapes so that the top layer of sheet mulch is at same level as hardscape. May need to raise irrigation spray heads.
- B. If you must remove lawn, then consider using it onsite for topography or swales. Can use sod cutter for large areas or hand tools (shovels, etc.) for smaller areas and when sod cutters cannot be used due to tree roots.
 1. If lawn material is being discarded, make sure it goes to a green waste facility.

Step Four: Install irrigation system, decorative rocks, plants, water features, rain basin, etc.

- A. Install plants, rocks, water features, and low-volume drip irrigation system. Pre-water holes to check for drainage and avoid transplant shock. Remember to plant high enough to accommodate mulch layer. Purchase quality nursery stock that is weed free and add a handful of well processed compost or worm castings in the planting hole. Can plant small plants above cardboard in mulched area with a small amount of compost around rootball.

Step Five: Sheet mulch

- A. Put a layer of (wet/saturated) corrugated cardboard down over thoroughly watered lawn areas being converted. Make sure to have a 6-inch minimum overlap. Cardboard can be purchased in rolls or collected and re-purposed for this use. If collected remember to remove all packing tape, stickers, staples, etc. It is even more effective to layer saturated newspaper ½" thick before the cardboard, especially in weedy areas or uneven surfaces to help the layer bond with the soil. Saturate cardboard and newspaper in plastic containers before applying. These layers need to be saturated before applying the mulch and kept moist at all times.
- B. Add a 1- to 2-inch layer of compost. This can be done before cardboard if installing drip system. It is cleaner to work with clean cardboard surface than compost. If leaving existing irrigation system then apply compost after cardboard. If fresh grass clippings are below the mulch layers (a nitrogen boost), then the compost layer may not be needed.

Step Six: Mulching

- A. Add a 3- to 4-inch layer of mulch. Can use wood mulch, mixed green waste (chipped brush, tree company grindings, etc. Do not have mulch in contact with plant, staying a few inches away from stems and trunks. Apply a thinner layer under low plant foliage and thicker in areas between plants.

Step Seven: Enjoy your newly renovated, low-maintenance, drought-tolerant garden!

- A. Consider adding garden art, logs, driftwood, pine cones, birdhouses, fountains, etc., to personalize your yard and provide wildlife habitat.