University of California
Agriculture and Natural Resources | UCCE Master Gardener Program

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Landscape Redesign: An Environmentally Friendly Approach

Companion document – Video Script

UC Master Gardeners of Sacramento County YouTube Channel
https://www.youtube.com/channel/UClm9vPOH__UWg0Lwlp5vVNQ/videos

(Note: Video script is in *italics*, additional information is **bolded.)**

Darleen: *So, you're thinking of replacing your lawn with a more environmentally-friendly landscape. But where do you start? Hi, I'm Darleen Halsted, a UC Sacramento County Master Gardener. In this video, we will share a real-life yard design, utilizing some environmentally-friendly landscape principles.*

I'm here with Mary Welch, a fellow Master Gardener. Mary, you just completed a redesign of your front yard. What were you objectives as you embarked on this redesign?

Mary: *Hi Darleen. As you mentioned, I wanted to create an environmentally-friendly, regenerative landscape, and I wanted to use as many of the eight principles of this concept as I could. The eight ReScape principles are:*

1. *Act local*
2. *Reduce waste*
3. *Nurture soil*
4. *Sequester carbon*
5. *Save water*
6. *Conserve energy*
7. *Protect water and air*
8. *Create habitat*

ReScape California is a non-profit organization that promotes a whole systems approach to landscaping and gardening that works in harmony with the natural environment. The organization trains landscaping professionals in ReScape's principles, educates the community, and works with local and state agencies on regenerative land use policy. Find more information at https://www.rescapeca.org/

I had three major priorities. First, I wanted a wide diversity of plants that would feed and shelter beneficial pollinators year-round.

Beneficial pollinators can include bees, wasps, butterflies, moths, flies, birds, bats, wind and even people. See more at https://ucanr.edu/sites/PollenNation/Meet_The_Pollinators/
http://sacmg.ucanr.edu/files/196754.pdf
https://anrcatalog.ucanr.edu/Details.aspx?itemNo=8498

Second, I wanted to conserve water with the right irrigation and through water-efficient plant selections.

> **WUCOLS IV (Water Use Classification of Landscape Plants, 4th edition) is a database developed by the California Department of Water Resources in collaboration with University of California. The database provides irrigation water needs for over 3,500 plant groups used in California landscapes.** https://ucanr.edu/sites/WUCOLS/Plant_Search/

Third, I wanted to capture rainwater from the downspouts off of my roof, to prevent storm water run-off and recharge the ground water. The rain garden, semi-permeable walkways and use of California native plants were some of the design features that met my priorities.

> **From US Environmental Protection Agency: a rain garden is a depressed area in the landscape that collects rain water from a roof, driveway or street and allows it to soak into the ground.** https://www.epa.gov/soakuptherain/soak-rain-rain-gardens

> **Similar to a rain garden: Dry creek bed, dry stream bed, swale**

Darleen: *Mary, how did you start?*

Mary: *First, it's important to find a like-minded landscape designer and landscape contractor who actually includes these principles in their projects. The first step was to remove the lawn and shrubs. Keep in mind this landscape had not been updated in the last 40-50 years, and we had to work carefully around this large London plane tree and its extensive root system.*

> **Root care**: https://www.sactree.com/pages/499 http://ipm.ucanr.edu/PMG/GARDEN/ENVIRON/protectlandscapes.html **This information is rather detailed, but has a number of good points.**

Next, we excavated and installed a drainage system to redirect water from downspouts to the rain garden. We even planned for above normal rain years by adding some additional volume to our rain capture garden with a buried rain barrel and an overflow drain for heavy rain events. This was also the time to install the PVC piping and valves to support the irrigation system.

Buried rain barrels and drain pipes are available at irrigation and landscape supply companies.

Next, we added semi-permeable pathways, which included pavers with a sand foundation and in some places decomposed granite, which allows for higher water penetration. Installation of the drip irrigation lines was next.

Darleen: *I'm here with Jessy Parker, the landscape designer and a UC Master Gardener. Jessy, what type of irrigation system did you install to conserve water and provide adequate moisture to the soil?*

Jessy: *Well Darleen, every irrigation system is a unique project. I typically need to survey the area because the system depends on soil, drainage, plant selection, sun exposure and many other factors as well. For Mary's landscape, I installed an in-line emitter system and laid it in a grid pattern, equally spaced across the planting area. The idea of this type of system is to create an environment where we are watering the soil so that moisture is retained. This benefits both the plants' roots and the soil microbes, creating a healthy soil.*

The amount and frequency of water is controlled through a smart controller that measures local weather conditions, such as precipitation and evapotranspiration rates, and adjusts accordingly.

> **Evapotranspiration is the loss of water from the soil of a planted area due to the combination of evaporation and plant transpiration (release of water vapor to the atmosphere through the plant's leaves).**

Irrigation supply businesses (local or online) are a valuable source of information on in-line emitter systems and smart controllers.
Check with your water provider for availability of rebates on irrigation upgrade, rain barrel and smart controllers.

Mary: *After irrigation was completed, we started planting many, many plants, for a total of 136 to date. We selected a wide range of plants including shrubs, trees and perennials. About 50% are California native plants, and the remainder are non-natives that will provide year-round bloom for attracting beneficial insects, bees, hummingbirds, butterflies and birds year round.*

Last, we added a good thick layer of mulch. And for those areas that cry for a low maintenance ground cover instead of lawn, Kurapia was chosen as a very low water alternative to turn to.

I am so pleased with the results of this yard redesign, and yes, it was a big project. However, I really think the benefits now and for years to come will be well-worth the investment.

Darleen: *So there you have this redesign right after fall installation. . . and after the first rain you can see that the rain garden is working! Check back with us later for Part 2 as the redesigned landscape matures.*

References:
Additional information can be found on the UC Master Gardeners of Sacramento County website.
http://sacmg.ucanr.edu/Publications/
Garden Notes

- Attracting Beneficial Insects to Your Garden (Garden Note 129)
- Water-Efficient Landscape Plant List – California Native Garden (Garden Note 139)
- Lawn Removal Methods (Garden Note 161)

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Videos

- Make Your Garden Wildlife-Friendly
- Harvest Day Building Resilient Gardens
- A Walking Tour of the Water Efficient Landscape

ReScape California https://www.rescapeca.org/

Before You Dig Call Underground Service Alert (USA), Call 811

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