Easy changes in landscape maintenance produce sustainable joy.

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8 Best Practices of Sustainable Landscape Maintenance

1. **Landscape to your local climate.**
2. **Landscape for less to the landfill.**
3. **Nurture the soil.**
4. **Conserve water.**
5. **Conserve energy.**
6. **Protect water and air quality.**
7. **Create and protect wildlife habitat.**
8. **Grow food**

Little to No Expense

1. **Optimize automatic irrigation: can reduce landscape water by 30%.**

Inspect & adjust sprinkler nozzles eliminate leaks, over spray, runoff, blocked spray patterns. Set controllers to water 11 PM to 7 AM = minimum evaporation, maximum percolation with dew. Adjust schedule with each water bill.

2. **Discontinue hedge trimming**
3. **Retain yard clippings as mulch.**

Mulch: Covers the soil surface, Shades the ground, Hinders weeds, Increases biological activity, Improves water infiltration, Prevents evaporative water loss, Prevents erosion, Improves soil structure

4. **Practice responsible pest control IPM -- Integrated Pest Management --**

What is it and is it really "bugging" me?
When did it show up and how many are there?
What can I do to prevent it from returning?
What can I really tolerate?
How do I get rid of it?

Moderate Expense

1. Remove "orphan turf" & "stupid strips"
2. Collect & channel rain water on site
3. Convert old pop-up sprayers to high efficiency nozzles

Full Conversion Renovation/Conversion to Sustainable Practices

1. Replace turf with sustainable ornamentals and food plantings
2. Convert irrigation to low flow/volume (90% efficiency) or to high efficiency nozzles.
3. Retain all waste on site Compost, worm bins

Instructions for garden helpers:

- ★ **Become partners in change**
- ★ **New methods add value for all customers**
- ★ **Lace shrubs and trees by hand**
- ★ **Increase time monitoring and repairing irrigation system.**
- ★ **Bring mulch & compost – don't take away.**
- ★ **Distribute clippings as mulch**
- ★ **Use soil core probe and give reports.**
- ★ **Aerate turf more often.**

Irrigation Scheduling Worksheet

http://groups.ucanr.org/CLUH/files/65254.pdf

Site Name:_____ Location: _____

Date:_____ ETo: _____

Schedule: per day per week per month

Plant Materials: _____ Kc Value: _____

Irrigation System Type(s): _____

Precipitation Rate:_____in/hr Distribution Uniformity _____

Plant Water Use: ETo x Kc = _____ inches

Gross Water Need: ETo x Kc / DU = _____inches

Runtime: (ETo x Kc x 60) / (DU x PR) = _____minutes

Minutes to runoff: _____ Cycle Time: _____ minutes

Number cycles per irrigation day: _____

Water Budget Calculation

MAWA = maximum applied water allowance in gallons per unit of time (year, month, week);
MAWA = ETo x AF x LA x .062: _____ maximum gallons

CCF = MAWA / 748: _____billing units

Water Budget: (Eto x PF x LA) / DU = _____

Water Budget: (Water Budget in inches x 0.62) / 748 = _____billing units

ETo = historic or real-time reference ET in inches per unit of time;
AF = ETo adjustment factor, which varies but is commonly 0.8 or 1.0;
LA = landscaped area in square feet; and,
0.62 = factor for conversion to gallons from inches per square foot.
Since there are 748 gallons per 100 cubic feet, the MAWA can be converted to billing units of hundred cubic feet (CCF) of water as follows:
CCF = MAWA ÷ 748.
A hypothetical MAWA calculation for a landscape project is offered below.
Project site: Business park with a landscaped area of 50,000 sq. ft. in Riverside, CA.
Annual MAWA = ETo/yr × AF × LA × 0.62
= 56.2 in/yr × 0.8 × 50,000 sq ft × 0.62
= 1,393,760 gal/yr
= 1,393,760 ÷ 748 gal/CCF = 1,863 CCF per year.