LANDSCAPING

Sustainability is a whole systems approach to manage resources, conserve energy, and reduce waste. Landscaping is one component of green design. While typically thought of as an aesthetic feature, landscaping and site design can have direct benefits to surrounding buildings, by conserving and capturing stormwater and shading buildings, which lowers cooling costs.

The Benefits of Landscaping

Improved air quality

- Trees, shrubs and grass clean the air by sequestering pollutants (nitrogen oxide, sulfur dioxide, carbon monoxide and dust).

Reduced water use

- Plants, trees, mulch, soil, etc can capture and absorb water runoff, reducing watering required.

Lower temperatures

- Trees and plantings can lower area temperatures, effectively reducing the heat island effect that results from paved surfaces, auto emissions, and narrow streets where air does not ventilate well. Lower area temperatures reduce indoor energy use for cooling. A study in Arizona found that ecological landscapes reduced air conditioning in homes by 25%.

Reduced Utility Bills

- Using the right amount of water for the yard can save you money on water bills. Placing certain plants in the right locations can significantly reduce air conditioning use by shading the home.

Higher Property Values

- A well-planned, more natural yard increases property values, up to 10% in single-family homes.

Less Chemicals + Toxins

- Using organic mulch to reduce weeds and enrich soil is less costly than using herbicides and chemical fertilizers.

Site Suggestions

Look for plants that are:

- suitable for summer dry climates
- subject to very few pests
- require low maintenance
- have at least two seasons of life span
- native plant species to the region

Things to Consider

Lawn

- Make your new lawn only as big as you need it to be.
- Use a native lawn substitute instead of European grasses if you want a low green area and don't need a play surface. Many native shrubs are low growing, very low maintenance and use little or no resources after they are established. Native perennials, such as yarrow and sedges, can also be used for lawn. They require much less mowing and watering than a typical grass lawn does. Native grasses and wildflowers can also be used to create a meadow instead of a lawn, attracting butterflies and other insects.

Lawnmower:

- Tune up your lawnmower at least once per season or after 25 hours of mowing. A well-tuned mower is more efficient, uses less gasoline, and pollutes less. Replace

your gasoline-powered lawnmower with a human-powered reel mower. According to the National Wildlife Federation, a gas-powered lawnmower emits 11 times the air pollution of a new car per hour.

- Consider a Mulching mower, which cuts grass into tiny bits and leaves grass cuttings on your lawn which feed your lawn nitrogen as they decompose. You may be able to buy a mulching blade for your existing mower instead of buying a whole new push mower.

Grass and Weeds

- During dry months keep your lawn tall—as high as three inches, depending on the grass type. The longer the grass, the more roots the plant can support and the less water it will need. A taller lawn also shades the ground, keeping it cooler so that weeds are less likely to germinate.
- Hand pull and dig out larger weeds, instead of spraying herbicides. Herbicides can kill the good bugs in the soil and run off from lawns during irrigation, polluting bays, streams and other bodies of water. Hand pulling is safer and allows you to use those greens.

Watering + Irrigation

- Plant during cool, wet weather to allow plants, especially trees and shrubs, establish root systems before the dry season. This timing dramatically reduces the water requirements for a newly planted landscape.
- Water in the morning, when the temperatures are cool to ensure that the water doesn't evaporate before it gets to your lawn. Watering in the evening means the lawn stays wet all night, inviting fungal diseases.
- Adjust sprinkler heads to prevent water from running onto paved surfaces. Whenever possible keep the water where you want it—on your lawn, not the pavement.
- Add an automatic shut-off to your irrigation system to turn it off when it's raining, or install one of the new evapotranspiration (ET) controllers. Turning off your irrigation system when it's raining is an obvious water saver.
- Set your controller to water in two shorter periods for the same total length of time. By breaking up your watering time, you allow the water to soak into the ground before adding any additional water, eliminating runoff.
- Adjust your irrigation controller and check for leaks in your irrigation system once a month during the dry season. Most people over-water. Adjusting your system every month ensures you give your lawn only the water it absolutely needs—about one inch per week.
- Replace your existing spray irrigation system with a subsurface drip system. While spray irrigation systems are 70 percent efficient under ideal circumstances, subsurface drip systems are about 90 to 100 percent efficient because they apply the water directly to the roots. Not only do they reduce water use, they also reduce the number of weeds that germinate, reduce fungal diseases, keep the lawn dry for play, eliminate spray heads and eliminate overspray, which can damage fences and home siding.

Fertilizer + Mulch

- Fertilize by spreading a one-inch layer of compost over your lawn in spring and fall. Chemical fertilizers often kill off beneficial creatures such as earthworms, which produce castings that feed the lawn. The compost will feed the lawn and improve the soil so that it can hold more water and support more subterranean flora and fauna.
- Mulch the yard with wood chips to reduce weed growth, prevent erosion, and conserve water during the summer.

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- Use at least three inches of organic mulch on the soil surface. This keeps weeds down by about 75%. As the mulch breaks down it supplies the soil with nutrients.
- Add some clover to your grass. Having some clover in your lawn will feed it and keep it green. Clover fixes nitrogen from the air, making it available to your lawn in the soil.
- Use cornmeal gluten on your lawn. Cornmeal gluten, which is about 10 percent nitrogen by weight, is a natural fertilizer and pre-emergent weed preventative that's usually applied in the spring and fall. According to garden writer Ann Lovejoy, 20 pounds of cornmeal gluten per 1,000 square feet will add one to two pounds of nitrogen to your lawn.

<u>Waste</u>

- Try to limit waste and reuse or donate materials to avoid sending things to landfill.
- Use plants that require very little pruning. Pruning takes time, isn't very fun and contributes to landfills. I want plants that fit into the planting spaces and can grow into their natural forms.