

Sustainable Landscaping

Environmental Impact of Landscapes

As California grows, communities use more resources and generate more waste. Environmental agencies are looking closely at urban landscapes for solutions to long-term pollution problems. Consequently, legal restrictions are being placed on landscape design and maintenance practices.

Role of Landscape Managers

Landscape contractors and site managers can play an active role in efficiently managing resources, reducing waste, and preventing pollution. With forethought and planning, they can maintain and design “sustainable landscapes” and make them cost-effective and environmentally sound.

What Are Sustainable Landscapes?

Sustainable landscapes are managed by using practices that preserve limited and costly natural resources, reduce waste generation, and help prevent air, water, and soil pollution. The goal is to minimize environmental impacts and maximize value received from dollars expended.

What Are the Benefits?

When landscapes require excessive amounts of water, energy, labor, and other resources, environmental and economic costs outweigh many of the natural benefits of urban landscapes.

In contrast, sustainable landscapes feature healthier, longer-lived plants that rely less on chemical pesticides and fertilizers, minimize water use, and reduce waste generation and disposal. They also require less maintenance and alleviate groundwater and air pollution problems.

Using Sustainable Practices

Sustainable landscapes mean more than hot, dry gardens of cactus and gravel. They can incorporate beautiful plants, shrubs, and trees and reduce

maintenance costs while at the same time protect the environment.

Using sustainable landscape maintenance practices makes good business sense. Using the practices outlined in the following sections will reduce resource depletion, waste generation, and pollution problems while also improving the health of the landscape in an aesthetically pleasing and cost-effective manner.

Build Healthy Soils

Healthy soils are essential in urban landscapes. Organic matter additions (compost or humus) can transform poor soils into a fertile growth medium that supports healthy plant growth while reducing water and fertilization requirements. Healthy disease- and pest-resistant plants improve landscape appearance and increase property values.

Use Mulch

Use shredded or chipped plant materials with an appropriately high wood content as a mulch cover over the soil in planting beds and other bare areas in the landscape. Mulch will insulate plant roots, reduce weeds, minimize water loss, and control erosion, dust, and mud problems. Decomposition of mulch helps condition the soil and adds nutrients.

Irrigate Efficiently

Overwatering aids rapid plant growth and runoff adds to groundwater pollution. Use water-efficient irrigation systems, such as drip or low-output sprinkler heads, that deliver a precise volume of water to plant root zones. Develop watering schedules based on historical or actual weather data. Use soil probes to monitor soil moisture before watering.

Limit Fertilization

Applying precise amounts in a timely manner will reduce growth, diminish the potential for pollution, and promote healthy disease- and pest-resistant plants. Fertilize according to the needs of the species planted. Use slow-release or organic-

based formulas based on nutrient needs as verified by soil testing. This will reduce growth spurts that increase the need for pruning and mowing.

Grasscycle Turf Areas

Use mulching mowers that leave grass clippings on the lawn when mowing. Grass clippings will decompose quickly and release valuable nutrients back into the soil. This will reduce water and fertilizer usage and green waste generation as well as maintenance costs. Moderate growth through proper turf management will produce short clippings that will not cover the grass surface.

Prune Selectively

Excessive and haphazard pruning of shrubs and trees is wasteful and unhealthy. Pruning should be limited to maintain natural growth patterns. Hedging, topping, and shearing of landscape plants into formal shapes only encourage excessive new growth. Using natural pruning techniques at the proper season will promote healthier plants and also reduce “suckering” and stabilize growth.

Reuse Organic Materials On-Site

Landscapers can use a chipper at the job site to mulch prunings and clippings from woody shrubs and trees and apply mulch on the landscape. Trimmings and clippings from lawns, trees, and shrubs from large landscape sites can become feedstock for on-site composting operations. This will save on purchasing outside soil amendments.

Recycle Organic Materials Off-Site

If lawn clippings, shrub and tree trimmings, or prunings must be removed from landscape sites, they should be transported to a local composting facility or green waste processor for recycling. When purchasing mulches and composts, consider products with the highest recycled green waste content to support and sustain long-term market demand.

Practice Pollution Prevention

Landscape managers are encouraged to use Integrated Pest Management (IPM) to reduce use of chemical pesticides and herbicides. These chemicals can eventually make their way off-site and contribute to nonpoint source pollution

(pollution not traceable to a single location). Increased use of non-motorized equipment will also reduce emissions and noise pollution.

Retrofit Inefficient Landscapes

As established landscape sites age or grow beyond their intended use, they must be redesigned to integrate resource efficiency, site function, and aesthetics. Reduce turf areas and establish new landscape plantings with more low-maintenance and drought-tolerant plants. Irrigation systems must undergo retrofits and depleted soils enriched to save water and promote healthy plant growth.

Upgrade Contract Specifications

A good landscape maintenance program requires a contract that provides for and promotes the use of sustainable practices. Site managers and contractors should develop and use sustainable landscape maintenance contract specifications that are resource-efficient. They should include good cultural practices, water management, green waste management, and preventative maintenance management clauses.

Think Recycle/Buy Recycled

Recycling materials from the construction, installation, or upkeep of landscape sites will reduce waste. Wood waste coverts to mulch, and plastic pots can be recycled into products for landscape use. Buying recycled-content landscaping products, such as plastic edging or lumber, conserves natural resources and strengthens markets for these recyclable materials.

Resources Available from CIWMB

CIWMB’s website at www.ciwmb.ca.gov/Organics/Landscaping/ provides more information on many of the above practices. View thousands of recycled-content products on the Recycled Content Product (RCP) Directory at www.ciwmb.ca.gov/RCP/; see CalMAX at www.ciwmb.ca.gov/CalMAX/ for suppliers/users of reusable/recyclable organic materials.

Join Governor Schwarzenegger to Keep California Rolling. Every Californian can help to reduce energy and fuel consumption. For a list of simple ways you can reduce demand and cut your energy and fuel costs, Flex Your Power and visit www.fypower.com.