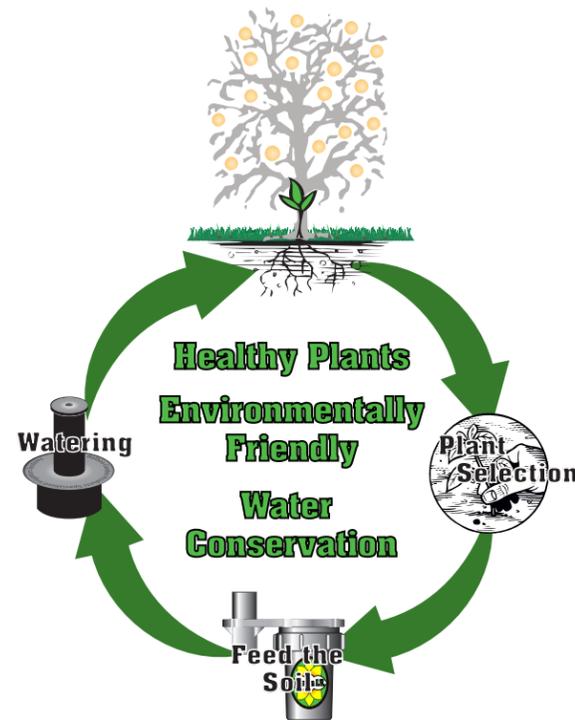


What is a **SMART** Landscape?

All plants need varying quantities of water, light, nutrients, and temperature in order to survive. The SMARTLandscaping approach is to use new technology to apply an optimal amount of these basic needs to the plants. The result is a landscape that conserves water, needs fewer pesticides, and minimizes run-off into our water ways.



What is the **SMART** Landscaping Exchange?

The SMARTLandscaping Exchange connects you to a local landscape professional with specialized training in water efficient and environmentally friendly products for your garden. A homeowner can order a standardized, professional installation and be assured that a trained professional will come to their home.



**We Specialize in Improving
the Efficiency of
Your Current Landscape Irrigation System.**

**SAVE Water...
REDUCE Runoff...
HEALTHY Plants!**

**Contact us today
to schedule your in-home installation**

Your Local SMART Landscape Partner is:

smartlandscaping.com

or

call 877-301-Garden



**Save Water
Reduce Runoff
Healthy Plants**



An average homeowner spends 68% of their total water bill to maintain their landscape. More efficient watering, fertilizing, and soil amending techniques can lower your water bill and help your plants look their best.

Common Landscaping Practices...

How do plants receive their basic needs from nature?

All plants need sunlight, water, nutrients, and proper growing temperature. In nature, plants receive varying levels of sunlight and shade depending on their surrounding environment. Water comes in the natural forms of precipitation, lakes, streams, and rivers. Finally, naturally occurring microbes in the soil break down living matter into usable nutrients for the plants to absorb through their root system.

BASIC GARDEN PITFALLS AND MISTAKES

Shallow watering and Sunlight mismatch

Plants are often selected without careful consideration of whether of the environment into which it is being placed. For example, it is common to find large trees planted in the middle of lawns. This mismatch of water and sunlight requirements creates problems for both the lawn and the tree. The frequent watering required by the lawn tells the tree to put out shallow roots, rather than the deep roots necessary to become stable and extract deeper sources of water. As the tree grows it creates shade, which in turn blocks the lawn from receiving enough sunlight.

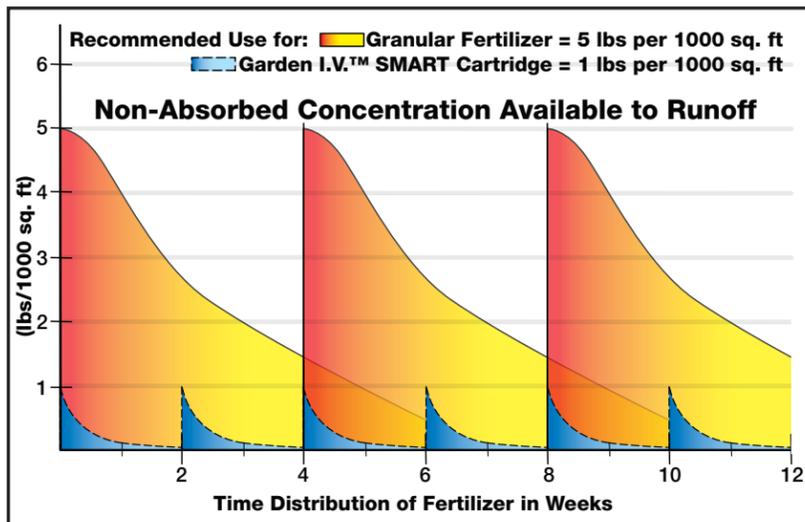
Misting Sprinkler Heads

Most sprinkler systems are installed without considering the effects of excess water pressure in the system. This excess pressure puts wear and tear on the system and causes a major cause of wasted water.



Excess Fertilizer Wasted and Soil Microbes Depleted

Granular fertilizers slowly dissolve over time and contain a high salt index. The problem with this method of fertilizing is that the undissolved particles are susceptible to becoming airborne by the wind, washed away into the storm drains, or sucked up by lawn mowers. Furthermore, the high salt index in granular fertilizers will kill the microbes in the soil, thus reducing the ability of soils to convert the organic matter into usable nutrients.



The SMART Landscape...

The SMART Landscaping approach considers the complete landscape design starting with plant selection, irrigation design, and plant nutrient requirements.

SMART Plant Selection Basics:

SMART Landscaping begins with choosing the correct plants for the correct location. Plants with similar watering, sunlight, and nutrient requirements should be grouped and watered together.



SMART Irrigation Components Provide Unmatched Control

1. Garden I.V. SMART Feeders

Provide a means to inject liquids fertilizers and soil amendments on a zone-by-zone basis.



2. Garden I.V. Lawn Care System

Easy as 1-2-3. Step 1. Soil Cleanse helps move salt and chemical buildup. Step 2. Nutrient Activator naturally releases the nutrients and minerals trapped in the soil. Step 3. Lawn Energizer feeds the lawn and builds strong, deep roots.

3. Toro Precision® Series Rotating Nozzles

Based on the design of the world's leading gear-driven rotor sprinklers for golf course applications, the Precision® Series Rotating Nozzle delivers wind resistant, multi-stream, multi-trajectory water flow.



4. Toro CLIMATE LOGIC

Adjust sprinkler run-times to account for daily changing weather by using the CLIMATE LOGIC™ weather station and wirelessly attaching it to most Toro or Irritrol sprinkler controllers.



Sustainable...

Creating a long term healthy landscape requires addressing the chemical, physical, and biological needs of both the plant and the soil.

Chemical

Plants are living organisms which require certain nutrients to survive and thrive. There are thirteen main nutrients (N,P,K,S,Mg,Ca,Fe,Mn,Zn,Cu,Mo,B,Cl). The optimal amount of each of these nutrients varies according to plant variety and



season. Incorrect amounts of any given nutrient can have devastating effects on your plants. For example, all 6 of the tomato plants shown above were planted at the same time, in exactly the same soil, and were given exactly the same growing conditions (water, sunlight, and temperatures). The three tomato plants on the right were provided an additional 1/4 teaspoon of high-grade liquid fertilizer once per week for a full month. The three control plants on the left were not given any additional fertilizer. As you can see, the tomato plants which were given the additional fertilizer flourished, whereas the ones which were only given water grew much less vigorously.

Physical

Soils are composed of sand, silt, and clay. The percentage of each particle is used to classify the soil structure as clay, loam, or sandy loam. The soil structure helps predict how well water enters, holds and drains through the soil. The soil structure also influences the amount of nutrients a soil can hold. Over time and use soil becomes compacted, reducing its ability to drain and making it difficult for plant roots to get air. Mechanical aeration is used to de-compact soils.

Biological

Even if a soil contains plenty of nutrients, these nutrients still may not be available for the plant to metabolize. Microbes such as Fungi, Bacteria, Protozoa, Actinomyces, and Algae are nature's decomposers of organic material and nutrients. These microscopic organisms are essential for breaking down nutrients into usable food for the plant.

Sustainable Lawns and Home Gardens

A complete SMART System was trialed at Mt. San Antonio College on ten turf plots. The goal was to prove a highly efficient sprinkler system, a weather-based controller, and targeted turf nutrition program that could help grass become more water efficient. The trials included many unique additives not found in conventional granular products, and the focus was to provide nutrients (Chemical), natural water moving penetrants (Physical), and bio-stimulants to promote microbial activity (Biological). The results showed that each of the turf types could be maintained successfully using less water if all of the chemical, physical, and biological needs were met.

