



developing a
waterSmart
landscape



THE UNIVERSITY OF GEORGIA

COOPERATIVE EXTENSION

Colleges of Agricultural and Environmental Sciences & Family and Consumer Sciences

Begin with a waterSmart Design

A *waterSmart* landscape is designed to be functional and water-efficient. Try to preserve and incorporate existing vegetation into the design — it generally doesn't require supplemental irrigation if left undisturbed.



Group plants by their water-use: high, moderate or low. Generally, highly visible areas get the most water, while less visible areas get little or no supplemental water.

High water-use areas — Small, highly visible areas (such as home entrances) where plants are watered regularly to maintain optimum growth and quality.

Moderate water-use areas — Areas where plants are watered during establishment and when they show signs of moisture stress (pale green foliage, wilting or leaf scorching).

Low water-use areas — Areas where plants are watered only by natural rainfall after establishment.

Ideally, at least 60% of a *waterSmart* landscape includes low water-use areas. No more than 10% includes high water-use areas and no more than 30% includes moderate water-use areas.

Examine the Soil, Sunlight and Slope

An individual landscape may have many soil types. Evaluate the soil for:

- structure and texture
- drainage
- fertility

To determine soil fertility, take a sample to your local county extension office for testing. The results will tell you if your soil needs lime and what kind of fertilizer will provide the best growth.



Most soils benefit from compost, which improves:

- soil structure and texture, making it easier for roots to grow.
- the soil's water- and nutrient-holding capacity.
- soil fertility and the ability of roots to absorb nutrients.

Note how much sunlight each part of the landscape receives each day.

- Some plants do better in full sun while others need more shade.
- Plants in shady locations generally need less water than those in the sun.

During landscape construction:

- slope beds away from buildings.
- introduce shallow depressions to retain moisture.
- install drought-tolerant plants at higher elevations and moisture-loving plants at lower elevations where the site drains naturally.

Keep Irrigated Turfgrass Areas Small

Turfgrass usually occupies the largest area of a landscape and receives the highest amount of supplemental irrigation. To save water, keep irrigated turfgrass areas small.

There are many different types of turfgrasses, and they vary greatly in their ability to withstand periods of limited rainfall and drought. Bermudagrass, for instance, can survive long periods without water if it is installed and managed properly. For a list of recommended turfgrasses and management guidelines, contact your local Cooperative Extension agent.



Put the Right Plant in the Right Place

When selecting plants, consider:

- sun exposure
- light intensity
- typical wind conditions
- average summer and winter temperatures
- drainage patterns

Whether a plant is native to the area or an exotic import, if it's adapted to the soil, the climate and local site conditions, it will thrive. Contact your local county extension agent for information on landscape plants for Georgia.

Remember, plants don't save water... *waterSmart* people do!

When Irrigating, Make Every Drop Count!

Never install an irrigation system before creating the landscape design. Consider using low-volume irrigation, such as drips or micro-sprinklers, to water ornamental trees, shrubs and flowers. Low-volume irrigation uses 30% to 50% less water than sprinkler irrigation, and reduces evaporation. Watering in the evening, night or early morning can also reduce evaporation losses.

Mulch, Mulch, Mulch

Mulches:

- help retain water and minimize evaporation.
- help prevent weeds that compete with plants for moisture.
- add organic matter and beneficial microorganisms to the soil.
- moderate soil temperatures.
- reduce erosion.
- lessen the spread of soil-borne plant diseases.

The best mulches are organic and fine-textured, such as pine straw, shredded hardwood mulch, and pinebark mini-nuggets. For the best water conservation, maintain a mulch layer 3 to 5 inches deep under ornamental plants.

Start Grasscycling

Lawnmower clippings provide a natural mulch at the soil surface and hold moisture in the soil. Research has shown that as much as 30% of the nitrogen applied as fertilizer is recycled when clippings are added back to the grass. The key to effective "grasscycling" is mowing often enough so the clippings remain small and break down into organic matter quickly.



Maintain the Water Conservation Ethic

A low-maintenance, *waterSmart* landscape requires:

- less water and fertilizer
- less routine pruning
- fewer pesticides
- less frequent fertilization

Watering, fertilizing and pruning encourage new growth that needs additional irrigation and wilts easily when rainfall is limited. Applying less fertilizer and fertilizing less frequently also reduces the chance of nutrient runoff into rivers, lakes and streams.

A *waterSmart* landscape is more than just water-efficient. It's a landscape that has been carefully designed, properly installed and managed to reduce pollution, improve conservation and ensure year-round beauty.

Enhancing *waterSmart* features in a landscape doesn't have to involve great effort or expense. Sometimes, simply changing watering or fertilizing habits, adding mulch or relocating a plant to a more suitable location can make a landscape more *waterSmart*.

Over-watering may cause root rot and weaken a plant, making it more prone to insects and diseases. Ironically, plants are often over-irrigated during periods of limited rainfall.

Over-watering not only wastes water, it also increases the likelihood that fertilizers and other chemicals will run off into storm drains and make their way back to our streams, rivers and lakes.

Do your part and be *waterSmart* by following these simple guidelines for outdoor water conservation.



For additional information on saving water in the landscape, see www.conservewatergeorgia.net or call your local county Cooperative Extension office at **1-800-ASK-UGA1**.

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Do your part...and be *waterSmart*.
And remember...the water we save today
is an investment in our future!

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