SAVING WATER IS EASY WHEN YOU THINK ABOUT IT

Did you know?

- During dry periods, landscape watering can use up to three-quarters of total household water usage.
- Many plant problems arise not from underwatering, but from overwatering.
- An inefficient sprinkler can deliver as much as 300 gallons an hour onto a lawn. That’s no drop in the bucket!

Watering efficiently is one of the best and easiest ways to save water—and money. Besides conserving water, proper watering will also keep your landscape plants healthy and beautiful throughout the year. A water-wise landscape doesn’t mean giving up your lawn or making dramatic changes to your landscape or lifestyle. There are many simple ways to save water, and they all start with you. This booklet will show you how.
Xeriscape, a set of principles for water-wise landscaping, combines the Greek word *xeros*, meaning *dry*, with the word landscape.

Although the word translates as *dry-scape*, Xeriscape is really about planning and maintaining your landscape and watering efficiently. This sensible approach allows you to conserve water while enjoying an attractive yard. The water-wise landscape principles described in this booklet are based on the original seven principles of Xeriscape:

1. **Planning and Design** pg. 3-6
2. **Soil Improvement** pg. 7-8
3. **Practical Turf Areas** pg. 9-10
4. **Efficient Irrigation** pg. 11-16
5. **Mulch** pg. 17
6. **Low Water-Use Plants** pg. 18-20
7. **Appropriate Maintenance** pg. 21-22

Read on to learn more about each of these key principles of water-wise landscaping.
Whether you’re developing a new landscape, renovating an existing one, or just looking for ways to conserve water in an urban environment, proper planning and design are essential to creating a site that is water-wise. Most people want to skip right ahead to the planting, but it’s better to look at the big picture first. How will you use your landscape? How will your landscape use water? This section will help you answer those questions and make a plan.

**MAP IT OUT**

1. **Identify Permanent Features**
   On a piece of graph paper, draw to approximate scale any permanent features of your property, including the location of your house, other buildings, large rocks, slopes, and existing trees or vegetation you plan to keep.

2. **Identify Characteristics**
   Next, tape tracing paper over your base plan and sketch different qualities and characteristics of your property, including sun exposure, existing shade, direction of summer breezes, slopes, and street noise. You can also identify soil types on your property and any drainage problems that need to be corrected or considered. If you’d like to harvest rainwater, identify spots where rainwater falls or flows from your roof to the ground.

3. **Identify Use Areas**
   Tape on another piece of tracing paper and identify use areas. You’ll want to identify three different areas: public, private, and service. Public areas are the highly visible areas that typically receive the most care (and the most water). Private areas (usually the backyard) are where the family plays the most. It should be functional in design and receive less water than the public areas. Service areas, such as the sides of the house, garage, or driveways, are least visible and should require the least care and watering.
SHADE IS VERY COOL

There’s definitely a bright side to shade, so make sure you plan plenty of shade for your landscape. Shade cast by trees or structures can cool the landscape by as much as 20 degrees, reducing heat buildup and water evaporation from the soil. A mature oak can dissipate as much heat as four central air conditioners running 24 hours per day! Shade also reduces heat buildup from hard surfaces, such as driveways, walks, and walls, so plan to shade these areas with trees and large shrubs whenever possible. Trellises, arbors, walls, or fences can provide shade or scatter light.

ZOOM IN ON YOUR WATERING ZONES

The next step in planning your landscape is to identify the microclimates in your yard. Moisture, sun, shade, wind, and heat—as well as the physical characteristics of your landscape—create different zones that require different amounts of water. Once you have identified these microclimates, you can plant “with nature” by selecting plants that can survive and thrive within these zones without much watering. Ready? Tape another sheet of tracing paper over your base plan and sketch your water-use zones.

Very Low Water-Use Zones
There are two kinds of Very Low Water-Use Zones. There are zones that don’t need any watering, such as driveways, decks, patios, rock gardens, or pathways, and there are naturally wet zones—protected areas where exposure, shade, and contour work together to inhibit evaporation. In these areas, irrigation is only necessary to establish new plantings. Since Very Low Water-Use Zones offer the greatest potential for water

Sketching your water-use zones will help you select the right plants for each area.
An experienced professional can help you a great deal to plan and implement a water-wise landscape. You may want to hire one simply to help establish a master plan that you can execute yourself. If you’re a true do-it-yourselfer, check out the Additional Resources section on the back cover of this booklet for resources that can give you a more detailed strategy for making your yard water-wise.

savings, you’ll want to keep any well-established plants in these areas. Shaded areas not only reduce water demand, they lower indoor temperatures and reduce summer cooling costs.

**Low Water-Use Zones**
Low Water-Use Zones are somewhat exposed areas that need some watering, but take advantage of runoff from downspouts, patios, and driveways for most of their water. Using low-volume irrigation systems and effective mulching over the soil and plant roots can often turn a Moderate Water-Use Zone into a Low Water-Use Zone.

**Moderate Water-Use Zones**
Moderate Water-Use Zones are sunlit areas with grass or plants that require more water. In your landscape plan, keep these zones small and limited to only highly visible or functional areas, such as front entrances or recreational lawns.

**PLANT SELECTION**

**Right Plant, Right Place**
Once you’ve planned out your landscape, you can start picking the best plants for each of your zones. Tape another sheet of tracing paper over your base plan and add your plants, considering site characteristics, use areas, water-use zones, and shade needs.

Many of the native plants that thrive on the East Coast are already water-wise. They’ve adapted to hot, humid weather as well as hot, dry weather. There are dozens of species of beautiful and hearty plants to choose from. Just plant them in the right spot and give them room to get established. Contact your local water utility, cooperative extension, or similar agencies for information about suitable plants. Or flip to pages 18-20 of this booklet for suggestions.
Put Like with Like
To reduce watering and maintenance, group plants with greater water needs together, and place them in a spot that is naturally moist, such as a low-lying area or at the bottom of a hill.

Low water-use plants should be used in dry spots, windy or exposed areas, and against sunny south or west walls of buildings. Keeping plants with similar needs together allows you to provide just enough water to keep them healthy. Whether you’re irrigating by hand or using an automatic timer, grouping like with like can simplify your watering sequence.

Little Plants Are Big Winners
Most people like the idea of super-sizing their shrubs from the nursery. However, if you go smaller, you’ll save big—not only on nursery costs, but also on water bills. A less expensive one-gallon plant can quickly catch up to a five-gallon plant.

In the final step of your plan, sketch in your trees, shrubs, groundcover, and turf areas.
PAY DIRT: IMPROVING YOUR SOIL ENCOURAGES WATER-WISE PLANTS

Carefully prepared plant beds can reduce water usage by almost half. That’s because soil plays a huge part in a water-wise landscape. Good soil absorbs and holds moisture better and encourages plants to grow deep roots so they can access moisture even when topsoil is dry. Improving the soil now can help your plants become healthier and better suited to handle low-water conditions later.

What Is Good Soil?
Good soil has organic material that (1) holds water well, (2) provides nutrients, (3) is aerated to allow water to penetrate several inches to reach deep roots, and (4) has large particles that allow water flow and absorption. Dense soils such as clay are slow to absorb water, so they’re prone to runoff.

Get Your Soil Tested
Healthy plants start with healthy soil. So, before planting or installing an irrigation system, make sure to test your soil. Your local cooperative extension can test your soil and tell you how to improve it. See the Additional Resources on the back cover for the extension in your area. When collecting samples, keep the following in mind:

1. Remove a small amount of soil from a depth of about four inches at 10 scattered spots around the yard. Do the back and front yards separately.
2. In a clean plastic bucket (don’t use galvanized steel), mix the soil gathered from the 10 spots together into a single soil sample.
3. Pack your soil into the soil sample box provided by the agency.
4. Repeat these steps for the backyard and mail out both samples for testing.

Typically, within a few weeks, the agency will reply with a letter explaining what your soil is missing and how to enhance it. Once you know what your soil needs, follow the steps on the next page to add the recommended improvements.
Avoid chemical fertilizers with nitrogen and phosphorus that can wash into creeks, rivers, and lakes, causing plumes of harmful algae. If you must use chemical fertilizers, use them sparingly and never during or just before rainstorms. Avoid fertilizing sloped areas where the chemicals will be washed away by rain. Whenever possible, use natural organic material, such as compost, with natural levels of nutrients, and work it into the soil by tilling or “topping off” the soil.

How to Improve Your Soil

1. Begin with deep spading, plowing, or rototilling—to a depth of about six inches—to break up compacted soil and allow root systems to grow deeper into the earth.
2. While tilling, add organic matter such as compost or shredded leaves to improve penetration, distribution, and retention of moisture.
3. Add soil amendments as recommended by a soil test.
CUT BACK YOUR GRASS

Lawns that stretch from property line to property line just don’t make much sense these days. Besides requiring a lot of fertilizers, herbicides, and fungicides—chemicals that often end up in our streams, lakes and bays—large lawns with conventional spray irrigation waste one of our most precious resources: drinking water.

However, you don’t have to give up your lawn. Instead of thinking of grass as the focal point of your yard, think of it as having a function: a play area, for example, or a visual frame for a larger natural setting. With good soil, the right grass selection, and the right maintenance, you can still have a beautiful lawn area that needs little or no watering once established. And remember that grass is naturally resilient. It protects itself by going dormant in very dry conditions and springing back when normal rainfall returns.

Start by giving up turf areas that don’t get much use, such as those near foundations, along medians, or on steep slopes. Replace these turf areas with ground-cover, flower gardens, ornamental shrubs, and shade trees that are water-wise and drought-resistant. Be careful adding impervious surfaces, such as paved walkways and patios. They increase runoff and may cause drainage problems. In the end, your water-wise yard will look far more interesting than it ever did with plain old turf.
SELECT A LOW WATER-USE TURF GRASS

Where you do have grass, consider a water-conserving, warm-season turf grass species, such as centipede, zoysia, or Bermuda. Of the three, Bermuda cultivars are by far the best at conserving water and are most drought-resistant. Ask your cooperative extension or garden center which cultivars are most appropriate for your lawn. Keep in mind that Bermuda grass will turn brown in the winter, so including shrubs, evergreen trees, and cool-season flowering plants will help enhance the appearance of your landscape year round.

By choosing a low water-use grass suited to your region, enhancing the soil, and mowing high, you can grow healthy grass with a strong root system that will:

- Survive dry and drought conditions when they occur.
- Resist disease, insects, and weeds on its own.
- Reduce or eliminate the need for chemical applications.
- Use less water and be easier to maintain.
WATER-WISE PRINCIPLE 4: EFFICIENT IRRIGATION

GOING WITH THE FLOW: WATERING & CONSERVING

Just by following a few simple guidelines, water-wise gardeners can create hearty landscapes that can withstand hot, dry conditions.

PROS & CONS OF DIFFERENT IRRIGATION SYSTEMS

Sprinkler Systems

Sprinklers can cover large areas. Manual sprinklers require you to open the valve, time the watering yourself, and then shut off the flow. Automatic sprinkler systems offer the benefit of programmable controllers.

If you choose an automatic sprinkler system, make sure you set it correctly and adjust it as conditions change. Water early in the morning to reduce the evaporation rate. If water runs off your yard, split your watering times into two or more sessions. And be sure to turn off your system if you’re getting enough water from rain showers.

A good way to prevent overwatering is to install rain or soil moisture sensors to override your automatic watering system when necessary.

A rain sensor simply senses rainfall. Once a designated amount of water has been detected, it shuts down any regularly scheduled irrigation. Rain sensors are small, simple devices and are generally less expensive and easier to install and maintain than soil moisture sensors.

Soil moisture sensors are more accurate than rain sensors because they can detect moisture at the level of the root system. They are more exact in measuring how much water your plants are receiving and thus offer greater water savings. However, they are somewhat complicated to install and manage.
**Drip Irrigation**

This system is good for a small yard or for watering individual plants. Drip irrigation is highly effective at supplying one to four gallons of water per hour directly to the soil. The advantage of drip irrigation over sprinklers is that there is little water loss due to evaporation or runoff. It’s particularly good for mulched areas because it can directly soak the soil without washing away the mulch.

**Hand Watering**

The simplest and most common irrigation system is a garden hose or a portable sprinkler. The advantage of hand watering is that you can easily avoid overwatering. Use a nozzle to control the flow. When water stops being absorbed into the ground, move to another location. Wait an hour, then plunge a long screwdriver or spade into the ground to check that the soil is moist to a depth of six to ten inches.

**WATERING BY THE NUMBERS**

There are three steps to practical landscape watering:

1. Know how much water your plants need.
2. Know how much water each part of your watering system applies.
3. Match your watering system output to your plants’ needs.

Follow these three steps to figure out the best watering plan for your two main plant types. On pages 13-14, we’ll calculate your lawn watering needs, then we’ll do the same for landscape plants on pages 15-16.
1. How Much Water Does Your Lawn Need?
For lawns, water deeply but infrequently to encourage deep roots. The key to watering your grass is to apply enough water to soak down to the depth of the roots. The amount varies with soil type, but a good guide is to apply no more than 1 inch of water every time, which is enough to soak the soil to between 6 and 10 inches.

2. Measure Your Sprinkler Output
Without knowing it, you could easily drop up to 300 gallons of water in one hour and end up overwatering your lawn. Here’s how to test your sprinkler output so you can adjust your watering time:

1. Place six to eight shallow, flat-bottomed cans at scattered locations around your lawn. Tuna or cat food cans work well.

2. Run your sprinklers for 15 minutes.

3. Use a ruler to measure the depth of water in each can. Add all the numbers, then divide by the number of cans to find the average output.

4. This average number is your sprinkler number. It is the average amount of water your sprinklers apply in 15 minutes.
3. How Long and How Often Should You Water?

After you’ve calculated your sprinkler number in the previous step, you can calculate how long to run your sprinklers. Simply locate your sprinkler number in the chart below, then find the corresponding watering time.

<table>
<thead>
<tr>
<th>Sprinkler Number</th>
<th>0.2</th>
<th>0.3</th>
<th>0.4</th>
<th>0.5</th>
<th>0.6</th>
<th>0.7</th>
<th>0.8</th>
<th>0.9</th>
<th>1.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watering Time in Minutes</td>
<td>75</td>
<td>50</td>
<td>37</td>
<td>30</td>
<td>25</td>
<td>22</td>
<td>19</td>
<td>16</td>
<td>15</td>
</tr>
</tbody>
</table>

Now put your numbers to work. Set your sprinkler timer and water your lawn for the correct number of minutes. Wait one hour, then push a spade or long screwdriver into the ground to see if you’ve soaked the soil to the appropriate depth. It will slide easily through wet soil but will be difficult or impossible to push through dry soil.

By the way, if you run your sprinklers for the correct number of minutes but water pools or runs off your lawn, then you need to split your watering time into two or more sessions. Wait an hour between sessions for the water to soak in.

Now, how often should you water? Water only when your turf is stressed from lack of water. How can you tell? Step on it. If you leave distinct footprints or the grass doesn’t spring back, it’s time to water. As long as you apply one inch of water (don’t forget to include any rainfall) each time you water, then no more than once a week is typically enough to keep your lawn green throughout the summer.
WATER-WISE LANDSCAPE WATERING

1. How Much Water Do Your Plants Need?
Just like grass, the most effective way to water your landscape plants is to water deeply but infrequently. Larger plants, like trees, need more water because they have deeper roots and larger root zones and can store more water. This also means they can be watered less frequently, but we’ll get to that in a moment.

The 1-2-3 Rule is an easy way to remember how deeply to water:
- **1 Foot** is the correct depth for small plants, such as groundcovers and annuals.
- **2 Feet** is the correct depth for shrubs.
- **3 Feet** is good for large shrubs and trees.

**SUGGESTED WATERING DEPTH FOR DIFFERENT TYPES OF PLANTS**

The following chart shows how much water is required to wet the root zone of different plants.

**GALLONS OF WATER REQUIRED**

<table>
<thead>
<tr>
<th>Plant Canopy Diameter in Feet</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree</td>
<td>1.5</td>
<td>5</td>
<td>11</td>
<td>16</td>
<td>22</td>
<td>26</td>
<td>38</td>
<td>59</td>
<td>85</td>
<td>115</td>
<td>150</td>
<td>190</td>
<td>235</td>
</tr>
<tr>
<td>Shrub</td>
<td>1</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td>17</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Plant/ Groundcover</td>
<td>0.5</td>
<td>2</td>
<td>3.5</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. How Much Water Does Your System Apply?
Here are some typical output numbers for common plant watering systems. Notice the huge difference between the drip emitter, bubbler, and watering hose outputs.

<table>
<thead>
<tr>
<th>System</th>
<th>Output Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drip Emitter</td>
<td>1/2 – 4 gallons per hour</td>
</tr>
<tr>
<td>Bubbler</td>
<td>1/2 – 2 gallons per minute</td>
</tr>
<tr>
<td>Hose</td>
<td>2 – 5 gallons per minute</td>
</tr>
</tbody>
</table>

3. How Long and How Often Should I Water?
Refer to the chart to the left and write down the watering needs of all of your plants. If you use drip emitters, adjust the number and size of emitters on each plant so that your plants get the water they need in two to six hours. For example, the chart shows that a 10-foot tree needs 59 gallons of water. A good setup for this tree would be six 4-gallon per hour emitters, running for 2-1/2 hours (6 x 4 x 2.5 = 60 gallons).

Water only as frequently as your plants need it. Most plants only need water when they start to wilt. However, some plants look wilted during the day, but actually have plenty of water at their roots and will recover in the evening. If your plants are still wilting at night, they need water.

OTHER GREAT WATERING IDEAS

- Morning is the best time to water, because watering in the evening can invite fungus to grow on your plants at night.
- Put a rain gauge in your yard. If you get 3/4 to 1 inch of rain in a week, you can skip your next lawn watering.
- If you have an automatic sprinkler system, attach a rain sensor or moisture sensor shutoff device.
- Use a rain barrel to collect rainfall and runoff from downspouts. Use the rainwater to water container plants and gardens. Make sure your rain barrel has a good, well-fitted screen so it will not harbor mosquito larvae.
WATER-WISE PRINCIPLE 5: MULCH

MUCH ADO ABOUT MULCHING

Think of mulch as sun block for plant roots. Just two to four inches of mulch can substantially retain soil moisture, slow evaporation, and protect roots from overheating, which is especially helpful to ornamentals and vegetables. Hate weeding? Start mulching. Mulch can reduce or eliminate weeds that compete with landscape plants for moisture, nutrients, and sunlight.

Mulch can be organic or inorganic material. Organic mulches, such as pine straw, pine bark, and shredded hardwood, are the best choices because they retain moisture and add nutrients to the soil as they decompose.

1. Before mulching a plant bed, remove all weeds. Do it early in the year before weeds get established. This will save you weeding time later.

2. Work a thin layer of mulch into the soil and then add two to four inches on top. Spread it out, and avoid making big mounds of mulch.

3. Mulch the entire root zone of the plant out to the dripline (leaf canopy).

4. When mulching around shrubs and small trees, make an earth basin and keep the mulch pulled back a few inches to prevent rotting the trunks. Shallow plants, such as azaleas, rhododendrons, and dogwoods, need the most mulching.
WATER-WISE PRINCIPLE 6:
LOW WATER-USE PLANTS

MEDIUM TO LARGE TREES

- Bald Cypress: *Taxodium distichum*
- Black Gum: *Nyssa sylvatica*
- Bur Oak: *Quercus macrocarpa*
- Common Hackberry: *Celtis occidentalis*
- Ginkgo (male only): *Ginkgo biloba*
- Japanese Cryptomeria (evergreen): *Cryptomeria japonica*
- Loblolly Pine (evergreen): *Pinus taeda*
- Red Maple: *Acer rubrum*
- Red or Green Ash: *Fraxinus pennsylvanica*
- River Birch: *Betula nigra*
- Sweet Gum: *Liquidambar styraciflua*
- Thornless Honeylocust: *Gleditsia triacanthos inermis*
- Tulip Tree: *Liriodendron tulipifera*
- White Oak: *Quercus alba*
- Yellowwood: *Cladrastis kentuckea*
- Zelkova: *Zelkova serrata*
SMALL TREES

American Hophornbeam  
American Hornbeam  
Chaste Tree  
Chinese Fringetree  
Common Elder  
Crabapple  
Crape Myrtle  
Cypress  
Eastern Redbud  
Eastern Red Cedar (evergreen)  
Foster's Holly  
Ginkgo  
Hedge Maple  
Highbush Blueberry  
Japanese Flowering Cherry  
Juniper  
Magnolia  
Nellie Stevens Holly (evergreen)  
Northern Bayberry  
Paw Paw  
Persimmon  
Sassafras  
Serviceberry  
Shadbrow Serviceberry  
Smoketree  
Smooth Sumac  
Southern Arrowwood  
Staghorn Sumac  
White Fringe Tree  
White Mulberry  
Winterberry Holly  
Witch Hazel  
Ostrya virginiana  
Carpinus caroliniana  
Vitex agnus-castus  
Sambucus canadensis  
Malus (many species)  
Lagerstroemia indica  
Cypresa (many species)  
Cercis canadensis  
Juniperus virginiana  
Ilex attenuata ’Fosteri’  
Gingko biloba  
Acer campestre  
Vaccinium corymbosum  
Prunus serrulata  
Juniperus communis  
Magnolia (several species)  
Ilex x Nellie Stevens  
Myrica pensylvanica  
Asimina triloba  
Diospyros  
Sassafras albidum  
Amelanchier arborea  
Amelanchier canadensis  
Cotinus coggyria  
Rhus glabra  
Viburnum dentatum  
Rhus typhina  
Chionanthus virginicus  
Morus alba  
Ilex verticillata  
Hamamelis virginiana  

SHRUBS

Acuba  
American Arborvitae  
American Beautyberry  
American Boxwood  
Barberry  
Black Chokeberry  
Blackhaw Viburnum  
Chinese Holly  
Chokecherry  
Compact Oregon Grapeholly  
Deutzia  
Eastern Arborvitae  
English Boxwood  
Euonymus  
False Arborvitae  
Firethorn  
Flowering Quince  
Forsythia  
Fothergilla  
Glossy Abelia  
Hawthorne  
Heavenly Bamboo  
Hummingbird Summersweet  
Inkberry Holly  
Japanese Holly  
Japanese Honeysuckle  
Juniper  
Littleleaf Boxwood  
Mahonia  
Mountain Laurel  
Pinxterbloom Azalea  
Possumhaw  
Privet  
Red Chokeberry  
Scotch Broom  
Southern Arrowwood  
Southern Wax Myrtle  
Spirea  
Virginia Sweetspire  
Western Arborvitae  
Winterberry  
Witch Hazel  
Yucca  

Acuba japonica  
Thuja occidentalis  
Callicarpa americana  
Buxus sempervirens  
Berberis thunbergii  
Aronia melanocarpa  
Viburnum prunifolium  
Ilex cornuta  
Prunus virginiana  
Mahonia aquifolium Compacta  
Deutzia scaba; D. gracilis  
Thuja orientalis  
Buxus sempervirons ‘Suffruticosa’  
Euonymus japonica  
Hiba arborvitae  
Pyracantha (several species)  
Chaenomeles japonica  
Forsythia  
Fothergilla gardenii  
Abelia x grandiflora  
Rhampholepis indica  
Nandina domestica  
Clethra alnifolia  
Ilex glabra Shamrock  
Ilex crenata  
Lonicera japonica  
Junipers (many species)  
Buxus microphylla  
Mahonia bealei; m. aquifolia  
Kalmia latifolia  
Rhododendron periclymenoides  
Ilex decidua  
Ligustrum (several species)  
Aronia arbutifolia  
Cytisus scoparius  
Viburnum dentatum  
Myrica ceratocarpa  
Spirea (several species)  
Itie virginica  
Thuja plicata  
Ilex verticillata  
Hamamelis virginiana  
Yucca (several species)  

VINES

Wintercreeper Euonymus  

Euonymus fortunei ‘Coloratus’  

GROUND COVER

Bugle Weed  
Creeping Phlox  
Foamflower  
Green and Gold  
Leadwort  
Lilypert  
Mondo Grass  
Sensitive Fern  
St. John’s Wort  
Woodland Phlox  

Ajuga reptans  
Phlox stolonifera  
Tiarella cordifolia  
Chrysogonum virginianum  
Plumbago ceratostigma  
Liriope muscari; L. spicata  
Ophipogon japonicum  
Onoclea sensibilis  
Hypericum (several species)  
Phlox divaricata
PERENNIALS & HERBS

Aster
Black-eyed Susan
Blanket Flower
Butterfly Bush
Butterfly Weed
Cotoneaster
Daylily
Gayfeather
Goldenrod
Joe-Pye Weed
Lambs Ear
Lantana
Lavender
Lavender Cotton
Mint
Mistflower
New York Ironweed
Oregano
Parsley
Pinks
Purple Coneflower
Queen Anne’s Lace
Rosemary
Sage
Stonecrop
Swamp Milkweed
Thyme
Tickseed
Wild Bleeding Heart
Wild Columbine
Wild Geranium
Yarrow

Aster novae-angliae; A. novae-belgii
Rudbeckia fulgida
Gaillarda x grandiflora
Buddleia davidii
Asclepias tuberosa
Gaillarda x grandiflora (several species)
Hemerocallis (many species)
Liatris spicata
Solidago rugosa
Eupatorium fistulosum
Stachys byzantina
Lantana (many species)
Lavandula (many species)
Santolina chamaecyparissus
Mentha (many species)
Eupatorium coelestinum
Vernonia noveboracensis
Origanum (many species)
Petroselinum crispum
Dianthus gratianopolitanus; D. deltoides
Echinacea angustifolia
Daucus carota
Rosmarinus officinalis
Salvia (many species)
Asclepias incarnata
Thymus (many species)
Coreopsis (many species)
Dicentra eximia
Aquilegia canadensis
Geranium maculatum
Achillea millefolium

NATIVE AND ORNAMENTAL GRASSES

Big Bluestem
Blue Fescue
Fountain Grass
Indian Grass
Little Bluestem
Maiden Grass
Pampas Grass
Switch Grass
Andropogon gerardii
Festuca glauca
Pennisetum alopecuroides
Sorghastrum nutans
Schizachyrium scoparium
Miscanthus sinensis
Cortaderia selloana
Panicum virgatum
WATER-WISE PRINCIPLE 7: APPROPRIATE MAINTENANCE

KEEP YOUR LANDSCAPE GROWING STRONG

Now that you have an efficient, water-wise landscape, you can keep it growing strong by following a few simple guidelines each week.

Mow
During the summer, never cut more than one-third of the height of your grass. Not sure? Set your mower to its highest setting. Taller grass cools the soil, encourages deep roots, and reduces stress. If you mow your grass too short, root growth slows down, making the grass more susceptible to heat and drought. Also, leave grass clippings on the lawn to return nutrients to the earth and encourage growth.
Weed Control
Weeds are thieves. They steal nutrients and water from your grass and other plants. Keep weeds under control by weeding early in the year and consistently throughout the growing season.

Test Your Soil
Healthy soil has the proper balance of plant nutrients and pH. Contact your cooperative extension or nurseries in your area for soil testing services (see the Additional Resources section on the back cover). It can make a real difference in the health of your soil.

Fertilize
Adding a light top dressing of compost or organic fertilizer does wonders. It reduces thatch buildup on lawns, improves soil texture, and increases root mass and surface area. “Top dress” your lawn and plant areas early in the year when conditions are wet. Also see How to Improve Your Soil on page 8.

Prune
Avoid heavy pruning. Pruning stimulates growth, so plants require more water. Make sure you prune your trees and shrubs in the dormant (winter) season before the weather gets hot and dry.
**ADDITIONAL RESOURCES**

**READ AND GROW**
Want to go deeper? The following are good resources for learning more about creating and maintaining a water-wise landscape. Also visit wateruseitwisely.com for tips, games, and resources to help you conserve water.

**Georgia Resources**

Cooperative Extension  
800-ASK-UGA1  
www.caes.uga.edu

Metropolitan North Georgia Water Planning District  
404-463-3256  
www.northgeorgiawater.com

Georgia Environmental Protection Division  
404-656-4713  
www.conservewatergeorgia.net

Pollution Prevention Assistance Division  
404-657-5208  
www.gadnr.org/p2ad

Georgia Water Wise Council  
www.gwwc.org

Dalton Utilities  
706-278-1313  
www.dutil.com

**North Carolina Resources**

Cooperative Extension  
www.ces.ncsu.edu

**NC WaterWise Partners**

City of Durham  
www.durhamnc.gov

Fayetteville PWC  
www.faypwc.com

City of Greensboro  
www.greensboro-nc.gov/water

Greenville Utilities  
www.guc.com

City of High Point  
www.high-point.net

OWASA  
www.owasa.org

City of Raleigh  
www.raleighnc.gov

City of Wilmington – Water Treatment Division  
910-343-3690

**Virginia Resources**

Hampton Roads Planning District Commission  
Hampton Roads Water Efficiency Team  
757-420-8300  
www.hrpdc.org  
www.hrwet.org

Cooperative Extension  
www.ext.vt.edu

**Washington DC Metropolitan Area Resources**

Metropolitan Washington Council of Governments  
www.mwcog.org

DC Water and Sewer Administration (DC WASA)  
www.dcwasa.com

Loudon County Sanitation Authority (Leesburg, VA)  
www.lcsa.org

Fairfax Water  
www.fairfaxwater.org

Town of Leesburg, Department of Utilities  
www.leesburgva.gov