



earth-wise guide to

Landscape Design

The purpose of this fact sheet is to provide background information on creating a green garden for either the do-it-yourselfer or for those working with a landscape professional

benefits of a green garden:

- Reduce water usage
- Reduce the need for pesticides and fertilizers
- Lower the overall impact on the surrounding environment
- Provide wildlife habitat
- Preserve the look and feel of Central Texas

steps to a green garden:

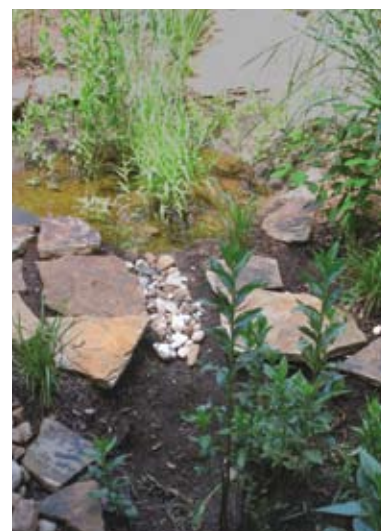
- Analyze conditions in your yard
- Start with a plan
- Plant trees to create shade
- Incorporate techniques to keep water on the land
- Select tough plants

Choose a style or design that appeals to you (clockwise from top left): The structural elegance of sun-loving xeric plants or the bright colors of a cottage garden, a tailored formal yard or an innovative rain garden.

Green Garden, Central Texas Style

Green Gardens come in many styles. They range from cottage gardens full of color, to soothing Zen gardens, to hot cactus rock gardens. Each of these styles can be created using a plant palette tailored to the unique conditions of the Central Texas area, and more specifically, to the conditions in your own yard. An array of native and adapted plants makes a Green Garden a beautiful, earth-friendly landscape that reflects the character of our local environment, and gives your yard and your community a distinct sense of place.

In addition, Green Gardens require less water and are less prone to insect and disease problems and the need for chemical maintenance. Less chemical input reduces pollution in our creeks and streams. By creating a Green Garden, you are helping to protect Austin's environment one yard at a time.



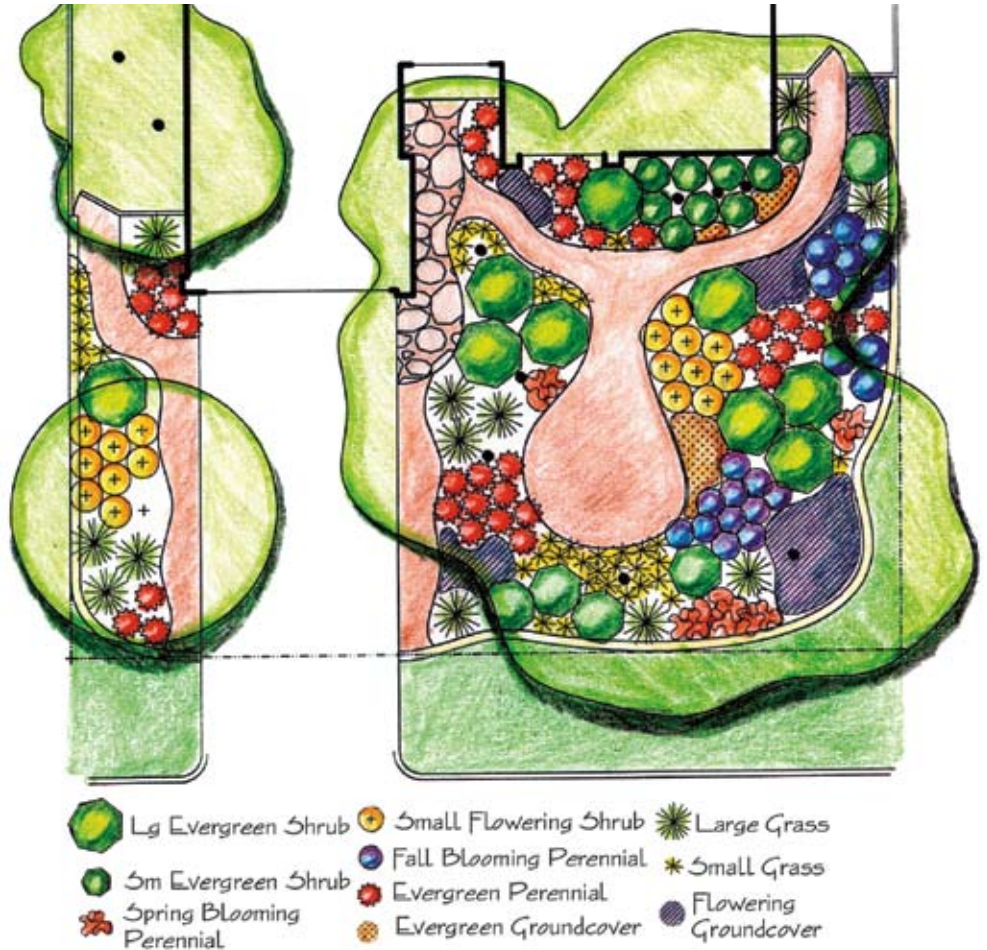
Planning is...

...the evaluation of what you already have in your landscape, and the creation of a clear road map to what you would like to achieve. Begin with the end in mind!

- **Lifestyle** - Think about **how you use your yard now**, and how you would like to use it in the future, so you can design with those needs in mind. Lawns can demand significant maintenance (time, chemicals and water), so minimize turf areas when possible
- **Current Conditions** - Evaluate the **current conditions in your yard**...where are the sun and shade? What views would you like to hide or enhance? How can you accommodate difficult conditions such as steep slopes, deer, problem soils or poor drainage?
- **Seasons** - Take into account the **different seasons**. For example, many landscapes look great in spring, but lack winter interest. Once identified, this problem is easily corrected by adding a few interesting structural plants or evergreens
- **Budget** - Realize that landscaping can be costly. As a rough estimate, **allow for a budget** of \$3-5 per square foot to be landscaped if you are doing the work yourself. Then create a budgetary timeline for completion of your project
- **Timing** - Implement your plan in the following sequence:
 - Install hardscapes (sidewalks, paths, edges, etc.) and underground irrigation system if desired. *Installing hardscapes after planting endangers plants that are already in the ground*
 - Create beds before planting turf
 - Plant trees and shrubs
 - Install beds according to your own priorities – complete them in the order that is most satisfying to you

Optional Plan Layouts

The Details:



The Look:



Taking photos may help you to better analyze your current conditions. Use tracing paper over a "before" photo to outline existing features and then pencil in new plants and beds. Incorporate plants of different heights, structures and textures to add aesthetic interest.

Design is...

... the arrangement of plant and structural elements to satisfy your landscape plan

Use graph paper to draw up your design, and choose a scale of 1 inch = 10 feet (10 little squares per inch on your paper). This scale is good for many residential size projects, and using graph paper facilitates the placing of plants when you are ready for installation

Consider the following in your design:



- **Proportion** - keep the size of your plants proportional to the house and environment around you, i.e., smaller plants for smaller spaces, larger plants for larger spaces



- **Variation in height** - an interesting design has a variety of plant heights, from groundcover underfoot to vines and trees overhead



- **Combination of evergreen and deciduous plants** - having only evergreen plants creates a static, unchanging landscape, yet deciduous plants often have no winter appeal. Use a combination of both



- **Plant texture** - coarse-textured plants have large sturdy leaves that stand still and silent; fine-textured plants have feathery leaves that dance in the wind. Use a combination for added interest



- **Seasonal interest** - choose plants for interest in each season – structure, berries and bark for winter; flowers and foliage for the other seasons



- **Foliage color** - if flowers aren't in season it is possible to have a colorful landscape using plants with different foliage color

• Plant Choice and Placement

- See the Grow Green Native and Adapted Landscape Plant Guide for plants that thrive in central Texas. Copies are available at all Grow Green nurseries or online at www.growgreen.org
- Even native and well-adapted plants can have differing water and drainage requirements. Choose mainly drought-tolerant plants, and group them with others of similar needs
- If you select a few more water-needy plants, group them together, and close to a source of water
- Put the right plant in the right place
 - shade-loving plants in the shade, and sun-loving plants in the sun
- Pay careful attention to plant spacing. Even the tiniest acorn grows into a mighty oak. Plant young plants according to their adult space requirements to minimize crowding, pest and disease problems
- Design your yard to create more shade. It is an excellent way to save on water and cooling costs through the summer months

Plants to Avoid - Avoid invasive plants that escape from yards to take over natural areas.

They choke out native species and upset the balance of the surrounding ecosystem. For a list of earth-wise plants, look for a copy of the **Grow Green Native and Adapted Landscape Plant Guide**, or check the web at www.growgreen.org

Transition is...

...the logical and efficient way to convert your yard to a green garden. For more information look for the **Grow Green Installation and Maintenance fact sheet**

1. The original yard had a typical suburban look — a single row of shrubs near the house and a large area of St. Augustine grass.



2. The removed neighborhood plants added to the plants and An irrigated installed



5. The finished product — a green garden with textural and seasonal variety for all to enjoy!



St. Augustine was
l and donated to a
r. Enriched soil was
o maintain healthier
nd to conserve water.
ation system would be
at this time.

Step-by-Step Transition

3. Walkways and landscape beds were installed to set the framework for the yard.



4. Trees and plants were placed to anticipate growth and shade



**Think you have
a beautiful
Green Garden?**



Apply for an award at
www.ci.austin.tx.us/greengarden/downloads/awgg_form.pdf
or look for an application at a Grow Green nursery.

KEEP WATER ON THE LAND

With increased population growth and smaller lots, much of our land is being covered with roadways, rooftops, parking lots and sidewalks that do not let water soak into the soil. This decreases baseflow (the constant flow in a creek) while increasing the chances of flooding and streambank erosion. The result is that many creeks have excessive flow during heavy rains and dry up shortly afterwards.

You can help both our waterways and your drainage problems by incorporating some “greenscape” techniques into your landscape plans.

Gutter downsouts

Direct downsouts to either
a) vegetated areas rather than pavement to allow water to soak in rather than run off or
b) underground to a rain garden

Rainwater Harvesting

By directing rooftop gutters to a rain barrel, you can then use the collected rainwater on areas of the land that most need water.

Swale or “Dry Creekbed”

Installing a stone or grassed channel that directs rainwater to an area of the yard where it can be better absorbed.

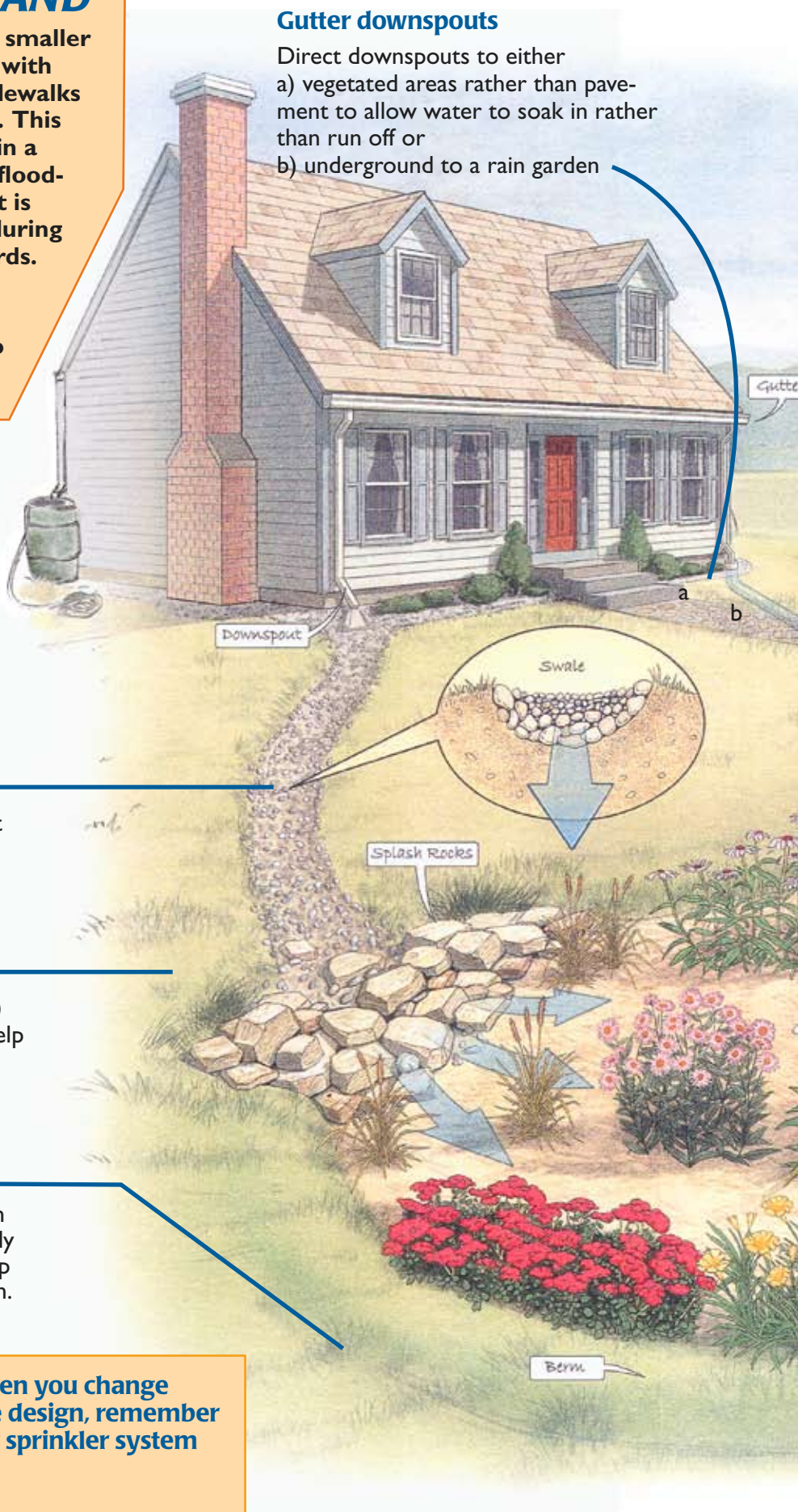
Soils

At least 4 inches (and ideally 6-8 inches) of organic topsoil should be added to help keep nutrients and water on the land.

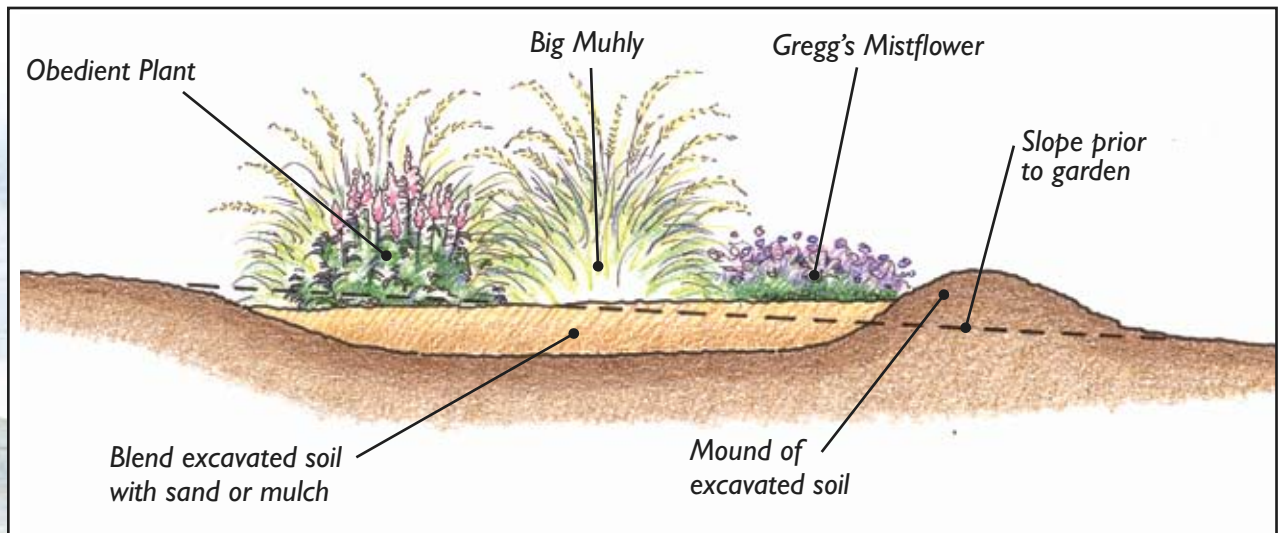
Berm

This could be a mound of earth or a low stone wall. It is typically at the bottom of a slope to help retain water or prevent erosion.

Reminder: When you change your landscape design, remember to change your sprinkler system as well!



Cross Section: Rain Garden



Trees

Plant disease-resistant natives to promote water retention, improve air quality, provide shade and habitat.

Porous Pavement

An alternative to asphalt, porous materials contain voids to encourage water to infiltrate the land. Some options include bark mulch, gravel, pervious concrete, paving stones and tumbled glass.

Your Lawn As a Filter

Grass slows down water flow and allows infiltration. Lawn does best in an area that is nearly level and should not be treated with chemicals in order to reduce the potential for water pollution.

Rain Gardens

These gardens are designed to catch and store rainfall for short periods of time and then dry out; they can be filled with attractive plants and often help solve drainage issues in the yard. For details on rain garden design and plant choices, see the following page and visit www.growgreen.org/plants.htm.

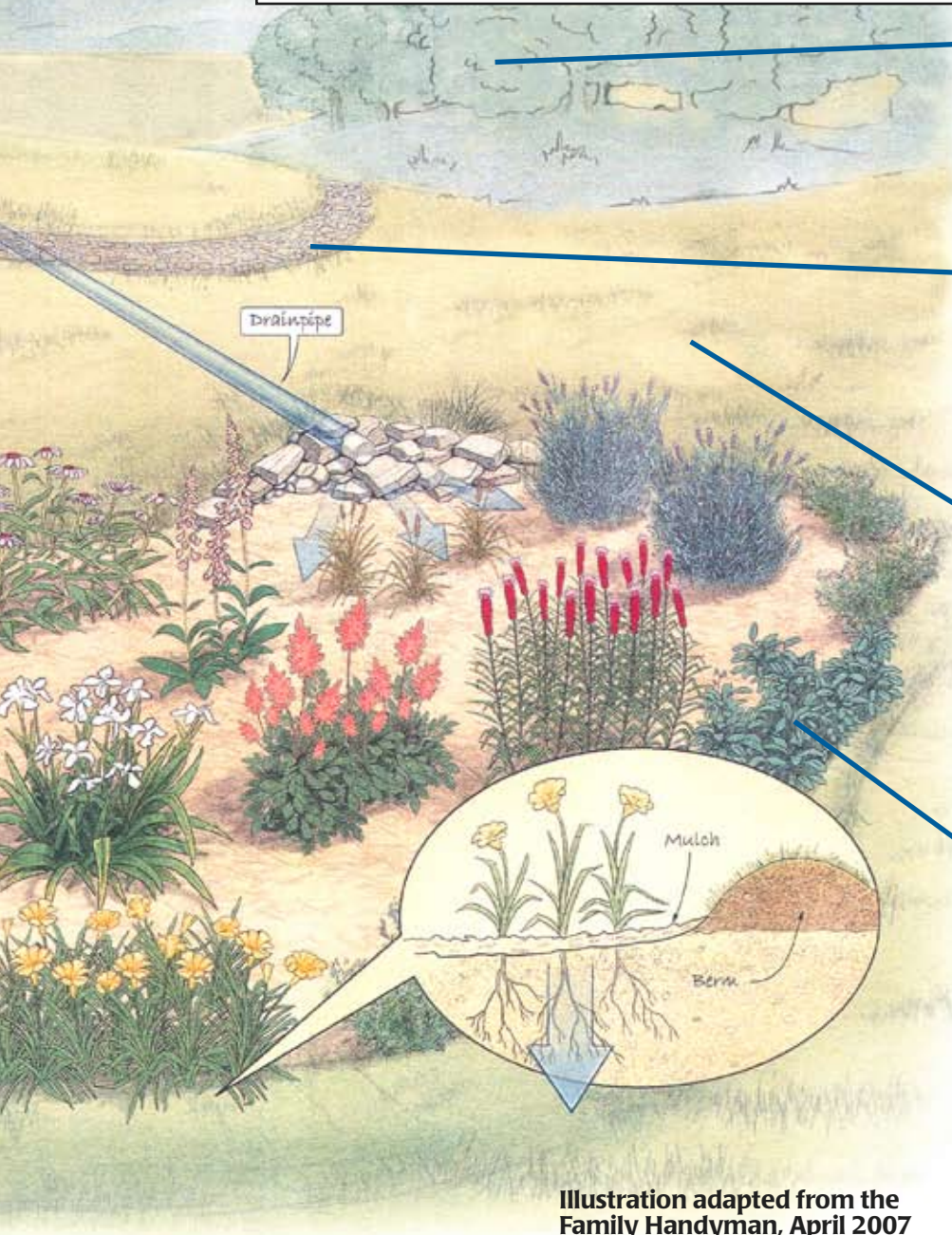


Illustration adapted from the Family Handyman, April 2007

Frog Fruit

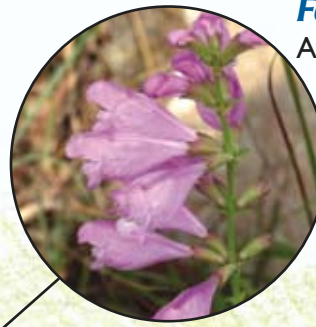
Alternative: Horseherb



Central Texas Rain Garden Plants

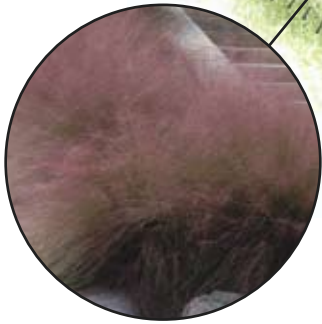
Fall Obedient Plant

Alternative: Spring Obedient Plant



Gulf Muhly

Alternative:
Inland Sea Oats



Black-eyed Susan

Alternative: River Fern



Gregg's Mistflower

Alternative: Brazos Penstemon



Big Muhly

Alternative: Indian Grass



KEEP DIRT AND MULCH OUT OF THE STORM DRAIN!

Soil is one of our most common pollutants. Bare dirt can erode during rainfall and travel to our creeks, clogging waterways, damaging fish gills and carrying chemicals with it.

Solutions:

- Plant or mulch any bare soil
- Stabilize eroded areas as needed
- Install erosion controls if you are doing construction or landscaping projects

Caution: If you mulch a sloped area, make sure to contain any loose materials with edging so a heavy rain doesn't wash it away.

Become a Backyard Habitat

Austin is one of America's first Wildlife Habitat Communities!

Learn how to certify your yard by visiting the
National Wildlife Foundation website at

www.nwf.org/backyard/

www.growgreen.org



**Watershed Protection
Development Review**

512-974-2550

AgriLIFE EXTENSION
Texas A&M System

512-854-9600

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