



Assessing Your Property



The First Step in Developing a Streambank or Shoreline Landscape

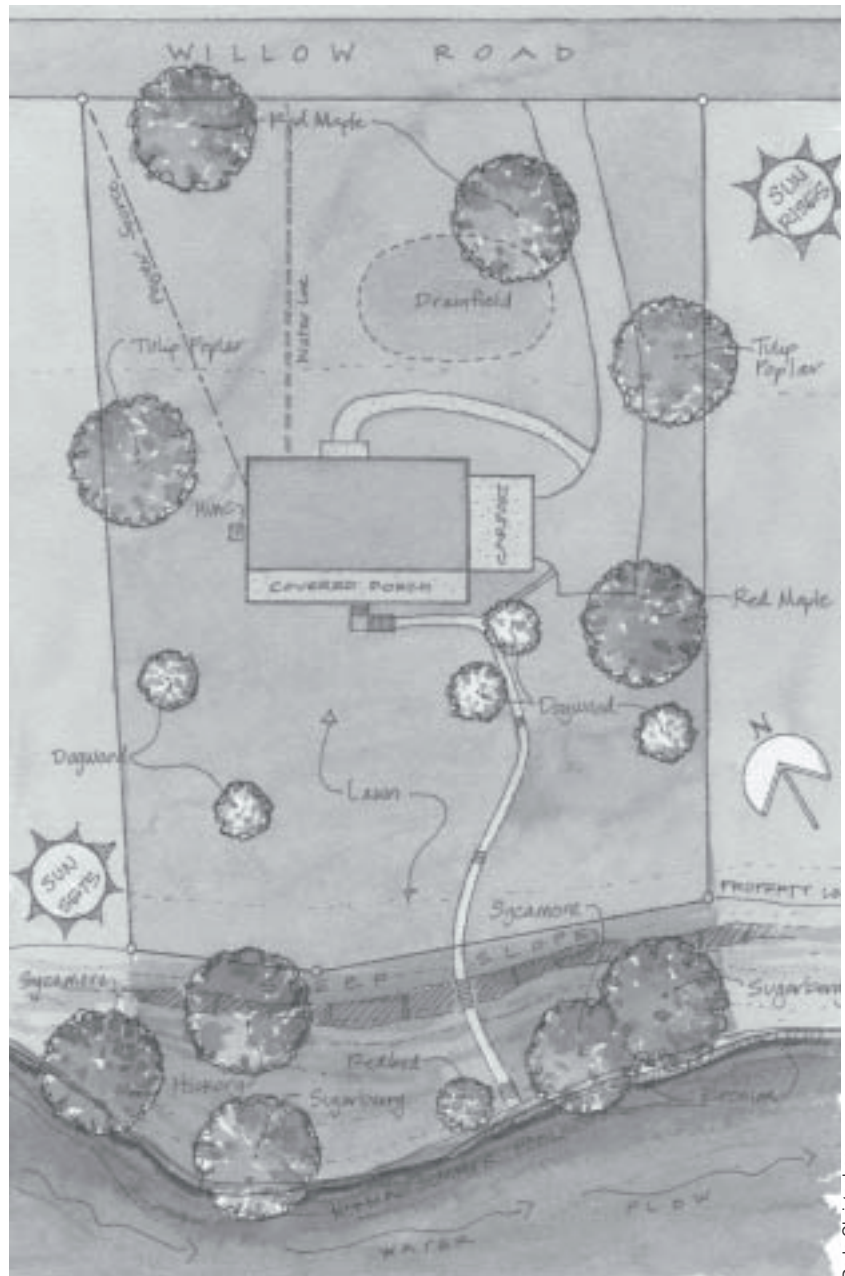
A careful assessment of your property provides a framework for your landscape design by helping you make important decisions about your riparian restoration project. This fact sheet will help you develop a base map to assess your property. This is the first step in designing a streambank or shoreline landscape plan using native plants.

Before developing your landscape plan, it helps to have a map of your property. The map provides an overhead perspective of existing structures and conditions. You can draw your own map or hire a professional. Be sure any public land is clearly and accurately marked. Also indicate the floodline, or high-water mark, if applicable.

Your map needs to include the following:

1. Existing structures, including:

- Property lines
- House, garage, and other structures
- Driveway
- Swimming pool
- Patios/decks
- Paved and unpaved walkways
- Water use facilities



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Your house, garage, driveway, and patio are impervious surfaces—they do not absorb water. Water that drains over land to another location is called runoff. Designing your landscape to manage runoff will help prevent erosion.



2. Utilities and infrastructure, including:

- Municipal sewer lines, septic tanks, and drainfields
- Natural gas and water lines
- Overhead and underground utilities, such as electric, telephone, and cable lines

If you want to plant in a utility right-of-way, contact the appropriate utility provider. Keep in mind, if you do plant in a right-of-way, the utility company may have the right to cut or remove any vegetation.

3. Existing natural features, including:

- Trees, shrubs, flower beds, and other plants
- Lawns and other vegetated areas
- Any features that may require special attention, such as hills, bluffs, rock outcroppings, steep slopes, etc.
- Existing or potential erosion problems
- Wet areas or wetlands
- Bare or sparsely vegetated areas
- Existing vegetation you want to preserve
- Drainage patterns

Identifying existing plants will help you decide which ones to keep and which ones to remove. Plant guides and tree identification books can help you identify your plants. Most guides will note if a plant is native. Another alternative is to consult with a local expert such as a botanist, urban forester, or landscape designer.



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4. Light patterns

- Locate north, south, east, and west on your map. This information will help you decide which native plants are best suited for particular areas. If a shoreline or streambank faces south or west, it is usually drier and hotter; if it faces north or east it will more likely be damper and cooler.
- Note patterns of sunlight and shade every three hours. If possible, note summer and winter sun/shade patterns on your map. Think of these areas of sunlight and shade in terms of the three categories below:

Full sun—Sites that receive at least eight hours of direct sunlight each day

Partial sun—Sites that receive three to six hours of direct sunlight each day

Full shade—Sites that receive less than three hours of direct sunlight each day

5. Areas used by wildlife

View your property in the morning, afternoon, and evening and observe the visiting wildlife. Mammals may be hard to spot, but you can walk your property and look for telltale signs such as tracks, burrows, and dens. Think of the wildlife in the following categories:

- Birds—Songbirds, ducks, hawks, owls, herons, etc.
- Small mammals—Chipmunks, squirrels, rabbits, raccoons, etc.
- Large mammals—Deer, foxes, etc.
- Insects—Butterflies, moths, mayflies, dragonflies, etc.
- Amphibians—Frogs, toads, salamanders, etc.
- Reptiles—Turtles, snakes, lizards, etc.

Note whether the animals use your property for food, cover, or nesting. Make a list of the ones you have seen and mark the areas they visit on your map. If you see very little wildlife, make a list of the kinds you would like to attract. When choosing your plants, you can select species that provide food and shelter for the animals you like to watch.

6. Moisture conditions

Look at your land and decide which of the descriptions below best fits the area. These conditions will help you decide which plants are suited for those areas. You may have a combination of site conditions on your property. Be sure to mark these on your map.

Dry upland—Upland sites with soils that are normally dry and well drained. Examples include dry woodlands, dry grasslands, and sandy, graveled slopes.

Moist upland—Upland sites with rich, fertile soils that are typically moist but not saturated. Examples include rich, moist woods and moderately moist grassland areas.

Water's edge—Sites that are temporarily saturated or shallowly flooded during the growing season. Examples include streambank, shoreline, or floodplain areas prone to occasional flooding.

Wetlands and standing water—Sites that are saturated or shallowly flooded for most of the growing season. Examples include shallow water along the margins of reservoirs, streams, or wetlands that have standing water for most of the growing season.

7. Nearby features

Make note of features you would like to screen with vegetation (houses, roads, utility lines, etc.) and scenic views you would like to frame (streams, river, reservoir, etc.). Note the plant height and spread necessary for screening or framing. Mark them on your map.

Other considerations

Soil testing

Soil pH, a measure of acidity, is not something to include on your map but it is a good idea to have it tested. Whether your soil is acidic, neutral, or basic will be a determining factor in preparing your site and choosing your native plants. Although most soils in the Tennessee Valley are in the acid or neutral ranges, those that developed over limestone rock or have been heavily limed could have pH values in the basic range.

Ask your county agricultural extension agent for soil testing instructions and materials. Testing the soil pH will help you select plants that are properly suited to your site. Many plants will survive outside their preferred pH range; however, they may not flourish. If plants are stressed, they will require more maintenance and be more sensitive to other pressures such as drought and pests.

Budgeting

Converting property to a more natural state may seem expensive at first, but the long-term benefits of less maintenance time and lower costs can outweigh the initial investment. There are several approaches to establishing a native landscape that differ in cost. Obviously, letting nature take its course is less expensive than buying and planting trees, shrubs, and other vegetation. The compromise is that it takes nature longer to establish an effective native landscape. Sowing seeds is less expensive than landscaping with bare root or container-grown plants, but seed-grown plants will take longer to establish. Bare root and container plants often bloom within the first year. Choose a plan you can afford, and remember—you don't have to do it all in one year.

Permitting

At many reservoir sites, there is a strip of public land between private property and the reservoir. Before cutting trees, clearing undergrowth, or planting trees on public land managed by TVA, you need to obtain a permit from TVA. Additional permits are required when a property owner preposes to build a structure such as a dock or to modify a stream channel. Your local TVA Watershed Team can assist you with the permitting process.