

CHAPTER THREE

Assessing Your Property and Planning Your Buffer Landscape

Step by Step Guide to Assessing Your Property

The first step in developing a buffer landscape plan is to prepare a careful assessment or inventory of your property. The instructions contained in this chapter are designed to be very comprehensive. You don't necessarily need to follow all of these instructions, just the ones you find useful or appropriate for your circumstances.

A map of your property can be helpful in developing this assessment. A 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 800-foot elevation contour line, the normal property line marking the AEP/SML project boundary, and your lot property line.

A drawing that is 100% perfect isn't necessary. A map that is reasonably close is usually acceptable. A surveyor's map should be available to you when you purchase property or you can get a map from the county building office. Another source for this type of map is from satellite photos found on your county's internet site. You can download and print these photos and contour maps of your property with the address, property owners, or GPS location for reference. Information can be located by searching the Franklin, Bedford, or Pittsylvania GIS site on the internet. These sites have aerial photos, topography, and contour line information. The web addresses are:

Bedford County <http://www.co.bedford.va.us/Res/GIS/index.asp>

Franklin County <http://arcims.webgis.net/va/franklin>

Pittsylvania County <http://216.237.216.18/gscwebp/default.aspx>

Once you have a drawing of your lot, sketch in the following information points.

1. Existing structures and boundaries including:

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

2. Utilities and infrastructure including:

- Water wells
- Municipal sewer lines, septic tanks, and drain fields

CALL BEFORE YOU DIG!

Don't forget to call Miss Utility at
1-800-552-7001
at least 3 working days
(excluding weekends and legal holidays) before beginning any digging project

- Natural gas and water lines
- Propane tanks
- Satellite equipment. Consider line of sight implications
- Overhead and underground utilities, such as electric, telephone, and cable lines.
- Irrigation heads and underground pipes

If you want to plant in a utility right-of-way, contact the appropriate utility provider. Keep in mind that 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, and steep slopes
- Existing or potential erosion problems
- Wet areas or wetlands: indicate slope, low spots, and high spots
- Designated drainage easements
- Bare or sparsely vegetated areas
- Existing vegetation you want to preserve

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, local nursery, or landscape designer. This SMLA Buffer Landscape manual, the SMLA plant list, and AEP regulations are additional resources.

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 the shoreline 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 and 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



Full Sun is at least SIX hrs. of direct sun.

Part Sun is FOUR to FIVE hrs. of direct sun.



Part Shade is dappled light throughout the day or TWO to THREE hours of direct sun.



Shade is early morning sun or late day sun.

- 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

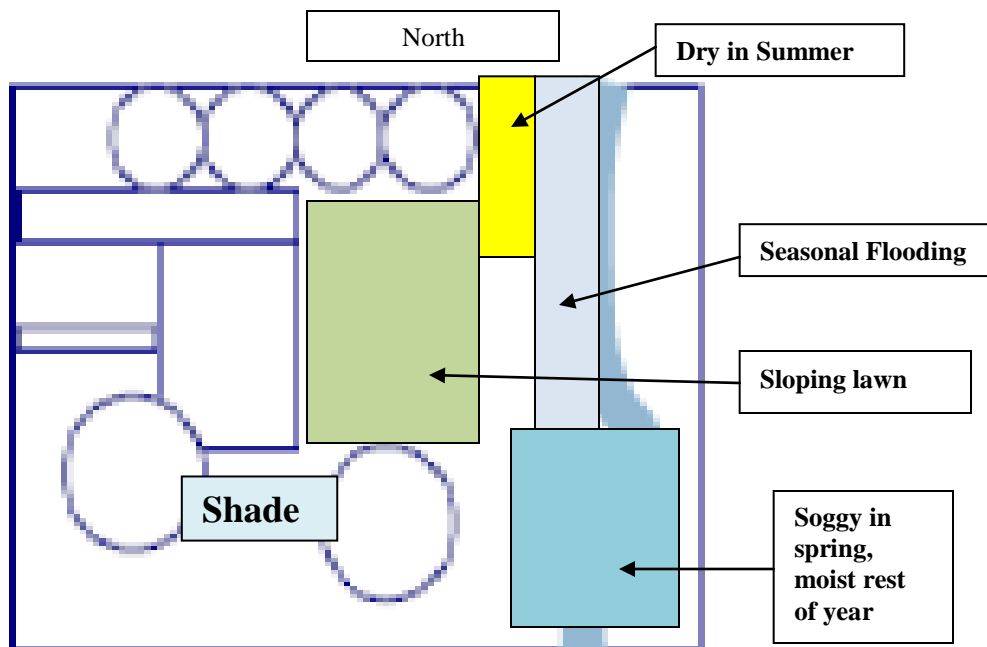
View your property in the morning, afternoon, evening, and night and observe the visiting wildlife. Many animals such as deer, raccoons, and opossum are nocturnal and will visit your property after dark and will eat many of your plants. Mammals may be hard to spot, but you can walk your property and look for telltale signs such as tracks, scat, burrows, and dens. Think of the wildlife in the following categories:

- Birds including songbirds, ducks, hawks, owls, herons
- Small mammals including chipmunks, squirrels, rabbits, raccoons
- Large mammals including deer, foxes
- Insects including butterflies, moths, mayflies, dragonflies
- Amphibians including frogs, toads, salamanders
- Reptiles including turtles, snakes, lizards

Note whether the animals use your property for food, cover, or nesting. Make a list of the wildlife 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

You may have a combination of growing conditions on your property. Look at your land and decide which of the descriptions below best fit different areas of your site. These conditions will help you decide which plants are best suited the property. 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. Examples include stream bank, shoreline, or floodplain areas prone to occasional flooding.
- Wetlands and standing water: sites that are saturated or shallowly flooded for most of the year. Examples include shallow water along the margins of the lake, streams, or wetlands that have standing water for a portion of the year.

7. Nearby features

Make note of features you would like to screen with vegetation such as houses, roads, utility lines, or docks and identify scenic views you would like to frame such as streams or the lake. Note the plant height and spread necessary for screening or framing. Mark them on your map.

Other considerations

Soil testing

It is a good idea to have the pH of the soil on your property tested. Although most soils in the SML area 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. Contact information for the extension offices is:

Bedford County (540) 586-7675

Franklin County (540) 483-5161

Pittsylvania County (434) 432-7770

Soil testing kits are also available at the SMLA office. The cost is \$10.00 per kit payable to Virginia Tech or the appropriate county extension office. 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 and timeliness of completion. Sowing seeds is less expensive than landscaping with bare root or container-grown plants, but seed-grown plants will take longer to reach maturity. Bare-root and container plants often bloom within the first year. Choose a plan you can afford and remember — you don't have to complete it all in one year.

Permitting

At Smith Mountain Lake, all land between an 800 foot contour line and the surface of the lake is controlled by AEP. (The extent of this land on your property depends generally upon the topography of your property.) Before cutting trees, or clearing undergrowth on this land, you need to obtain a permit from AEP. Additional permits are required when you plan to build a structure such as a dock or to modify the land. Adding plant material does not require a permit.

Use of the Property

As a final consideration, take some time to imagine all the different ways your property will be used during the year including:

Walkways or paths needed down to the waterfront

Children's play areas

Patio areas

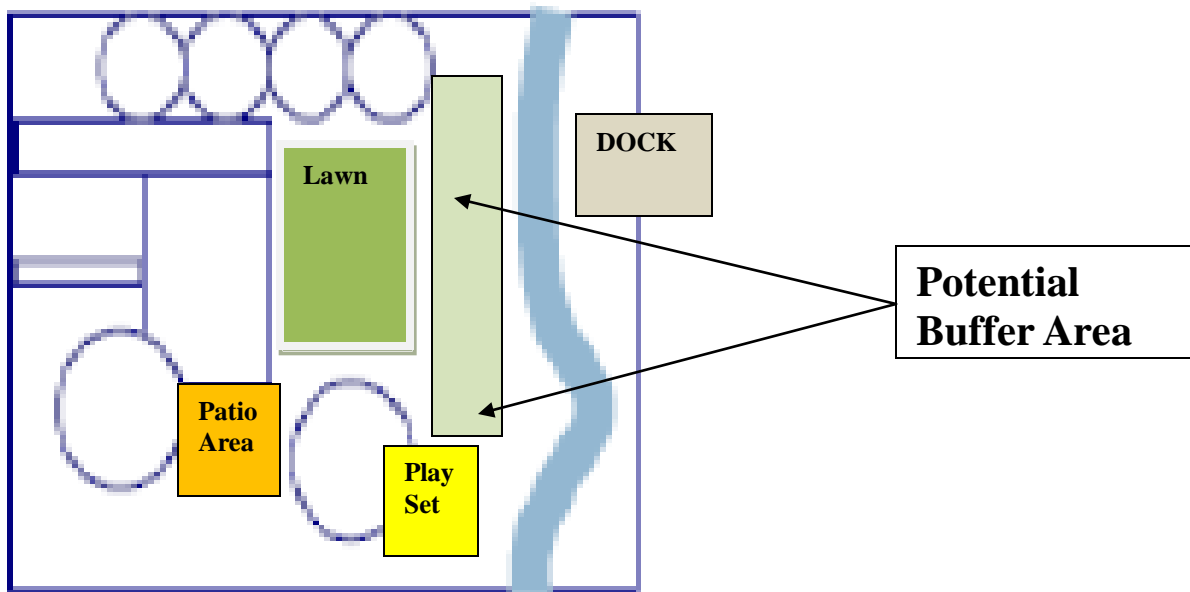
Views of the lake during different seasons of the year

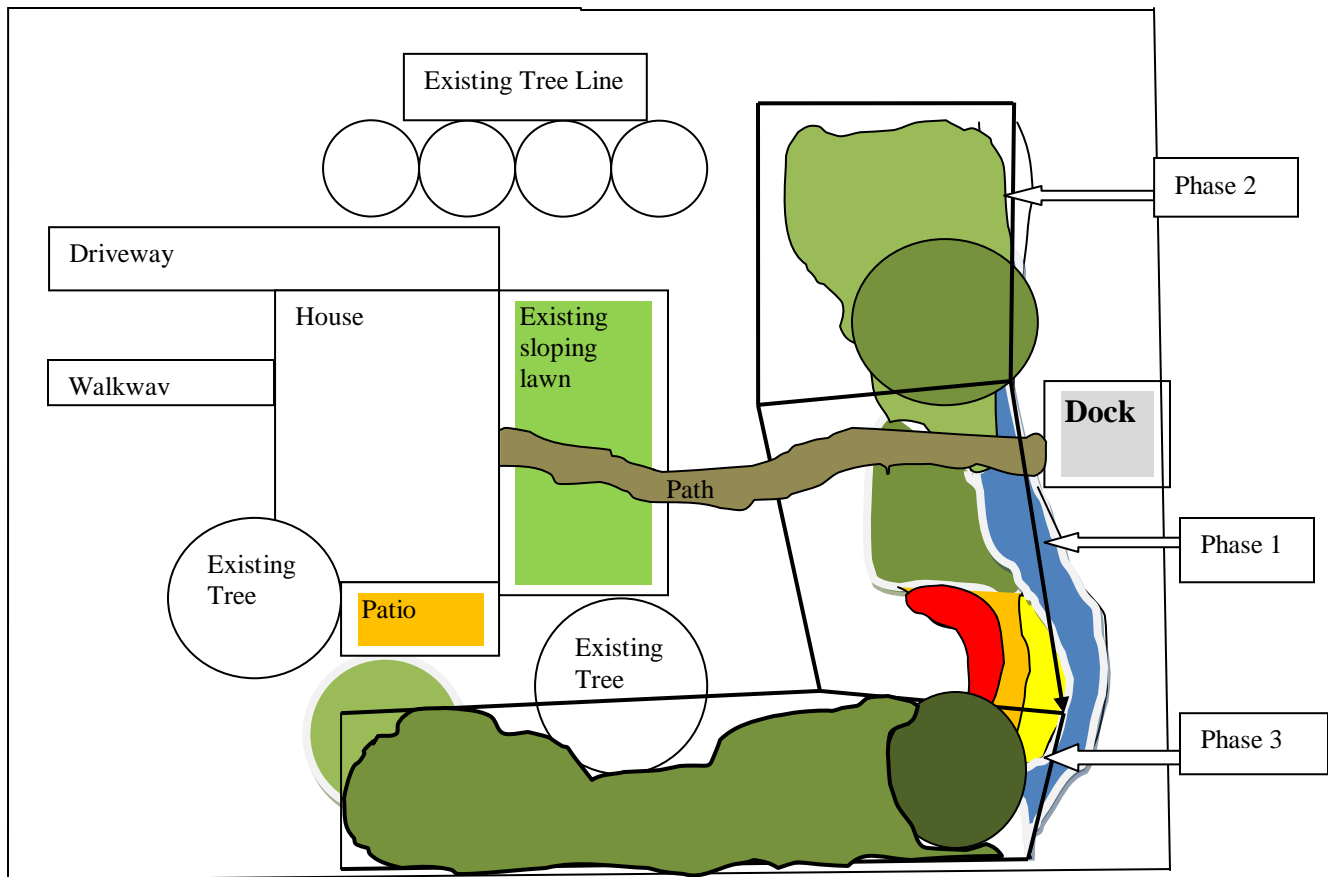
Sitting areas at different levels on the property

Various garden areas for flowers, vegetables, butterflies, and birds

Natural areas left with habitat to attract wildlife

Here is an example of a property map





Step by step guide to creating the design for your Buffer Landscape.

If you decide to hire a professional landscape architect, a landscape designer, or a landscaper you will find a list in this guide of these individuals who practice their trade in the SML area and who are participants in our Buffer Landscape Project. Contact them directly.

If you choose to do the design work yourself, the following guide will help you develop a workable design plan.

1. Framing the View of the Lake

It's now time to think about your view. You basically want to envision what the buffer area will look like once it is developed (planted) and how it will affect your view. Once you've done this, think of locations where you might want low growing plants and where tall plants should go. Large trees generally do best on the right and left edges of the buffer area providing a frame for your view area. Careful selection of plant materials can enable you to create windbreaks and to screen out objectionable objects in your yard or on your neighbors' property. This part of the design process is often likened to an artist or photographer framing out the picture he is about to create.

What you plant now will look considerably different in ten years. Most plants tend to grow and get bigger and taller. Keep that in mind throughout the design and planning process.



2. Deciding on Plant Material

Deciding what to plant and where to plant may be the most difficult part of buffer landscaping. There are many, many books and websites available. There is also an extensive list of native plants and cultivars in the appendix to this manual. Most plant lists include the common and scientific name of the plant and best growing conditions and requirements. Many participating landscape professionals and nurserymen, in the area are available. Volunteers from the SMLA Buffer Landscape Committee are available to help too. The environmental conditions of the buffer area will dictate which plants will look best and thrive in your landscape. Go back to your site plan to match your plant selection with the conditions you have mapped:

- If the area is frequently moist or wet, you should plant something that likes wet soil.
- You should plant sun-loving plants if the area has a southern exposure with a great deal of direct sunlight.
- If your buffer area has a southern or western exposure it, will tend to be hot and dry. North and east exposures will be wetter and colder and will get less sunlight. Select plants accordingly.
- If you have a steep slope or have some erosion problems, use plants that grow and spread quickly to stabilize the soil.
- Note plants that are thriving on nearby properties. These will probably do well in your landscape.

The SML area is considered to be in growing zone 7. That means you can plant perennial plants, shrubs, trees, groundcovers, and grasses that will grow in a zone 7 area. Keep zone 7 in mind as you purchase plants, especially if you buy plant materials outside the area or via the Internet or catalogs.

3. Designing planting areas.

- Sketch in planting areas on your map and select a variety of plants for each separate area.
- To maximize the filtering benefit, your buffer should be somewhere in the area of 25` to 35` deep. If you don` t have 25 to 35`, or don` t have the time or money to do it all at once, do it in stages. Some is better than none. There`s always next year.
- If you select trees for your planting areas, consider planting moderate sized woody shrubs grouped around the immature trees. These shrubs will add interest to the area and help hold the soil until the trees grow to provide a mature canopy above the planting bed.
- Most plants don` t normally grow in a straight line. Imitate nature by staggering plants in a natural curve or grouping.
- For each planting area select plants of different shapes and heights. Flowering plants, shrubs, and trees will add color and attract wildlife.
- Don` t forget fall colors and winter shapes to create interest.
- Spacing plants correctly is critical for plant survival. Space your planting to allow plant size at maturity. Information including height and width at maturity is found on plant tags on nursery plant material and in most plant lists.
- Spacing plants and the size of the planting bed will determine the number of plants to plan for each planting bed. (Some plants look best when planted in groups: odd numbers are usually preferred).

Planting Tips

Group plants in **mulched beds** instead of placing them individually around the yard.

This technique gives a more natural look to the landscape and makes watering and weed control much easier.

Mulched planting beds

- provide an area to recycle yard wastes,
- protect plants from lawn equipment,
- moderate soil temperatures,
- conserve water,
- help control weeds, and
- add organic matter to soil.

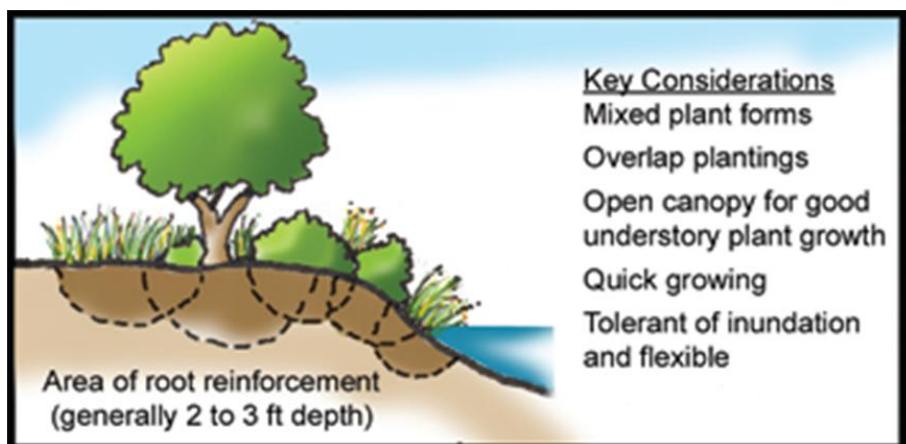
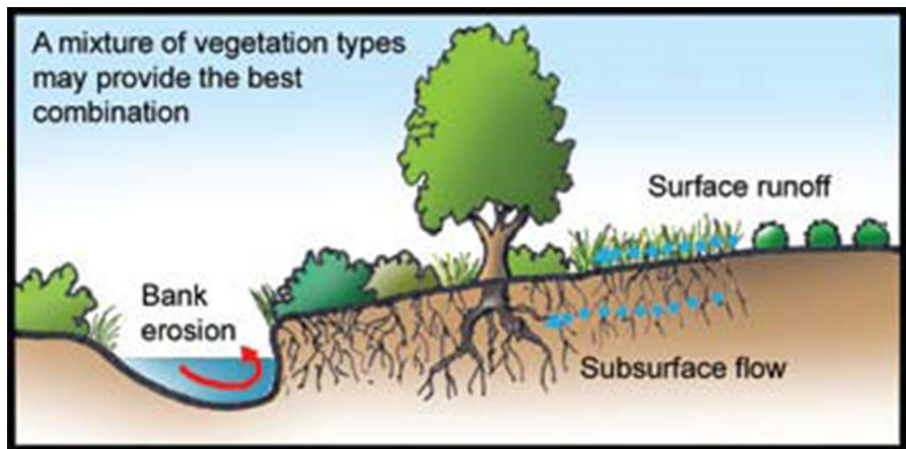
4. Additional considerations

You may decide to plant some areas of your landscape in a manner designed to attract and support wildlife. This is an added bonus. Wouldn` t it be special to see hummingbirds regularly visiting your buffer landscape area or a steady flow of butterflies coming to the various flowering plants. The SMLA plant list indicates the types of wildlife attracted to various plants.

Whether you are choosing the plant materials yourself or with the help of someone else,

consider species native to Virginia first. They are well adapted to this climate and are tolerant of the local soils and resist pests. They also tend to have deep root systems that do a better job of both reducing and filtering runoff from your property into the lake.

Once you have an overall Buffer Landscape Plan for your property, you can decide how to begin. You can start with just one of your designed planting beds and add others in the coming years. You may decide to begin with a planting area that solves a certain problem: water runoff, drainage, erosion, or lack of shade. With every addition to your Buffer Landscape you are helping preserve water quality, provide wildlife habitat, and protect the value of your property.



Examples of contour maps and aerial photos available online.

Information can be located by searching the Franklin, Bedford, or Pittsylvania GIS site on the internet. These sites have aerial photos, topography, and contour line information.

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