



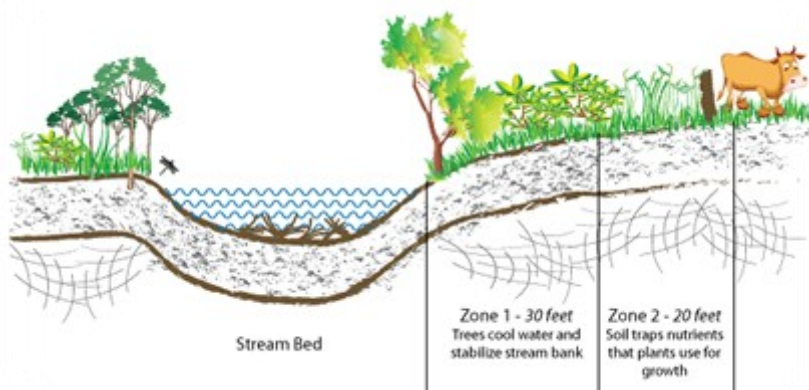
## **Water Quality: What YOU can do to help Silver Lake.** **Tips from the Silver Lake Association's Water Quality Committee**

### **Tip Ten: Benefits of Natural Shorelines**

#### **Create beautiful lakefront landscaping that will also improve the water quality of Silver Lake**

##### **1. Riparian Buffers**

According to Penn State Cooperative Extension, riparian buffers protect water quality by intercepting sediment and pollution from agricultural fields, residential lawns, roadways, and other sources. This improves habitat for aquatic wildlife while providing food, cover, water, and breeding areas for many other kinds of wildlife. Riparian buffers trap sediments, trap nutrients and pollutants, recharge the ground water, provides better habitat for fish, and improves habitat for other wildlife. A riparian buffer can remove up to 50% or more of nutrients and pesticides, 60% of certain pathogens, and 75% or more of sediment.



When planning, consider three zones. Zone 1 begins at water's edge while Zones 2 and 3 move inland. Zone 1 goals are to provide bank stabilization as well as shade, so larger trees or shrubs are planted here. Zone 2 should absorb excess nutrients and protect them from entering the water, so a diverse array of native trees and shrubs can be planted in this area. Zone 3 is the first gate at slowing runoff and trapping sediment so native grasses and wildflowers are excellent choices for planting.

**2. Native Plants** are important to use, because, native perennial plants are lovely to look at, but more importantly, they fill a vital role in nature. Native animals such as butterflies need native plants for food and reproduction. According to Amanda's Garden, a Native Perennial Nursery in Springwater, NY, as native areas such as woodlands, prairies and wetlands become overrun by human infrastructure, invasive alien plants and other disturbances, it is even more important to put at least some native plants in your garden. Using native plants helps to bridge the gaps between forestland, park and residential areas. This encourages wild animals and native plants to establish in your area. Native plants can also be used in the problem areas of the garden, such as shady or very wet areas. This aids you as the gardener to create beautiful solutions to many previously troublesome spots. Think of these areas as an opportunity to promote biodiversity. An ecologically sound landscape benefits you because it is easier to care for. Native plants have adapted to pests, disease, and climate stresses and they can cope well with these problems.

**3. Other Tips** include limiting phosphate and fertilizer use, scooping pet waste, cleaning your gutters, mowing your lawn no shorter than 2 3/4" to 3", planting native plants, minimize runoff with rain barrels or rain gardens, and be water wise. (Please see Tip Sheet Two, under the Water Quality Tab, on the SLA website)

##### **Articles and Websites to reference:**

<http://chqdaily.com/2014/08/01/natural-shoreline-helps-chautauqua-lake-health/>

<http://www.chautauquawatershed.org/index.php/watershed-care/10-easy-things-you-can-do>

<http://www.bluethumb.org/>

<http://www.watershedco.com/blog/shoreline-restoration-options/>

<http://extension.psu.edu/natural-resources/wildlife/habitat-management/pa-wildlife-16-riparian-buffers-for-wildlife>