



Conesus Lake Watershed Council

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<https://www.livingstoncounty.us/217/Conesus-Lake>

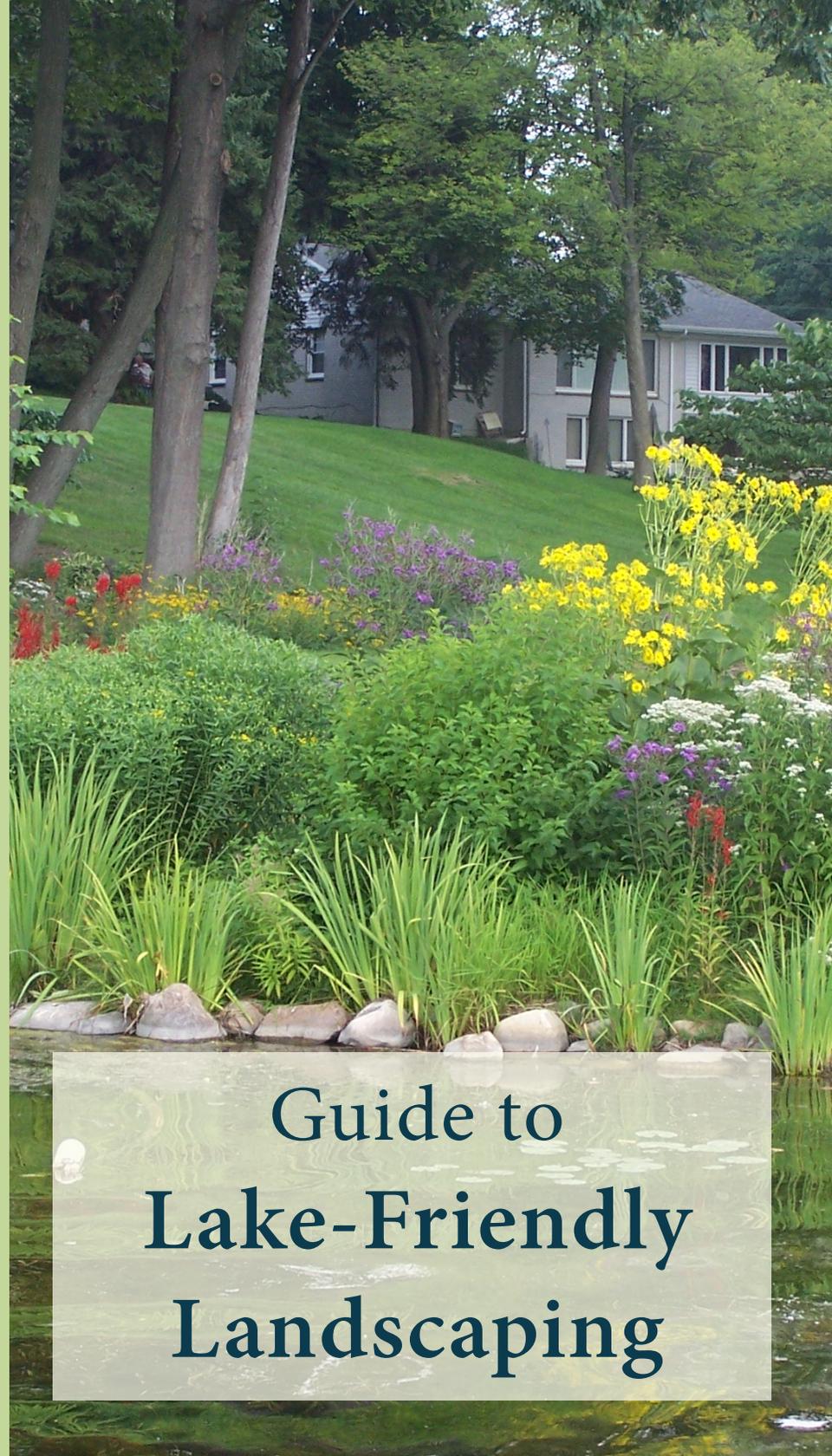


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Photo Credit: Lynn Airel

Conesus Lake Watershed



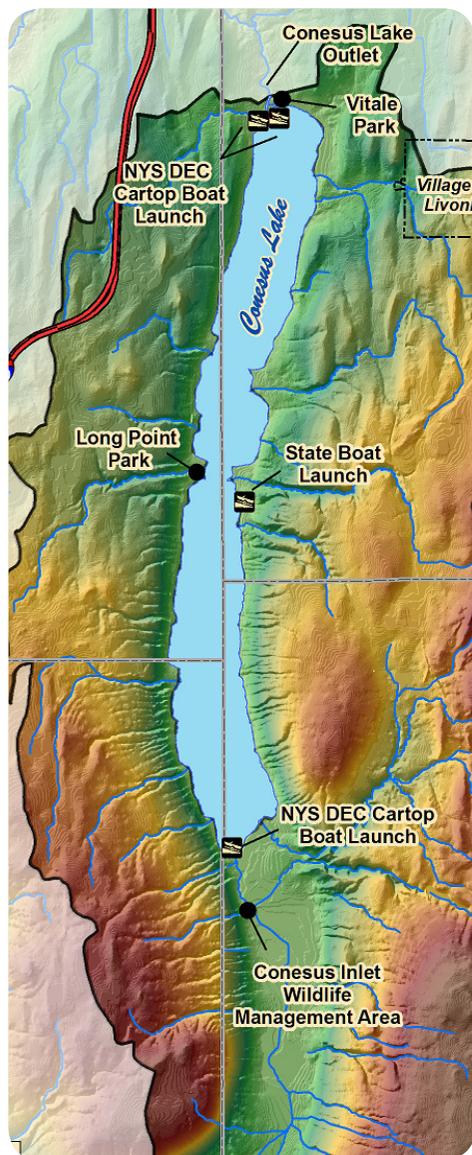
Guide to Lake-Friendly Landscaping



Water Quality and Conesus Lake

The Conesus Lake Watershed encompasses 70 square miles and includes all or part of seven municipalities within Livingston

County. There are hundreds of year-round homes along the shores of Conesus Lake and it is a popular destination spot for outdoor recreation and tourism. As land is cleared for residential and commercial development, stormwater runoff, erosion, and water quality issues increase.



Activity on the land around Conesus Lake directly affects our natural resources. We can work together to support the lands and water that we appreciate and rely upon.

This guide is a resource for lakeshore landowners and landowners in the watershed to learn about landscaping practices that will help protect water quality, limit erosion, conserve wildlife habitat, and preserve the beauty and quality of life in and around Conesus Lake.

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A healthy lawn with robust landscaping adds beauty and value to properties around Conesus Lake. Traditional lawn and garden care can compromise the health of our waters. There are practical and effective alternatives.

Beautiful Lawn, Healthy Lake

1. Reduce lawn size. Add native plantings and buffers.
2. Mow less often. A healthy lawn is 2^{1/2} to 4 inches high.
3. Go native - select native plants for a beautiful and low maintenance solution to lawn care.
4. Test the soil - find out what your soils really need and might NOT need. Contact Cornell Cooperative Extension for assistance (<http://ccelivingstoncounty.org/>).
5. Skip the fertilizer. Try natural composting first.
6. If you must fertilize, go phosphorus free. NYS law bans the use of phosphorus for lawn care under most conditions. Learn more at http://www.lawntolake.org/PDFs/NY_lawresphos.pdf.
7. Keep grass and leaves out of drainages and streams by bagging, composting, or leaving them as natural fertilizer.
8. Pick up pet waste - pet wastes contain both phosphorus and harmful bacteria.
9. Avoid use of herbicides, insecticides, pesticides, and fungicides except as a last resort. Learn about Integrated Pest Management (IPM) which will help you know when and how to apply chemicals.
10. If a landowner considers the use of an approved/regulated chemical, check the product label to see if the chemical has special regulations or prohibitions for use near water bodies by contacting NYSDEC.



A Last Resort

Fertilizers and other chemicals should not be a part of routine maintenance. They enter our waterways easily and many have been shown to cause death and disease to biological systems. Use only as a last resort.



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GREEN INFRASTRUCTURE:



Residents and landowners along Conesus Lake can have a direct effect on the beauty of the lakeshore and quality of the water by practicing simple green infrastructure landscaping techniques.

Green Infrastructure Reduces Runoff and Improves Water Quality

Green Infrastructure is any technique that reduces stormwater runoff and prevent erosion using natural materials such as rocks and plants (rain gardens, living shorelines) and other methods (rain barrels, permeable pavement) to slow or contain water from rain or snowmelt on site. Retained water can be directed into a rain garden, stored in a rain barrel for future use, or filtered into the ground. The result is reduced erosion and improved water quality.



Rain gardens and rain barrels contain runoff from rooftops for recycling or slow release.

Green Infrastructure techniques can be low cost and low maintenance. They add both beauty and function to your landscaping. Learn more at www.dec.ny.gov/lands/58930.html

Say Hello to Native Species

Native species are the cornerstone of naturoscaping. They are perfectly adapted for buffers, rain gardens, along living shorelines, and in traditional gardens too!

Cardinal flower	Goldenrods	Spicebush
Bee balm	Dogwoods	White turtlehead
Milkweeds	Viburnums	Blue flag iris
Bergamot	Switchgrass	Palm sedge
Asters	Sensitive fern	Blue-eyed grass



10 Great Reasons to Use Native Plants:

1. Easier to establish than cultivated varieties.
2. Robust root systems that help prevent erosion.
3. Provide habitat for songbirds and pollinators.
4. Prevent the spread of invasive species.
5. Adapted to local conditions and require less care.
6. Require less fertilizer, save money, and protect water quality.
7. Adapted to local pests and require little or no pesticide use.
8. Variety of species that grow in sun, shade, wet, or dry.
9. Beautiful, diverse, and seasonal blooms.
10. Create a sense of connectedness with the local ecology.

Resources: The Finger Lakes Native Plant Society (<https://flnps.org/>) and Native Plants for Gardening and Landscaping by the NYSDEC (https://www.dec.ny.gov/docs/lands_forests_pdf/factnatives.pdf).



wildonestwincities.org

Naturescaping is the concept of landscaping with native plants. This approach to landscaping holds many benefits to lakeshore landowners.

What is a Native Plant?

Native plant species include grasses, wildflowers, trees, and shrubs that grow naturally in our region. These plants and plant communities evolved to grow under local conditions. Native plants support native wildlife and the natural environment of the Conesus Lake Watershed.

What is an Invasive Plant?

Invasive plants are non-native species (introduced from another region or country) that cause or are likely to cause harm to the environment, the economy, or to human health. These plants out-compete native species for space, sunlight, and nutrients, often creating dense stands of a single species with little value to wildlife or people. Note: Not all non-native plants are invasive.

Say Goodbye to Invasive Species

Protect our natural environment by avoiding use of invasive species like those listed below.

- | | |
|-------------------|----------------------|
| Multiflora rose | Japanese barberry |
| Autumn olive | Yellow iris |
| Bush honeysuckles | Purple loosestrife |
| Norway maple | Burning bush |
| Common buckthorn | Oriental bittersweet |



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Landscaping with green infrastructure can reduce flow into the lake and prevent erosion from surface water, lake water, and ice. The first step is exploring your property and discovering opportunities for installing green infrastructure techniques. The steps below along with the rest of this guide will show you how.

Visit www.livingstoncounty.us/217/Conesus-Lake for more information and additional resources.

Know and Map Your Space

The first step is site assessment. Complete the steps below and then explore the techniques introduced in the rest of this guide.

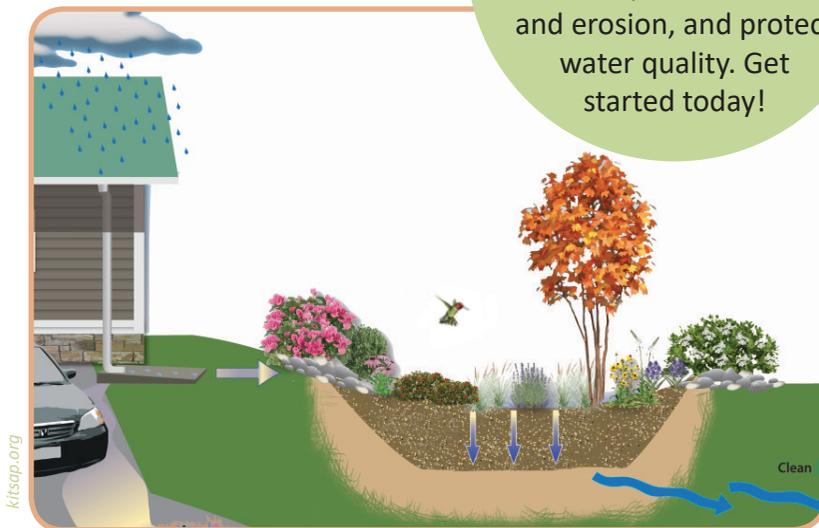
- Draw your property lines and a layout of buildings, paved driveways, sidewalks, parking areas, lawn, decks, and natural areas (gardens, shrubs, trees).
- Estimate or measure the square footage of each feature at your site and note measurements on the map.
- Locate downspouts and identify rooftop areas that drain to each.
- When it rains (or when you water your site with a hose), note where the water flows on site before it reaches the lake. Draw arrows. Note internal drainages, culverts, and ditches.
- Note soils where water drains and where water pools.

PLANT A RAIN GARDEN



A rain garden is a shallow depression that collects rainwater and snowmelt from downspouts, overflow from rain barrels, and surface flow from paved areas. Rain gardens feature deep-rooted plants that can tolerate fluctuating water levels, and occasional “wet feet.”

Creating a rain garden will add beauty to your landscaping, provide habitat for birds and butterflies, reduce flooding and erosion, and protect water quality. Get started today!



The Best Place for a Rain Garden

Identify potential locations for a rain garden. Look for relatively low, flat, open areas with good drainage near runoff from downspouts, paved areas or overflow from rain barrels. Avoid areas where water ponds for more than 24 hours after a rain event. Avoid areas under dense tree canopy. Keep rain gardens at least 10' away from the foundation of a building with a basement and do not place over septic systems. Consider location of underground utilities when selecting a location; contact Dig Safely NY prior to digging by calling 811.

Living Shorelines Have Multiple Benefits

Living shorelines are a natural, simple, cost-effective way to prevent erosion and improve water quality. They are also low maintenance, improve recreation, scenic, and real estate values, and provide habitat for desired fish and wildlife. Living shorelines can even deter unwanted wildlife species such as Canada geese in lawns and residential areas.



R. Ottens

Create Your Own Living Shoreline!

Lakefront landowners are encouraged to explore how to create a living shoreline using nonstructural elements such as native plants, rocks, and other natural materials. Get started today with the steps below.

1. Identify, map, and measure areas of erosion or vulnerability on your property.
2. Design using a combination of rocks, fiber logs and mats, native plants (wildflowers, trees, and shrubs).
3. Check regulatory review requirements and secure any necessary permits.
4. Monitor and adapt.

Alternative – If your particular erosion issue requires a greater degree of stabilization, a hybrid approach utilizing a combination of structural and natural elements can be employed. Contact an environmental professional or landscape design engineer for design consultation.



nativelandscapes.com

A living shoreline has been stabilized using gentle slopes and natural materials such as plants, sand, fiber logs, vegetated mats, and rocks. Living shorelines get stronger with time.

Prevent Shoreline Erosion with Natural Solutions

As wind, waves, and ice erode portions of the shoreline, water quality suffers, and landowners lose valuable land and scenic resources that cannot be replaced.

Traditional solutions to shoreline erosion such as retainment walls and bulkheads “harden” the shoreline.



J. Herbert



H. Shipman

Hardening the shoreline is often unnecessary and causes a host of additional problems. Consider natural solutions.

Natural Shorelines are Alive!

Natural design is based on the establishment of a variety of native grasses, flowers, shrubs, and trees which in turn provide habitat for insects, fish, birds, and mammals.

Design and Build Your Own Rain Garden

1. Estimate the square footage of drainage area that flows to the rain garden location and size the rain garden to be at least 10% of the area that drains into it.
2. Call Dig Safely NY before digging to mark underground utility lines. After utility marking, you are ready to dig/excavate.
3. Confirm appropriate drainage by digging one or more 18” deep holes, fill with water, and be sure the holes drain within 24 hours. If not, this is not a good location for a rain garden.
4. To support drainage, many rain gardens start with a base layer of gravel or sand. This can be topped with filter fabric or pea gravel, followed by a thick layer of a soil filter mix. A mix of 2/3 sandy loam topsoil and 1/3 compost of the garden is desirable. Finish with a layer of mulch or ground cover.
5. Convey water from a downspout into the rain garden using an above ground pipe or shallow rock-lined swale.
6. Mark edges of rain garden with stakes and string or other methods.
7. Dig up and loosen existing soil from 18”-32” deep depending on layers to be used. Use of the excavated soil will depend on soil quality and porousness. Depth of garden will depend on filtering capacity, wetness of soils, and soil amendments needed.
8. Make the basin as flat as possible so water will spread. If on a slope add a small berm at downhill slope to hold water.
9. Plant a mix of hardy, native species. Consider moisture levels of each area of the garden; the center of the depression is wettest. Check for sun/shade exposure too. See page 11 to learn more about native plants.
10. Show your friends and neighbors. They will want a rain garden too!

INSTALL A RAIN BARREL



A rain barrel is a time-tested way to capture and recycle rainwater for non-potable use around the house and in the garden.



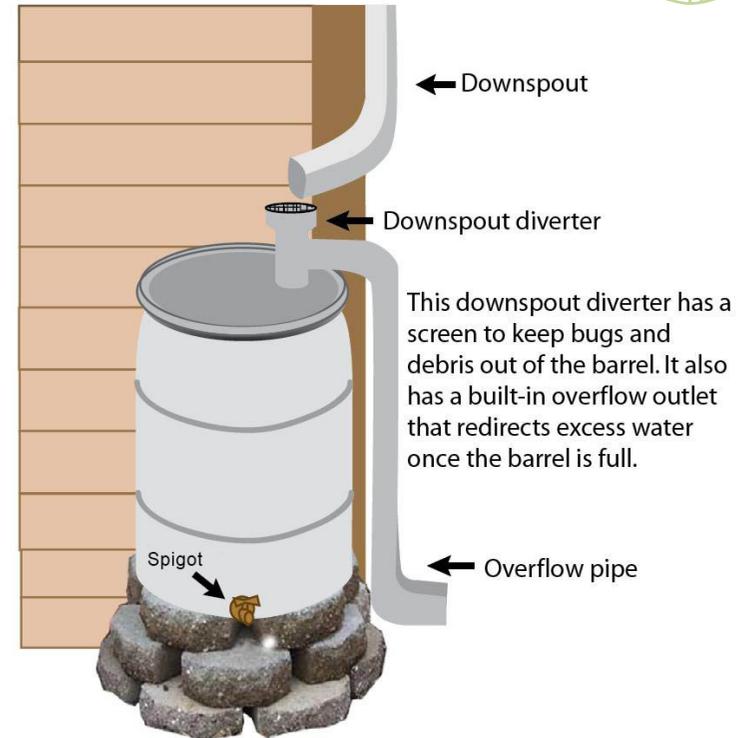
There are many types of pre-fabricated rain barrels to choose from and just as many simple, easy do-it-yourself designs.



How Much Water?

An inch of rain on an average size roof (800 sq ft) can generate 500 gallons of water. That is enough water to fill ten 50-gallon rain barrels! That is a lot of free water!

To learn more about capturing rainwater, read the *NYS Rainwater Harvesting Guide* at: <http://efc.syr.edu/wp-content/uploads/2015/03/NYSRainwaterHarvestingGuideR.pdf>



Install Your Own Rain Barrel

1. Install rain barrels at the base of one or more downspouts.
2. Choose locations that are convenient for re-use of water or where the overflow will irrigate a garden or rain garden.
3. Elevate the rain barrel about 12" to promote gravity flow and access to spigot.
4. Secure the rain barrel on a firm, level surface with no chance of tipping.
5. Use an enclosed or mesh covered inlet to prevent debris and mosquitoes from entering the barrel. Or install a rain barrel diverter with an easy-to-clean filter.
6. Enjoy the convenience of recycled rain water!