

Action 2: Well-Stewarded Land and Natural Resources

Action 2.1 Provide Watershed Education

Action 2.1.1 Citizen & Business Owner Education

Sponsor or host a program to educate citizens and business owners in your community about the value of watersheds and the importance of protecting and restoring them. (5 points)

The purpose of the presentation to the Millbrook Association was to educate the residents on watershed dynamics, specifically at it relates to the health of their ponds and West Brothers Brook. The presentation included information on processes that influence pond health, various types of non-point source pollution, and measures homeowners can take to protect and restore the ponds.

Screen-shot taken from the Milbrook Owners Association Newsletter, July 2018 on the presentation by Patricia Sesto, Director of Environmental Affairs.



Annual Meeting

Turnout was standing room only at this year's Annual Meeting on Monday, May 21st at the Milbrook Club. The pre-meeting social gathering was well received and many non-member residents had the opportunity to tour the newly renovated clubhouse. Directors elected to serve a new term starting in 2019 were: Andrew Wiener, Matt Arpano, Dan O'Sullivan, Kristina Schmitz, Mike Meyer and Jamie Schemmerhorn, who will serve as our new secretary. The proposed budget for the year of \$515,592 was passed. This represented a 3.8% increase and includes \$50,000 each for the building of funds toward future road repairs and lake projects.

Lake Health Presentation



Patricia Sesto, Director of Environmental Affairs for the Town of Greenwich gave a wide-ranging presentation on lake and waterway health prior to the official business of the Annual Meeting. She noted that many of the lakes in Greenwich were man made over the years, as is the case with Milbrook. This education informed her specific remarks on the Milbrook lakes and the issues facing our waters.

- Our lakes are located at the bottom of a large watershed and are thus impacted by everything that occurs along this watershed including catch basin drainage and runoff from yards.
- As this stormwater runs over the land it picks up fertilizers, bacteria, sediments, animal waste and other pollutants.
- She offered this noteworthy statistic: Our lakes average 4-6 feet in depth. A healthy lake should be 8 feet deep. Without action to address the sediment levels in our lakes, they will eventually fill in and become marsh.

Tips for a Healthier Pond

- To the extent you can, minimize the amount of pesticides and fertilizers spread within the pond's watershed.
- Make sure your lawn service tests your soil in several locations and customizes a plan to your landscape's needs. Plants will only absorb so much fertilizers and pesticides. The excess will wash away.
- Pick up after your dog.
- Have a manure management plan for farm animals.
- Look for opportunities to foster stormwater absorption into the ground. This will sustain groundwater levels and help your pond be full and cool during low flow periods.

(continued on back)

Tips continued

- If lawn goes down to the edge of your pond, rethink the landscaping and install a buffer that is both beautiful and protective. Buffers will filter out many pollutants, offsetting other landscape choices. When done right, they also keep Canada geese away.
- Eliminate direct discharges of stormwater from down spouts, yard and driveway drains, and even road catch basin drains.
- Plant trees which will provide shade to the pond. Not only will the tree help keep the water cool, its roots will help keep the shoreline stable. Locate the trees so views are not unduly blocked.



Contact Us

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Tips for Managing Your Pond

A homeowner's guide to making positive land management choices to benefit your pond.





Water Supply

Ponds get their water from overland flow, watercourses, and/or groundwater. Stormwater which flows across the landscape picks up pollutants such as fertilizer, pesticides, bacteria, and heat. Stormwater can be a significant source of pollution.

Every pond has a watershed. A watershed is an expanse of the surrounding landscape which drains to the pond, either as overland flow or groundwater.

Thus, land use decisions within the watershed will necessarily influence the health of your pond. How you manage your pond can ameliorate for harmful decisions beyond your property and beyond your control.

Polluted Stormwater

- Fertilizers wash into the pond and will likewise fertilize pond weeds. Phosphorous is particularly bad for freshwater.
- Pesticides affect more than the target bug or plant. Pesticides that flow into the pond will also harm the aquatic life. Pond critters tend to be more vulnerable than their land-based counterparts.
- Animal waste from dogs, horses, geese, etc. is rich in bacteria and nutrients. Excess nutrients equals pollution.



- Runoff from pavement also contains pollutants such as heavy metals, brake pad dust, and all the chemicals that can come from various auto leaks.
- Stormwater also carries sediment. The sediment settles in the still waters of ponds, reducing the pond's life span.
- Roof and pavement runoff is hot in summer months. Warm water holds less oxygen than cool water, and therefore does not support a diversity of aquatic life. Warm water is often synonymous with polluted water and direct discharges from roofs and pavement simply facilitate the pollution of your pond.



Buffers should not only protect your pond; they should enhance the enjoyment of your property

Plant for Success!

Help your pond achieve its natural beauty by minimizing the pollutants on the surrounding land and create a protective buffer to absorb what pollution cannot be avoided.

- Create a swath of natural vegetation at least 10-15 feet deep along your pond's border. Vary its width to enrich the visual appeal and allow for pond access.
- If there is not room for a 10-foot deep buffer, do what you can. Every bit of buffer helps.
- Plant trees to shade the pond.
- Plant shrubs and trees to minimize shoreline erosion.
- Incorporate plants you think are beautiful!
- Choose native plants. They are resilient and require less care.
- Pick up bacteria-rich pet waste from your yard.
- Manage your lawn so it needs the least amount of chemical additives.
- Remember, organic fertilizer is still fertilizer and can pollute your pond, too.
- Be sure lawn clippings are not going into the pond.
- Plant densely enough to create a visual barrier to discourage geese.

Who We Are

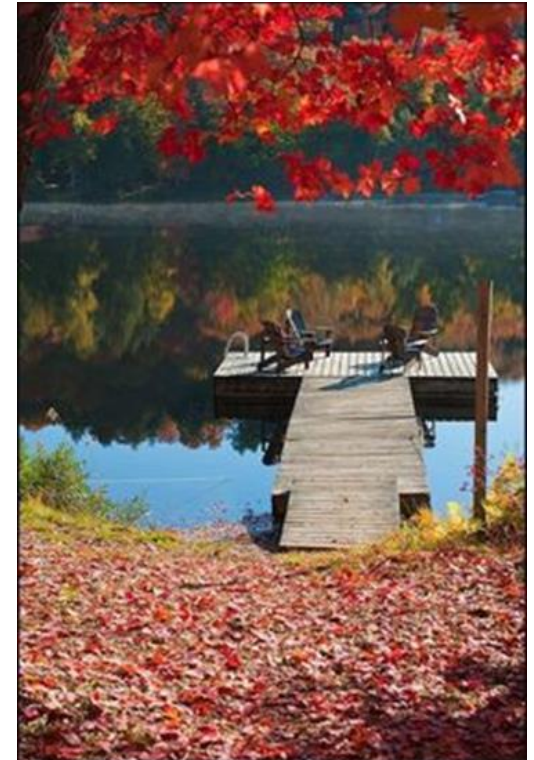
The Conservation Commission and the Inland Wetlands and Watercourses Agency are responsible for, among other things, protecting the valuable natural resources of Greenwich and helping our residents understand what they can do to responsibly steward their own properties.

Contact Us!

Inland Wetlands and Watercourses Agency
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Conservation Commission
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Pond Buffers

*The last line of defense
to protect your pond*



What Influences a Pond's Health?

The landscape surrounding your pond determines its health and visual appeal.

All pond owners strive to have a pond free from algae, floating weeds, sediment, and nuisance waterfowl. This seems simple enough, yet attaining this goal naturally is elusive for many, if not most ponds in suburban landscapes.

The primary problem is the land care choices made on the properties that drain to your pond. As stormwater runs over the land, it picks up fertilizers, pesticides, bacteria, sediment, and other pollutants. Once this polluted runoff reaches the pond, the balance of the pond is tipped and evidence of an unhealthy pond comes to light.

Are you making the right choices to ensure your pond is at its best?

The Watershed of a Pond

The watershed of a waterbody describes the area of land that drains to that waterbody. This can be a small area or a large area, consisting of many acres spread over many properties. For ponds in a suburban landscape like Greenwich, land uses include a mix of paved surfaces, rooftops, lawns, planting beds, wetlands, meadows, and forests.

To the benefit of your pond, natural forests, meadows, and wetlands work to retain pollutants that pass through them via stormwater flows. Conversely, our developed areas are the source of those pollutants and pond degradation.

Like forests, meadows, and wetlands, ponds act like a sink and retain the pollutants. Unlike the others, ponds cannot readily manage these pollutants, resulting in low oxygen, excessive algae and plant growth, and sedimentation. These problems are part of a negative process called eutrophication and will accelerate the death of your pond.

Lawn down to the pond's edge not only doesn't protect a pond, it is detrimental to it.



Effective buffers can be as simple as wild flowers and meadow grasses.

While it is impractical for you to control land care decisions beyond your own boundaries, there are practices you can utilize to give your pond its best chance at being healthy and chemical free.

Benefit of Pond Buffers

By creating a properly vegetated buffer, you are providing a last line of defense.

The suburban landscape, with its lawns and paved surfaces, is a constant threat to your pond's health. Buffers can help.

Here is what the mighty plants in a buffer can do for you.

- Filters sediment and pollutants out of stormwater runoff.
- Deep roots of meadow grasses, shrubs, and trees prevent pond banks from eroding and slumping.
- Shade from trees keeps the water cooler. Cooler water holds more oxygen and more oxygen means healthier water.
- Meadow grasses and shrubs at least 3 feet tall will strongly discourage Canada geese from using your pond and yard.