



GOOD:

A stormwater management pond with natural vegetation that reduces waterfowl and helps to filter nutrients from stormwater. Stormwater ponds are not intended for recreational activities such as fishing, swimming and feeding waterfowl.



BAD:

This stormwater management pond has excessive algae growth due to increased fertilizer use by nearby residents and grass clippings decomposing in the water. This pond also lacks a vegetative buffer.

Common Misconceptions

| Myth | Reality |
|---|--|
| Cattails and other vegetation make ponds unattractive and contribute to their deterioration | Vegetation stabilizes shorelines, reduces nutrient loads and provides wildlife habitat |
| Healthy ponds host large populations of ducks and geese | Ponds with high populations of waterfowl typically lack a vegetative buffer and have higher levels of nutrients |
| Dumping trash and used oil down storm drains will go to the water treatment plant | Storm drains empty into the nearest waterbody—your neighborhood stream or pond |
| Stormwater ponds are eyesores that require constant maintenance | Stormwater ponds are designed to clean stormwater and decrease costly downstream flooding and stream bank erosion |
| Stormwater ponds are breeding grounds for disease-carrying mosquitoes | Mosquitoes breed in pools of stagnant water like clogged roof gutter, flowerpots or bird baths. Correctly designed stormwater ponds are designed to minimize stagnant water. |

Resources

Monroe County Soil & Water Conservation District
www.monroecountyswcd.org
 585-753-7380

New York State Department of Environmental Conservation (DEC)
 (585) 224-2466

Canada Geese Issues:
www.dec.ny.gov/animals/7003.html

Aquatic Invasive Plants:
<https://www.dec.ny.gov/animals/50272.html>

NYS Nutrient Runoff Law:
<https://www.dec.ny.gov/chemical/67239.html>

Stocking Grass Carp:
<https://www.dec.ny.gov/outdoor/7973.html>

The Pond Guidebook

By Jim Oschterski, Bryan Swistock and Rebecca Schneider
 Available for purchase at Soil & Water Conservation District offices

The Water Education Collaborative (WEC)

Tips to improve water quality
<http://www.h2ohero.org>

Stormwater Coalition of Monroe County

<https://www2.monroecounty.gov/des-stormwater-coalition>



Living Next to Stormwater Management Ponds



What are Stormwater Management Ponds?

Stormwater ponds are bodies of water in developed areas that collect and store stormwater runoff. These ponds improve water quality and control water quantity by reducing pollution and preventing downstream flooding. Stormwater ponds can be attractive features depending on how they are managed.

Here is what YOU can do to help your neighborhood stormwater pond!

Solutions to Common Stormwater Pond Problems

| <u>Problem</u> | <u>Causes</u> | <u>Description</u> | <u>Preventative Steps & Corrective Measures</u> | |
|--|--|---|--|---|
| Nuisance Waterfowl | <ul style="list-style-type: none"> Mowing vegetation up to the edge Feeding waterfowl | Mowing to the edge of a pond creates an ideal habitat for geese because they can see potential danger. | <ul style="list-style-type: none"> Don't mow grass to the edge of the pond Allow natural vegetation (shrubs and grasses only) to grow 3-5 ft. from the edge of the pond to allow for a natural buffer Do not feed waterfowl | <ul style="list-style-type: none"> For Nuisance Canada Goose problems and permits, consult the NYS DEC website found on the back panel Install a physical barrier close to the water's edge such as wire fence or bird netting |
| Algae Blooms | <ul style="list-style-type: none"> Excessive nutrients such as nitrogen and phosphorous Direct sunlight Low water flow | <p>Fertilizers, grass clippings, and pet waste contain nutrients such as nitrogen and phosphorous that increase algae growth. Shallow water warmed by the sun can also promote algae growth.</p> <p>Harmful Algal Blooms (HABs) can occur in high nutrient ponds.</p> | <ul style="list-style-type: none"> Reduce or eliminate the use of fertilizer products on lawn Use fertilizer with zero phosphorus—Look for the “0” in the middle (reference NYS Nutrient Runoff Law link on back panel) Use of barley straw can inhibit algae growth Fertilize lawns from December 1—April 1 Use fountains or aerators to keep water moving | <ul style="list-style-type: none"> Prevent grass cuttings from entering pond Reduce or eliminate waterfowl and/or pet waste from entering water Stock grass carp in your pond to control submerged vegetation (see back panel for link to DEC website) |
| Erosion & Siltation | <ul style="list-style-type: none"> The action of water falling on or flowing over bare soil displaces sediment | Water flowing over bare soil transports soil directly into ponds causing erosion and water pollution. | <ul style="list-style-type: none"> Avoid destroying natural vegetation (shrubs & grasses) near the water's edge Seed and mulch any exposed soils Reduce areas with steep slopes around stormwater ponds | <ul style="list-style-type: none"> Plant vegetation and mulch to cover bare soil and help reduce soil erosion When vegetative measures are not adequate, place fieldstone or rip-rap near the waterline with municipal approval |
| Nuisance Rodents | <ul style="list-style-type: none"> Muskrats inhabit banks and disturb plant materials which may cause banks to erode or impair function of pond | <p>Muskrats and other rodents burrow into banks causing erosion and dam failures.</p> <p>Beavers can also cause flooding issues.</p> | <ul style="list-style-type: none"> Monitor pond for evidence of destructive wildlife | <ul style="list-style-type: none"> Place stone several feet above and below the waterline to prevent burrowing (requires Municipality approval) |
| Non-Native Invasive Aquatic Species | <ul style="list-style-type: none"> Non- native species can be introduced to the pond by humans and migrating waterfowl | Species not native to the ecosystem such as Eurasian Watermilfoil can cause environmental and economic harm by altering habitats for plants and animals. | <ul style="list-style-type: none"> Never dump water, plants, fish or animals in a body of water unless they originated from there Remove non-native species | <ul style="list-style-type: none"> Physically remove non-native species before they become established Plant native species See the NYS DEC website link on back panel for more info on invasive species |
| Human Pollution | <ul style="list-style-type: none"> Dumping contaminants such as oil, paint, gas and garbage on land or in storm drains can empty into ponds | Most storm drains discharge directly into ponds or nearby streams and carry chemicals, soap, litter etc. from the land directly to the water without being treated. | <ul style="list-style-type: none"> Don't dump anything into storm drains Wash vehicles on lawn or go to a car wash to prevent soap from entering waterways Properly dispose of chemicals and litter | <ul style="list-style-type: none"> Marking or stenciling storm drains reminds people not to dump into storm drains. Contact the Household Hazardous Waste Facility to dispose of chemicals: (585) 753-7600 |