

Examples of Stormwater Management Ponds

GOOD: This stormwater management pond with natural vegetation reduces waterfowl and helps to clean stormwater.



BAD: This stormwater management pond has problems with excessive algae due to grass clippings decomposing in the water and excessive fertilizer used by nearby residents.



Information Resources

- Local Soil and Water Conservation Districts**
Quebec County SWCD
<http://www.qcswcd.org/>
 (775) 583-6722
York County SWCD
 (537) 683-6358
 Gloucester County SWCD
 (537) 683-6358
- New York State Department of Environmental Conservation (NYS DEC)**
 (585) 226-5450
Canada Geese Issues:
www.dec.ny.gov/animals/7003.html
Aquatic Invasive Plants:
www.dec.ny.gov/animals/32861.html
- The Pond Guidebook**
 By Jim Oschterski, Bryan Swistock and Rebecca Schneider
 Produced by the Natural Resource, Agriculture, Engineering Service Cooperative Extension
 Available for purchase at Soil & Water Conservation District offices across New York State

Municipality Contact info:



For more information about the Ontario-Wayne Stormwater Coalition, visit
<http://www.ontariowaynestormwatercoalition.org/>

Serving the Towns of Farmington, Macedon, Ontario, Victor, Walworth; the Villages of Macedon and Victor; and the Highway Departments of Ontario and Wayne Counties

Living Next to Stormwater Management Ponds



What are Stormwater Management Ponds?

Stormwater management ponds are bodies of water in commercial and residential developments that collect and store stormwater runoff. These ponds improve water quality and control water quantity. Stormwater ponds reduce pollution and prevent downstream flooding. Stormwater ponds can be attractive or can become eyesores depending on how they are managed.

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

Common Misconceptions

Myth	Reality
Cattails and other vegetation make ponds unattractive and contribute to their deterioration.	Cattails and other vegetation stabilize shorelines, reduce nutrient loads and provide important wildlife habitat.
Healthy ponds host large populations of ducks and geese.	Ponds with high populations of waterfowl usually have high levels of pollution from their waste.
Dumping trash and used oil down storm drains is okay because it will go to the water treatment plant.	Most storm drains empty in to 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-causing mosquitoes.	Mosquitoes breed in pools of stagnant water. Properly designed stormwater ponds are designed to minimize stagnant water. Disease-causing mosquitoes are more commonly found in stagnant water sources such as: clogged roof gutters, wheelbarrows, old tires, flowerpots, and bird baths.

Solutions to Common Stormwater Pond Problems

For detailed information and instructions, see “*Information Resources*” on reverse side

<u>Problem</u>	<u>Cause(s)</u>	<u>Description</u>	<u>Preventative Steps</u>	<u>Corrective Measures</u>
<i>Nuisance Water-fowl</i>	Mowing vegetation up to the edge of the water creates desirable habitat for Canada Geese. Feeding of waterfowl.	Canada Geese prefer to be able to enter and exit water where there is limited vegetation for their predators to hide. Mowing to the edge of a pond creates ideal habitat for geese.	<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, this allows for a natural buffer • Avoid feeding waterfowl. • Install a physical barrier close to the water's edge such as wire fence or bird netting. 	<ul style="list-style-type: none"> • No single technique to discourage geese is always effective or acceptable. The persistent application of a combination of methods is usually necessary to yield the desired results. • For Nuisance Canada Goose problems and permits check out the NYS DEC website on back panel.
<i>Algae Blooms</i>	Excessive nutrients such as nitrogen and phosphorous and direct sunlight can cause rapid growth of algae.	Fertilizers, grass clippings, and pet waste contain nutrients such as nitrogen and phosphorous that increase algae growth. Shallow water warmed by the sun can lead to algae growth.	<ul style="list-style-type: none"> • Reduce or eliminate the use of fertilizer products on lawn. • Use of barley straw can reduce algae growth. • Prevent grass cuttings from entering pond. • Reduce or eliminate waterfowl and/or pet waste from entering water. 	<ul style="list-style-type: none"> • Reduce the amount of nutrients entering the pond i.e. stormwater runoff containing pesticides and fertilizers from lawn areas and farmland. • Use of a NYSDEC approved vegetable based dye such as Aquashadow® may reduce algae growth without negatively affecting wildlife.
<i>Erosion & Silta-tion</i>	The action of water falling on or running over bare soil displaces sediment.	Water flowing over bare soil transports soil directly into ponds and causes 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 storm-water 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.
<i>Nuisance Rodents</i>	Muskrats and other-rodents inhabit banks and disturb plant materials which may cause banks to erode or impair function of pond.	Muskrats and other rodents burrow into banks causing erosion and dam failures. Beavers can cause flooding issues.	<ul style="list-style-type: none"> • Monitor pond for evidence of destructive wildlife • Place stone several feet above and below the waterline to prevent burrowing—Must get municipal approval first 	<ul style="list-style-type: none"> • For nuisance beaver and muskrats, contact the NYS Dept. of Environmental Conservation office for permits and control methods.
<i>Non-Native Invasive Aquatic Species</i>	The introduction of non- native species to the pond by humans and migrating waterfowl.	Species not native to the ecosystem such as zebra mussels can cause environmental and economic harm by altering habitats for plants and animals and clogging water intake and discharge pipes.	<ul style="list-style-type: none"> • Never dump water, plants, fish or animals in to a body of water unless they came out of that body of water. 	<ul style="list-style-type: none"> • Physically remove non-native species before they become more well-established. • See the NYS DEC website for more info. • Plant native species.
<i>Human Pollution</i>	Dumping chemicals such as oil, paint, gas & litter on to land, or storm drains that empty into the pond.	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 not driveway or take to 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 put anything into storm drains. Contact your county Household Hazardous Waste Facility to dispose of chemicals.