Upper Saranac Lake

Homeowners Guide to a Healthy Lake

STORMWATER

Stormwater Runoff

Stormwater is water from rain or melting snow that does not soak into the ground. Instead, it runs over impervious surfaces, for example roofs, driveways, patios and sidewalks. As the water moves across these surfaces it picks up pollutants such as gas, oil, litter, fertilizers and pet waste. The stormwater then runs directly through shorefront properties and into Upper Saranac Lake. These pollutants can harm the fish populations and promote the growth of nuisance weeds.

There are several things you can do on your property to help reduce stormwater runoff into the Lake:

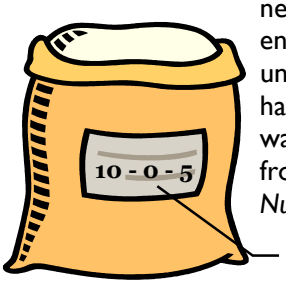
Reduce lawn areas in favor of trees, shrubs or natural ground cover to capture and hold rainwater.

Photo courtesy of Maine Dept. of Environmental Protection

1. Direct downspouts away from paved surfaces and away from directly entering the Lake.
2. Avoid using fertilizers and pesticides; at a minimum, switch to Phosphorus free fertilizer.
3. Pick up pet waste and dispose of it properly.
4. Establish a natural plant buffer area along the lakefront. Low growing shrubs or natural, unfertilized gardens are good.
5. Reduce impermeable ground surfaces by replacing them with natural walkways, gravel, or other permeable pavements.
6. Never wash anything near or directly in the Lake. Soaps and cleaning agents contribute to pollutants in the water. Avoid washing boats or cars where the detergent can get into the Lake.
7. When removing yard waste, do not rake leaves and debris into the Lake.

Zero Phosphorus Fertilizer

Phosphorus is an essential nutrient for plant growth, but too much in the Lake can cause excess algae to grow and blanket the water with a green goo. What's more, the majority of lawns already contain the necessary amount of Phosphorus for grass to grow. It's because of this that NYS enacted a law in 2012 that requires Phosphorus-free fertilizer be used on all lawns unless you are establishing a new lawn or a soil test shows that your lawn doesn't have enough Phosphorus. In addition, you may not apply fertilizer within 20 feet of a waterbody unless there is a 10 foot plant buffer. You may also not apply fertilizer from December 1 - April 1. For more information on the *Dishwater Detergent and Nutrient Runoff Law*, visit www.dec.ny.gov/chemical/67239.html.

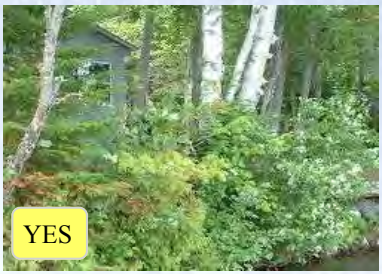


When shopping for fertilizer, look for the bag with the "zero" in the middle.

MANAGEMENT

Shoreline Buffers & Lakescaping

Removing vegetation from shorelines and river banks leaves an open path for sediment and pollutants to enter into Upper Saranac Lake. These pollutants have a negative impact on the plant and animal populations of the Lake system. Creating plant buffers along the shoreline will help keep soil in place and can absorb a substantial amount of Phosphorus and other nutrients before they enter the Lake. This will help keep our waters cleaner for swimming, boating, fishing, and drinking, and increase the natural beauty of the shorelines.



When planting a buffer, mimic nature by utilizing different levels of plants, decreasing the height as you move closer to the waters edge. This will be aesthetically pleasing, as well as create habitat for an array of wildlife.

Rain Gardens

Rain gardens are landscaped depressions that are designed to capture and filter stormwater runoff from impervious surfaces. Planting a rain garden in your yard will decrease the amount of pollution entering into the Lake. When planting your rain garden remember to keep it at least 10 feet from any foundations and direct any downspouts towards the garden. Naturally sloping or depressed areas in your yard are a good place to start. A typical homeowner rain garden is 100 - 300 sq. ft. large and 4 - 8 inches deep.

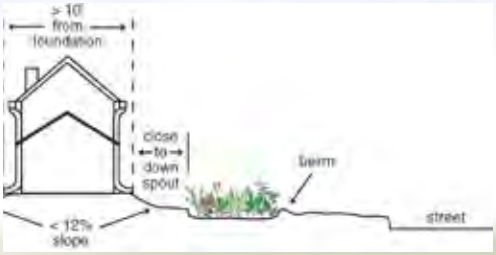
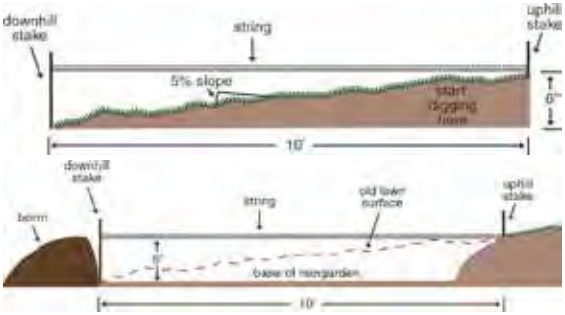


Figure from University of Wisconsin Extension and the Wisconsin Department of Natural Resources



Figures from University of Wisconsin Extension and the Wisconsin Department of Natural Resources

Native Plants

Landscaping around your house with native plants will not only keep your yard beautiful, but it will provide necessary habitat for local birds and butterflies. Hummingbirds enjoy Cardinal Flowers, Monarch Butterflies use native Milkweed for reproduction and the endangered Karner Blue Butterfly lays its eggs on Blue Lupine plants.

STOP AQUATIC HITCHHIKERS!™

Prevent the transport of nuisance species
Clean all recreational equipment.
www.ProtectYourWaters.net

CLEAN and remove all visible plants, animals, fish and mud from your boat, trailer, and other equipment and dispose of it in a suitable trash container. Clean any gear with hot water, heated above 140° F.

DRAIN water from bilge, live wells, ballast tanks and any other locations with water in them before leaving the launch. This includes scuba gear, waders and floats. Disinfect when possible.

DRY your boat, trailer, equipment and anything that is not washable for a least 5 days before re-using it in another waterbody.

Do not dump bait, fish, other animals or plants into the water!

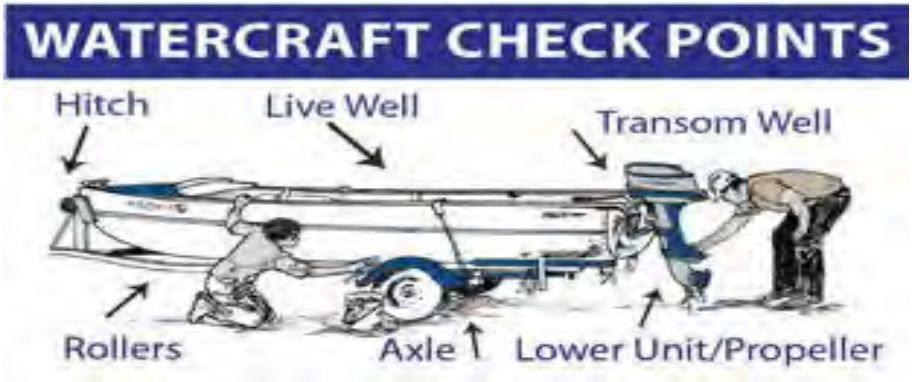


Figure provided by the Adirondack Lake Steward Program

INVASIVE SPECIES

Purple Loosestrife & Japanese Knotweed (Terrestrial)

Purple Loosestrife is much more than a pretty purple flower. It is an invasive plant that out-competes all other native plants that are essential to bird and wildlife habitat. Infestation of Purple Loosestrife has the potential to shift the ecological structure and functions of the wetlands, decreasing this vital ecosystems productivity surrounding Upper Saranac Lake.

Japanese Knotweed is a fast-growing, herbaceous perennial that can be found in many habitats, from forest edges to streambanks to roadsides. Knotweed has hollow stems with alternate, leathery leaves and white flowers that bloom in August. During the winter, the stems are a reddish color and easily visible. Knotweed is incredibly difficult to control, and spreads very aggressively.

Photo by A. Fox

Photo by P. Rischmiller

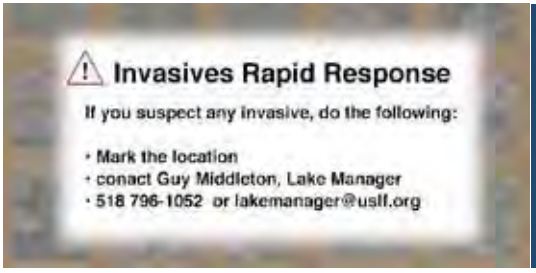
Photo by B. Blossey

Photo by M. Johnstone

Eurasian Watermilfoil & Variable Leaf Milfoil (Aquatic)

EWM is an invasive plant that was introduced to Upper Saranac Lake in or around 1996. With support from the Lake community and the Upper Saranac Lake Foundation's hand harvesting efforts, Milfoil has been dramatically reduced. Milfoil cannot be eradiated, therefore it needs to be continually managed. The presence of this invasive plant eliminates native plant species that many of the fish in the Lake depend on, as well as turn clear swimming beaches into mucky, weed-filled areas. Fragments of these plants can attached to boats and trailers, which is the main method of transportation between waterbodies. This plant has feathery leaves in whorls of four and the stems range in color from pale pink to red to reddish-brown. It is a submerged aquatic plant, and grows sideways once it reaches the surface of the water, which then forms dense beds along shoreline areas.

Variable Leaf Milfoil is another species of Invasive Milfoil that grows in water up to 6 feet deep, but can be found in deeper water. The submerged plant has feather-like leaves that are arranged in whorls of four to six around the stem. Each leaf has five to 14 pairs of leaflets. The plants flower in the spring and keep their flowers through the fall.



The Upper Saranac Lake Rapid Response Program is a conjunctive effort between the Upper Saranac Foundation and shore owners to identify and monitor invasive species and to report any suspected land use violations throughout the Upper Saranac Lake watershed.

SEPTIC MAINTENANCE

As a homeowner that is not part of a municipal sewer system your household waste is discharged into a septic system on your property. It is your responsibility to maintain your septic system, not only for the health of Upper Saranac Lake, but for the health of all who live and recreate here.

Regularly inspect your system

You should have your septic system inspected every 2 - 3 years to make sure that there are not any underlying problems you aren't aware of.

Pump-out your system

Pump out your septic system every 3 - 5 years for year-round homes and every 5 - 7 years for seasonal homes to maintain the integrity of the system and minimize health & water quality impacts.

If you are looking to replace your septic system, consider alternative systems such as a peat moss system

Failing Septic System

If you notice any of these signs of a failing septic system, it's time to call a professional….

1. Pooling water or muddy soil around the tank or drainfield area or leaching into your basement.
2. Bright green grass over your drainfield.
3. Rotten egg smell around the area of your drainfield.
4. Toilets or sinks back up when water is used.

Other maintenance measures you may not have thought of:

- Don't dispose of materials that may clog your septic system or cause harm to the system.
- Space out your water use by leaving time intervals between showers, loads of laundry, and washing dishes.
- Fix leaks and running toilets as soon as possible. All that extra water puts unneeded stress on your system.
- Using water efficiently will alleviate stress on your system and help it last longer.
- Only plant grass or plants with shallow roots over your drainfield. Plants with deep roots have the ability to cause damage to your system.
- Don't drive or park vehicles on your drainfield, as this could compact the soil and cause damage to your pipes.
- Keep all surface runoff flow directed away from your drainfield to avoid flooding your system.

WATER CONSERVATION

Water Efficient Landscaping

Gardens not only save water resources, but will save money that you would spend on high water bills. You will also have less maintenance of your yard and fewer yard trimmings to dispose of. Here are a couple of tips for water efficient landscaping.

- Smaller lawns surrounded by landscaped areas decreases watering needs and increases the retention of stormwater runoff from your roof or driveway.
- Using native plants decreases the need for watering and replacing dead plants.
- Aviod using rock mulches in sunny areas as they promote evaporation.
- Careful placement of trees can reduce heating and cooling costs.

Landscaping the slope to the waters edge uses stormwater runoff to naturally water plants.

Home Usage

If you looked closely at your water usage at home, there will be some areas where you could cut back. That would help save the Lake and the strain on your wallet.

Look for the Water Sense label when purchasing new products for your home. They are found on high-efficiency products that will help conserve water. For more info visit http://www.epa.gov/watersense/

- The average American uses 176 gallons of water per day.
- Leaky faucets can drip at the rate of one drip per second, which can waste more than 3,000 gallons of water each year.
- Washing a full load in the dishwasher uses less water than washing them all by hand.
- Filling up a bathtub uses almost 70 gallons of water, while taking a five minute shower uses around 15 gallons.
- Leaving the faucet running while brushing your teeth wastes 2 gallons of water a minute.
- A showerhead leaking 10 drips per minute wastes more than 500 gallons of water per year.

Did you know that Upper Saranac Lake is drinking water?

The NYS Department of Environmental Conservation has given Upper Saranac Lake a Waterbody Classification of Double A (AA), indicating that the water is suitable for use as a drinking water supply, also referred to as potable water. There are very few Double A classified lakes in NY, making the conservation of the water in Upper Saranac Lake even more important!

For more information....

Stormwater:

Franklin Co. Soil & Water Conservation District	http://www.fcswcd.org
NYS DEC	www.dec.ny.gov/chemical/8468.html

Rain Gardens:

Lake George Association	www.lakegeorgeassociation.org

Invasive Species:

Adirondack Park Invasive Plant Program	www.adkinvasives.com
Adirondack Watershed Institute	www.adkwatershed.org
Aquatic Invasive Management	www.milfoilremoval.com

Septic Maintenance:

NYS DOH	www.health.ny.gov/publications/3208/

Upper Saranac Foundation & Upper Saranac Lake Association

Please visit us at
www.uslf.org and www.uppersaranac.com

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INTERNATIONAL PAPER

Front and back cover of Upper Saranac Lake provided by Guy Middleton