

BEST PRACTICES FOR LAKE PROTECTION

Generally speaking, there are two very important nutrients that contribute to plant and algae growth: nitrogen and phosphorus. The best way to keep a lake healthy is to limit these nutrients from entering the water. Nitrogen is found in most fertilizers and improper septic runoff. Phosphorus is contained in many detergents.

The following are habits and practices that **minimize** the input of **nutrients** and sediment erosion and that will help preserve the health of Glen Lake. Please observe these ***Do's and Don't's***:

- Have your septic tank pumped as frequently as your septic service may advise—each system is unique and has different capacities. Maintain all components such as filter and pump as needed.
- Never bathe, shampoo, or wash pets or other objects in or near the lake, including boats, trailers, and vehicles. Water containing soap or phosphorus-containing detergent can run off into the lake, even beneath the surface of the soil.
- Use only low- or non-phosphate detergents in washing machines and dishwashers.
- Do not use fertilizer; cultivate shore fronts with natural vegetation as opposed to green, manicured lawns.
- Do not dump leaves or grass clippings or other vegetation into the lake. Do not burn brush or leaves near the shore, as nutrients remain behind to be washed into the lake water during the next rain.
- Keep land clearing to a minimum; revegetate bare areas and design curving paths or walkways to reduce erosion.
- Do not urinate or defecate in the lake and don't allow pets to do so. Animals that produce large quantities of manure should not be housed near the lake.
- Do not feed ducks or geese; let them eat the naturally occurring food available to them. Their feces contribute nutrients to the lake.

In bygone days, people were less informed about pollution and how various chemicals affected the purity and quality of lake water. Despite those beliefs, it is now generally understood that our lakes, streams, and water bodies need protection from human wastes of all kinds, and from excessive organic material and nutrients.

During the long days of summer, the plants and algae in a lake will produce great quantities of oxygen through photosynthesis. In the fall, when temperatures drop and the water cools, this growth starts to slow and plants begin to die off. When bacteria and fungi take over to “clean up” the dead vegetative growth, they consume oxygen in the process and begin to deplete the lake's oxygen supply. If there is too much plant material for them to handle, all of the oxygen could be used and the lake will die. The best way to prevent this is to limit the growth of plant and algae material by keeping excess nutrients out of the water. The lake will be able to clean itself without running out of oxygen because there will be far less vegetation to take care of.