
ENVIRONMENTAL Fact Sheet



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Septic Systems and Your Lake's Water Quality

How do septic systems work?

Septic systems act as the digestive tract for household organic waste and destroy disease-producing bacteria. The most commonly approved systems today consist of a septic tank connected to a leach field. The septic tank stores solid organic waste, and pipes waste water into the leach field where it is filtered and drained into the soil below.

How is water quality related to septic systems?

Certain nutrients build up in organic waste from your home and are dissolved in the water that ends up in the leach field. The nutrients that do not get filtered out eventually drain into the water table below the ground or drain into rivers and lakes that may be nearby. Nutrients - especially [phosphorus](#) - are vital to plant and algae growth. High levels of phosphorus, however, act as a fertilizer and create an environment where growth is unnaturally rapid. This deprives aquatic animals of vital dissolved oxygen and will speed up the life cycle of a lake through the build up of plant and algal matter.

What can you do to help water quality?

In order to alleviate the problem of phosphorus build up, each of us must act responsibly when addressing waste disposal. Be sure to contact your state and local agencies to determine whether your existing septic system, or the one you plan to build, meets all the regulations.

If your system is 20 years or older, chances are that it is outdated. If your present system is up to date, follow these simple guidelines to help maintain the natural flow of nutrients:

- Pump your septic tank when needed and at least every two to three years.
- Compost your kitchen garbage rather than using a garbage disposal. This keeps many nutrients from directly entering the water system.
- Report any sudden increase in aquatic algae or plant growth to the proper officials. This may be an indication of a phosphorus overload.
- Conserve water whenever possible. The more water in your septic system, the greater the possibility of nutrients leaching out through the system.

- Never flush toxic materials (such as paint, oil, or pesticides) down your drain. Not only do you risk the possibility of tainting your own drinking water, but you will also kill natural bacteria in your septic system that break down organic waste.
- Avoid flushing bulky materials down the drain. These will often clog your system and slow the decomposition process.
- Use phosphate-free or low phosphate dishwashing detergents.
- Run laundry or dishwashing cycles after a full load has been collected. This not only conserves water but will cut down on the amount of phosphates that drain into your septic system.