

ENVIRONMENTAL Fact Sheet



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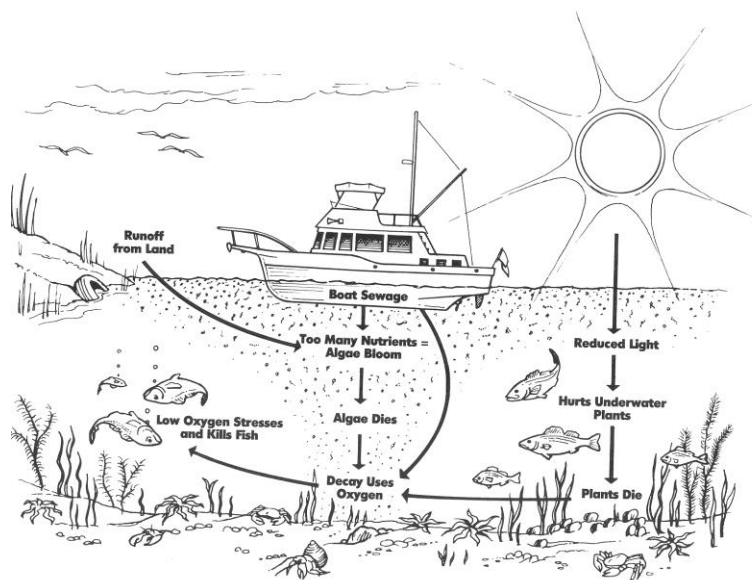
2019

Greywater: Keep It Out of Surface Waters

Greywater, like other pollutants, degrades the quality of water and limits or prevents its use. Greywater refers to laundry, dish, and bath/shower water; while toilet water is referred to as “black water.” Greywater has adverse effects on aquatic life and public health by negatively impacting drinking water supplies, recreational activities, and wildlife.

Typically, greywater exhibits a much faster rate of decomposition than black water. The faster rate means some of the **initial polluting effects of greywater can be significantly higher than that of black water**. In addition to decomposition, the concentration of pathogens, nutrients, and chemicals also contribute to degrading the quality of the surface water.

The nutrients found in greywater can increase plant growth, including cyanobacteria and algal growth. Nitrogen does not compose a significant portion of greywater, as it does with black water; however, phosphorus levels in greywater can exceed that of black water. Cleaning products contribute the majority of this phosphorus, which is why manufacturers have been required to limit the amount of phosphorus present in certain household cleaning products such as dish detergent.



Although black water generally contains more disease-causing organisms, many of these organisms can also be found in greywater and water contaminated with greywater. Some familiar organisms include coliform bacteria; fecal coliforms, including *E. coli*; *Salmonella* species; staphylococci species; viruses, including polioviruses and hepatitis virus A; and possibly *Giardia* cysts. The likelihood of these and other organisms being in greywater increases with the presence of sick individuals or children using diapers.

Chemicals, especially organic chemicals, cause a wide range of toxic effects on fish and aquatic life, including tumors and skin lesions and disruption of reproductive functions. Some of these chemicals accumulate in the environment, increasing their concentrations and their impacts. Additionally, chemicals associated with detergents, including the active cleaning agents for most detergents, surfactants, have recently been reported to disrupt normal hormonal functions. This growing concern has prompted studies into the health and ecological effects of these disruptors, however, many

questions have yet to be answered. For information about EPA's ongoing research visit their endocrine disruptor website at <https://www.epa.gov/endocrine-disruption>.

What can you do to help?

- Make sure that all of your plumbing is functioning properly and no wastewater of any kind is discharged into surface waters.
- Don't throw greywater overboard.
- Consider installing or converting a holding tank to collect all greywater if needed.
- If boating in inland lakes, ask a marine professional to tell you if your boat complies with the state regulations for inland waters.

Contact Information

For more information, please email CVA@des.nh.gov or call (603) 271-8803.

For mail please use: ATTN: Watershed, CVA Program
NH Dept. of Environmental Services
29 Hazen Drive, P.O. Box 95
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Please visit our website for more information on practices that help keep our water clean!

On our website you'll find information on:

- Where to pumpout holding tanks, which is the best option when using marine toilets, sinks, or showers, and the ONLY legal option for boaters on freshwater/inland lakes in New Hampshire.
- Federally designated No Discharge Areas in New England and what it means for boaters in New Hampshire and transient boaters.
- The Clean Vessel Act program, which is the federally funded program that provides for education, boat inspections, and funding for the construction and maintenance of pumpouts.
- Information on related programs like the shellfish and beach inspection program.

<http://des.nh.gov/organization/divisions/water/wmb/cva/index.htm>

