



Be Aware of Water Quality Challenges and Risks After Heavy Rainfall

The above average rainfall New Hampshire has experienced this month is causing our lakes and rivers to swell, which creates hazards for our residents and visitors. Naturally, once the rain stops and blue skies return, people will want to recreate in the water, but be aware that the rains bring certain risks that remain even on “blue sky days,” such as elevated levels of bacteria, including cyanobacteria, large amounts of debris, and swift currents.

Elevated Bacteria

Elevated levels of bacteria are likely in lakes and rivers where there has been high rainfall. Runoff from roads and parking lots can carry contaminants, such as nutrients and bacteria, into New Hampshire waters. You may also see oil slicks or large amounts of debris entering the waterbody from the excessive runoff, breached dams, and road or culvert washouts.

If you are in doubt, stay out of the water and wait for flood waters to recede and lake levels to come back down. Don't let children or animals play or swim in flooded areas. Contaminated water can result in skin rashes, sore throats, diarrhea or more serious problems. Being aware of the potential risks associated with flood waters and increased runoff can help you make informed decisions. NHDES' beach and lake monitoring programs are incapable of continuously testing every waterbody around the state to determine their suitability for recreation. For those locations we do monitor, the sampling is on a fixed schedule; conditions today may not be the same tomorrow.

If you are interested in sampling your private or public beach for *Escherichia coli* (E. coli) bacteria, use the [NHDES Accredited Laboratory Search Tool](#) to find a laboratory to assist you with collecting and testing your samples.

More Cyanobacteria Blooms

This summer has also brought a record number of cyanobacteria (“toxic algae”) blooms and they have occurred earlier in the season. These blooms can be stimulated by high temperatures and high levels of nutrients associated with runoff. Contact with cyanobacteria can be unhealthy for people and potentially deadly for pets.

Watch for blooms and murkiness of water. Cyanobacteria blooms can look like scum, mats, spilled paint or paint chips that are blue, green, white, yellow or brownish. If you notice anything resembling cyanobacteria, refrain from wading, swimming or drinking the water, keep pets out, and report it to NHDES through the [Cyanobacteria Bloom Report Form](#).

Always [check the NHDES website](#) for fecal bacteria and cyanobacteria beach and lake advisories before heading out, and [subscribe to weekly healthy swimming updates](#) issued by NHDES.

Drinking Water Wells

In some areas near lakes and rivers, groundwater wells, especially shallow “dug” wells, can become inundated by high water and ground saturation. When this happens, there is an increased risk of contamination of the drinking water well with bacteria. It is important to note that the water from a well may show no change in color or odor and still be unsafe to drink. If your well was flooded or if you have concerns about nearby flooding, you should get the water tested before consuming. [Find a lab for private well testing](#).

Septic Systems

High waters in lakes and rivers can flood septic systems on shoreland properties. This can cause sewage to back-up into the house or to discharge untreated to the surface water. In this situation, while the water levels are high, the homeowner can:

- Leave the structure vacant, if it is not a primary home.
- Use the facilities at another house, office, gym, restaurant, etc.
- Arrange for a port-a-potty.
- If the septic tank is above water and still intact, it can be used as a holding tank that will need to be pumped every 2-5 days depending on use.

If your system is flooded, wait 1-2 weeks for the leach field to dry out after the flood waters recede before using the system.

For questions, contact the local health officer first, because they have the capacity to get on-site to look at a particular property. Homeowners should hire a licensed septic system designer for technical questions and system evaluations. Questions about permitting for replacement systems should be directed to NHDES at (603) 271-3501; ask for the “Reviewer of the Day.” Questions about pump-outs and port-a-potties should be directed to Wade Pelham, Sludge and Septage Coordinator, at (603) 271-2818.

Repairing Damage

Many culverts and roads have been damaged by the storm. Any emergency work to repair this damage needs to be reported to NHDES if it is in a wetland area. More information is available at: [Obtaining Authorization for Emergency Wetlands Impacts](#).

Other Post-Flooding Considerations

In flooded homes, the inside air can become unhealthy and create an environment for mold to grow. Inhaling mold can cause adverse health effects, including allergic reactions. Mold also can damage materials in your home. [See EPA's Homeowners' and Renters' Guide to Mold Cleanup After Disasters](#) for information on how to clean up after a flood and how to prevent indoor air problems.

Also, any food, or fruits and vegetables from your home garden, that have come into direct contact with flood waters can make you sick. Any such produce should be washed prior to eating.

Bottom Line

Be aware of the associated risks; do not swim or boat if the conditions appear to be unsafe; check the [NHDES Healthy Swimming Mapper](#) to know before you go; and report potential cyanobacteria blooms to NHDES through the [cyanobacteria reporting form](#).

For more information, please contact Ted Diers, NHDES Water Division Assistant Director, at theodore.e.diers@des.nh.gov.

For additional information regarding potential health impacts from flooding, please contact the DHHS Public Information Office at pio@dhhs.nh.gov or (603) 271-9389 to be connected with a subject matter expert.