

1 National Life Drive, Davis 2  
Montpelier, VT 05620-3901

Tel: (802) 828-1294  
[www.anr.vermont.gov](http://www.anr.vermont.gov)



Julia S. Moore, P.E.  
Agency Secretary

Peter W. Walke  
Deputy Secretary

**State of Vermont  
Agency of Natural Resources**

**MEMORANDUM**

**To:** Representative Kitty Toll, Vermont Legislature  
**From:** Secretary Julie Moore, Vermont Agency of Natural Resources  
**Cc:** Commissioner Emily Boedecker, Dept of Environmental Conservation  
**Re:** Cyanobacteria blooms

A handwritten signature in blue ink, appearing to be "JSM", enclosed in a blue oval.

---

Cyanobacteria, also known as blue-green algae, are naturally found in fresh water throughout much of the U.S., including in Lake Champlain and other Vermont waters. Some types of cyanobacteria can release natural toxins or poisons (called cyanotoxins) into the water, especially when they die and break down.

Cyanobacteria grow well in water that has high amounts of nutrients like phosphorous and nitrogen. Cyanobacteria can multiply quickly to form surface scums and dense populations known as blooms, especially during the warm days of summer and early fall. More information about cyanobacteria is available on the Vermont Department of Health website at: <http://www.healthvermont.gov/health-environment/recreational-water/cyanobacteria-blue-green-algae>.

Since 2003, the State of Vermont has partnered with Lake Champlain Committee (LCC) to train citizen volunteers to monitor for cyanobacteria at lakeshore locations. The program helps citizens, along with health, environmental and recreational officials, assess the safety of our beaches. Volunteer monitors, along with staff from the Vermont Departments of Health (VDH) and Environmental Conservation (DEC), file weekly online reports that are displayed on the Cyanobacteria Tracker Map: <http://www.healthvermont.gov/tracking/cyanobacteria-tracker>.

The reports generally indicate one of three conditions at each monitoring location:

- Good conditions mean there have been no reports of blooms. Based on criteria established by the VDH, this area is considered generally safe.
- Low alert conditions mean small amounts of blue-green algae were observed during the visit. The area is open for recreation, but caution is advised in any location where dense accumulations or scums are apparent.
- High alert conditions mean that large amounts of blue-green algae – dense scums or highly colored waters – were observed during the visit. The water is not safe for recreational use in this area and anyone active on the water or along the shoreline of the pond should avoid contact with cyanobacteria blooms.

In 2019, a local resident received training and agreed to submit weekly reports on conditions in Joe's Pond in Danville; conditions are being observed at the Narrows. Although there have been occasional past reports of low alert conditions in Joe's Pond, this will be the first year where consistent, weekly reports are made. In the most recent report, from July 13, 2019, Joe's Pond in Danville was experiencing low alert conditions meaning small amounts of cyanobacteria were observed. Residents and visitors are encouraged to regularly check the Cyanobacteria Tracker Map to obtain the most current information on conditions and avoid contact with cyanobacteria.

Also, it has recently been reported that two dogs died several weeks ago after eating material or drinking water from a private pond with a suspected cyanobacteria bloom. Test results confirmed the presence of cyanobacteria toxin in pond water and stomach contents of the dogs, and DEC staff examined samples of plant material from around the pond and confirmed the presence of cyanobacteria in several locations. Out of respect for the owner's privacy, this information was not share publicly earlier; DEC was recently given permission to use this very sad event to raise awareness about the serious health issues that may occur after exposure to cyanobacteria. Dog owners should be vigilant about what their dogs may be consuming near lakes and ponds.

Cyanobacteria blooms can be challenging to predict and can disrupt summer recreation plans. In addition to providing information about current conditions at many major access areas, the State is actively engaged in the work needed to decrease the amount of nutrient pollution reaching Vermont's waters, which will in turn reduce the frequency and intensity of cyanobacteria blooms. In the most recent legislative session, the Administration and the Legislature worked together to commit unprecedented financial resources to clean water work. More information on this important, long-term work is available at: <https://dec.vermont.gov/watershed/cwi>.