



June 7, 2023

## **VDH Harmful Algal Bloom Swimming Advisory on the Blackwater Arm**

### **What is a HAB?**

A harmful algal bloom, also known as a HAB, is an overgrowth or bloom of a type of microorganism called cyanobacteria. This is confusing because often we hear these blooms called blue-green algae, and most algae, are beneficial to the lake ecosystem. When the concentration of cyanobacteria exceeds a certain level the Virginia Department of Health issues a Swimming Advisory in the area of the HAB.

### **What Does the Advisory Mean?**

High levels of potentially toxin producing cyanobacteria have been identified at multiple locations across the Blackwater arm of SML. VDH has issued a swimming advisory warning for the entire Blackwater portion of the lake, which means it is potentially harmful to swim and you should stay out of the water. Link to Advisory: <https://www.vdh.virginia.gov/content/uploads/sites/178/2023/06/Final-SML-Status-Report-6.6.23.pdf>

### **How Dangerous Is This?**

If the cyanobacteria blooms are found to be producing toxins, health effects could include symptoms such as upset stomach (nausea, vomiting, diarrhea), skin rash, tingling or burning and coughing. Children are particularly sensitive.

### **When will we get the toxin testing data?**

The toxin testing results were provided to SMLA on June 7<sup>th</sup>. None of the samples from June 1<sup>st</sup> contain toxins above the regulatory threshold. However, very minor amounts of toxins are present. This does not mean that toxin levels won't increase as the bloom ages. We still need to treat the bloom as harmful.

### **When will the Advisory End?**

The VDH process requires two additional sampling events, 10 days apart, that show the levels of cyanobacteria (and toxins if present) are below the threshold levels in both sampling events. This means that the earliest we could see the Advisory lifted may be somewhere around the last week of June.

### **What can I do in the Blackwater arm?**

You are safe to boat, canoe, kayak, fish or jet ski in the lake. However, you should shower if you do contact the water. Towed sports like tubing, water skiing and wake boarding/surfing are not advised.

### **What about pets?**

Because dogs are dogs, and basically drink a lot of lake water when they swim, they can be particularly sensitive to cyanobacteria and their toxins. The VDH should have alerted local veterinarians that this advisory is in place, so they know to be on the lookout for symptoms that could be related to exposure to cyanobacteria. It is best to keep dogs out of the lake during the advisory.

### **What if I swim? Will I get sick?**

Even if toxins remain at very low levels, people can still develop rashes from exposure to the elevated cell counts, through allergic reactions. Children are especially sensitive. Remember, toxin levels can increase without warning. Still avoid the water.



### **What if it spreads to other parts of the lake?**

The VDH has asked that any new areas that appear to be experiencing algal blooms be reported on their portal. If reports and samples indicate that the bloom has spread, VDH will expand the advisory to include other parts of the lake. Keep your eyes open for any streaky green or blue surface discoloration. If you see it report it. <https://www.vdh.virginia.gov/waterborne-hazards-control/harmful-algal-bloom-online-report-form/>

### **Can you eat fish caught in the Advisory Zone?**

According to the VDH, it is safe to eat fish caught in the Advisory Zone. Toxins accumulate in organs and skin; however, this bloom hasn't been around long enough for toxins to accumulate in fish tissue. Make sure you skin the fish and wash the fillets in fresh water before preparing.

### **I don't see any at my house, is it safe to swim?**

VDH has issued the advisory for the entire Blackwater arm of the lake, but it is very likely you will not see it in your cove or dock. This does not mean that cyanobacteria are not there. They migrate throughout the day and in certain lights are very difficult to see. Plus, they can be very visible at one point during the day and frankly disappear very quickly as they sink into the water column.

### **What are you (SMLA) doing about it?**

SMLA has over 50 volunteers out on the lake every other week, collecting our normal summertime water quality samples. Our volunteers are trained to observe and report any evidence of algal blooms they see. Our teams collect samples for algae which are analyzed for species present, and if elevated cyanobacteria species are noted in the samples, we will report to VDH and DEQ. We are also being proactive to remain in the chain of communication with VDH and DEQ as this plays out. SMLA is informing the community and membership of what we know as soon as we know it.

### **What can be done to clean it up?**

The HAB has to basically die off. This can take days to weeks. It is highly dependent on weather, storm events, and additional runoff into the lake.

### **How can it be prevented?**

The best way to guard against another HAB is to reduce the amount of nutrients coming into the lake. The nutrient most favored by cyanobacteria is phosphorus. Phosphorus is found in almost all organic material, such as vegetation and waste products. But it is also a very common element of soil. Residents can do their part by planting buffer gardens to intercept rainwater coming off lawns, by making sure septic systems are properly maintained and pumped regularly, by not using a phosphorus containing fertilizer. Consider whether your lawn needs to be so green, because when you feed your lawn, you also are feeding the lake. Keep debris like leaves and grass clippings out of the lake. Discourage geese from entering your lake front. Clean up after pets, and throw collected waste into the trash, not into the woods. Anything on the ground above the lake can wash right into the lake.