



SML HAB Timeline - Updated as of 7/7/23

- 5/22/23: the Virginia Department of Health (VDH) responded to citizen reports of suspected Harmful Algal Blooms (HAB). Following a set process, VDH notifies the DEQ and Ferrum College of the reports. SMLA is notified by Ferrum. DEQ is mobilized to collect samples, resources allowing. Ferrum coordinates taxa identification, if possible, for local information.
- 5/23/23: DEQ staff collected a sample for the report from Standiford Creek cove near channel marker B25 on the Blackwater arm of SML but did not collect a sample for the report near Virginia Key cove (channel marker B21). The one sample showed low levels of cyanobacteria and no toxins.
- 5/30/23-5/31/23: conditions at both reported locations worsened following Memorial Day weekend rain event, plus other reports were filed.
- 6/1/23: DEQ staff sampled report sites at Virginia Key, Kemp Ford Road, Anthony Ford Boat Ramp. All locations are within Blackwater arm of SML.
- 6/6/23: VDH issued a HAB Swimming Advisory for the entire arm of the Blackwater River.
- 6/6/23: Results of the testing were provided for the 3 sampled areas, but only for cell counts of cyanobacteria, no toxicity testing results are available as the lab at ODU is experiencing equipment issues. Cell counts greater than 100,000 cells/ml trigger the advisory, regardless of toxicity testing. Cell counts were found to be very high at Anthony Ford Boat ramp (>1.4 million/ml), at Virginia Key (152,760 cells/ml), and at Kemp Ford Road (110,190 cells/ml).
- 6/7/23: at least 8 reports have now been filed.
- 6/8/23: Toxicity data reported for 3 samples; levels are low but present. Anthony Ford 1.0 ppb, Virginia Key 0.27 ppb, Kemp Ford Road 0.30 ppb (advisory level 8 ppb).
- 6/12/23 & 6/13/23: multiple new citizen reports filed with VDH, many containing photos which appear similar to initial sites. New reports include a few within the Advisory Area and numerous reports outside of the Advisory Area.
- 6/13/23: DEQ initiated the first round of follow up sampling at six established water quality monitoring sites, all within main channel of Blackwater or Gills Creek. Three initial report sites were also revisited. No new sites inside or outside of the Advisory Area were sampled. Results expected week of 6/19 for cell counts and toxicity.
- 6/16/23: water samples collected by 2 residents who filed new VDH reports, outside of Advisory Area. Samples delivered to Ferrum for taxa identification.



- 6/17/23: Ferrum confirmed that the 2 samples provided for taxa identification contain cyanobacteria species, outside of Advisory Area (Betty's and Becky's Creek area of Roanoke arm).
- 6/17/23: a VDH report was filed by a swimmer who had become ill and ended up in the ER, after swimming through what they thought was pollen on Saturday May 27th, in Bull Run (Blackwater arm). VDH followed up with the person for an interview. Due to date of reported illness, and passage of time, no confirmation of bloom conditions in Bull Run is possible, according to VDH.
- 6/17/23: more than 33 HAB reports filed to date with VDH. Many reports are within the Advisory Area, many are outside. Some include photos, some do not.
- 6/20/23: Although it was anticipated DEQ would return for follow up sampling, weather conditions were such that DEQ could not sample. However, DEQ personnel did visit some locations in the Roanoke arm where citizen reports have been filed. No visual evidence was noted that triggered DEQ personnel to sample, however the significant rain event may have masked areas of bloom. Plan is to return Monday 6/26 for follow up sampling. Ferrum collected bimonthly plankton samples and continues to find elevated levels of cyanobacteria in the Blackwater River.
- 6/22/23: Results of the 6/13/23 sampling event received. Four samples collected in the lower Blackwater are found to contain acceptable levels of cyanobacteria and toxins. However, four samples collected in the Upper Blackwater, upstream of Gills Creek contain unsafe levels of cyanobacteria but no measurable toxins. Two of these sites are the original Virginia Key and Kemp Ford Rd, (Kilowatt Cove) locations. The other two are new sample locations based on the established water quality monitoring sites DEQ measures monthly. One is at The Cliffs, and one is at Channel Marker B48.
- Additional health reports have been filed on the VDH HAB portal. No further information has been provided.
- 6/26/23: DEQ personnel again visited areas in the Roanoke arm that had been reported by citizens. No visual evidence of bloom activity was noted, and no samples were collected in the Roanoke arm. DEQ only collected samples at 4 sites in the lower Blackwater arm: at the Anthony Ford Boat Ramp, Christmas Tree Island, Bull Run Channel and Three Point Isle Drive. These 4 sites had been found to have acceptable levels of cyanobacteria and toxins during the 6/13/23 sampling event.
- 7/6/23: One sample was collected by DEQ in the Roanoke arm where water quality measurements indicated elevated productivity. The one Roanoke sample was collected in proximity to Channel Markers R 36 + R 35, closer to the Franklin County shore. Results are pending.
- 7/6/23: SMLA hosts a HAB Town Hall at Trinity Ecumenical Parrish in Moneta for the community.



- 7/7/23: The 4 lower Blackwater samples that were collected on 6/26/23 were found to contain acceptable levels of cyanobacteria and toxins, and because this marks the second of two rounds of testing, at least 10 days apart, the VDH was able to modify the Swimming Advisory on 7/7/23 up to Gills Creek, or Channel Marker B16. No samples have been collected in the Upper Blackwater, above Gills Creek since 6/13/23. It is anticipated that DEQ will sample the Upper Blackwater during the week of 7/10/23 as well as complete their monthly sampling across the lake. If time and resources allow, sites that had been reported in the Roanoke arm will be revisited.