

## Lake James Watershed Water Quality Update

### Lake James Environmental Association

March 9, 2025

Lake James Environmental Association ([LJEA](#)) has received a lot of questions recently about the water quality in Lake James and in streams across the entire watershed. Our Community Science Committee has provided the following summary of what we know and don't know.

LJEA had to suspend our watershed-wide water quality testing in October and November due to safety concerns and because the laboratory that we use in Black Mountain was damaged during Helene. We resumed our stream chemical monitoring program in December. Lake James monitoring will restart in April. Here is a link to LJEA's chemical monitoring data: [LJEA Water Quality Data](#)

- Our results do not show dramatic, continuing elevated nutrient concentrations, or other chemical changes in our streams. We have observed some increases of Total Phosphorus, Turbidity, and Total Suspended Solids in several locations since Helene. Phosphorus is often attached to suspended soil particles, particularly in agricultural or fertilized areas. Thus, higher levels of turbidity due to suspended sediment often means higher Total Phosphorus levels. We expect these levels to drop back down toward their long-term values very soon.
- The brown color of Lake James (its turbidity) is diminishing, due to lower water levels and less erosion. Duke Energy now has two of the three turbine units working and Lake levels are approaching the usual target levels. We believe we will see continued improved water clarity in the coming weeks. We will note that the very west end of the Lake is very shallow and may see reduced water clarity for a longer period. Reducing boat traffic and slowing down the boats in that area can help with this problem.
- We tested a limited number of stream sites and sites on Lake James shortly after Helene. We did not find e.Coli levels that were high enough to pose health/human risk for swimming and incidental contact. LJEA will begin extensive, watershed-wide bacteria testing in April and will assist with Catawba Riverkeeper's annual Swim Guide program beginning in May and continuing through August. Lake users should avoid swimming in areas that are very turbid.
- We have not tested for "exotic" pollutants/chemicals such as fuel and battery acid, pesticides and herbicides. Compared to other areas, we are fortunate to have a relatively pristine watershed. We have no evidence of high levels of "exotics" that would be harmful to people who swim or have incidental contact with water in our streams and lakes.

- We plan to do some spot testing for pesticides and herbicides before Memorial Day. We are discussing the potential contaminants of concern with research groups at Appalachian State University and Research Triangle Institute. We will provide an update on the product of those discussions at a later date. Again, at this time, we have no reason to believe that we have “exotic” chemical concentrations at levels harmful to humans swimming or wading in our streams or lakes.
- Catawba Riverkeeper has a Pollution Reporter that you can use on your smartphone or computer to report possible pollution, trash, and large debris in and along streams and lakes. They are providing LJEAs with the information collected within the Lake James watershed. We encourage you to download the application and use it. Everyone can use it to report debris along our streams. On lakes, fishermen may use the form to report large submerged debris visible on their sonar units. You can access the form here: [Catawba Riverkeeper Pollution Reporter](#)
- LJEAs are working with Lake James State Park to expand our water quality testing near their swim areas. We expect to do initial water and beach sand testing in April and continue through August or later.
- LJEAs have not performed recent fish studies.
  - Local fishermen and NC Wildlife Commission have reported fish catches are not much different from other years.
  - Mercury content in fish caught in Lake James and other NC lakes are at levels such that fish consumption should be limited. See: <https://epi.dph.ncdhhs.gov/oeefish/advisories.html>
- LJEAs will begin detailed physical and biological assessments of 30+ sites in the Lake James watershed beginning in April. The biological (macroinvertebrate) analyses are a good way of determining general, long-term water quality. Combined with our extended bacterial testing, the assessments will give us a better understanding of Helene’s impacts and guide our recovery efforts.