

REPORT TO NORTH CAROLINA'S ENVIRONMENTAL REVIEW COMMISSION



JORDAN LAKE NUTRIENT MONITORING

March 1, 2026

Division of Water Resources

*NORTH CAROLINA DEPARTMENT OF
ENVIRONMENTAL QUALITY*

Pursuant to S.L. 2009-216, Sec. 3(c)

JORDAN LAKE WATER QUALITY MONITORING REPORT

March 1, 2026

SESSION LAW 2009-216 SECTION 3.(c) requires the Department of Environmental Quality to submit water quality monitoring reports for Jordan Lake every three years until the lake is no longer impaired by nutrient pollution. SL 2016-94 and SL2018-5 established requirements for readoption of nutrient rules for Jordan Lake. Following receipt of the NC Policy Collaboratory report in December 2019, the readoption of the Jordan Lake Rules was initiated.

Jordan Lake consists of three arms: Haw River, Upper New Hope Creek, and Lower New Hope Creek, with 22 monitoring stations throughout the lake. The most recent U.S. Environmental Protection Agency (EPA) approved report available to determine water quality impairment is the 2022 NC Water Quality Assessment, which is based on data from 2016-2020.

The key water quality parameter for determining nutrient pollution is chlorophyll a. The chlorophyll a standard is 40 micrograms per liter ($\mu\text{g/l}$) with a 10% exceedance allowance using a 90% confidence interval. This standard and the methodology to determine impairment has been approved by the EPA. Of the 9 monitoring stations established in the [2016 Study Plan](#), none are currently meeting the standard for chlorophyll a based on the draft 2024 NC Water Quality Assessment (based on data from 2018-2022). Therefore, the associated portions of the lake were determined to be impaired. In addition to the continued chlorophyll a impairment, portions of the reservoir are impaired for other parameters related to nutrient pollution, including turbidity and pH. Some stations did show improvement with decreased pH levels relative to the previous report.

The monitoring station results are provided in the table below along with a map of the stations.

If you have any questions, please contact Rich.Gannon@deq.nc.gov.

Table 1: Jordan Lake Chlorophyll a Sampling (2018-2022)

Monitoring Station	Number of Samples	Number of Samples Exceeding 40 ug/L	Frequency of Sample Exceedance (%)
CPF055C	50	17	34%
CPF055D	50	7	14%
CPF055E	50	6	12%
B2450000	40	9	23%
CPF086C	49	37	76%
CPF081A1C	50	40	80%
CPF086F	49	34	69%
CPF087B3	50	23	46%
CPF087D	50	15	30%
CPF0880A	51	12	24%

