

**GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2013**

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**SENATE BILL 515
Agriculture/Environment/Natural Resources Committee Substitute Adopted 5/14/13**

Short Title: Jordan Lake Water Quality Act.

(Public)

Sponsors:

Referred to:

March 28, 2013

A BILL TO BE ENTITLED
AN ACT TO REVISE THE NUTRIENT MANAGEMENT STANDARDS APPLICABLE TO
THE JORDAN LAKE WATERSHED.

Whereas, the United States Congress authorized the United States Army Corps of Engineers (USACE) to create what is now the B. Everett Jordan Lake in 1963; and

Whereas, the USACE submitted a Final Environmental Impact Statement (EIS) in November 1971 that stated, "Of primary concern is the eutrophic tendency of the lake. Eutrophication is a term used to describe the natural change in productivity of a lake during aging. It is usually a long-term phenomenon, which may be measured in geologic time Studies have shown that, assuming that all other elements necessary are available, the amounts of nitrogen and phosphorus presently found in the influent are adequate to produce algae blooms in the lake."; and

Whereas, the USACE stated in the EIS, "Several studies have indicated that the major water quality problem will be associated with anticipated nuisance algal growths resulting from excess nutrients from upstream sources."; and

Whereas, the United States Environmental Protection Agency (EPA) commented in the EIS, "Nutrient concentration in both the Haw River and New Hope River are high, and nuisance algal growth detrimental to water supply and recreation are a virtual certainty Impoundment should not take place until there is a strong technical basis for the prediction that nuisance algal growths will not occur."; and

Whereas, the USACE, in responding to the EPA's comments in the EIS, stated, "... it is doubtful whether a strong technical basis exists for the prediction that nuisance algal growths will not occur on most existing reservoirs"; and

Whereas, the United States Department of the Interior Bureau of Sport Fisheries and Wildlife commented in the EIS that, "High nutrient concentrations will intensify and extend water quality problems into the upper surface layers. Therefore, impoundment will create a pollution problem to the detriment of the ecosystem."; and

Whereas, the EIS contained a summary of complaints from pending litigation that included, "Even in the absence of nutrients from wastes, the shallowness ... would ensure abnormally heavy algae growths that could not be controlled Probably the most serious deficiency of defendants' environmental statement is its de-emphasis on the certainty that the water ... will be of exceptionally bad quality."; and

Whereas, Colonel Homer Johnstone, the USACE Wilmington District Engineer signed a Notice of Decision to Impound on September 14, 1976, to create the B. Everett Jordan Lake permanent conservation pool; and



1 Whereas, in the USACE Notice of Decision to Impound, Colonel Johnstone
2 considered work of the National Eutrophication Survey by the United States Environmental
3 Protection Agency and stated, "That there is common agreement that B. Everett Jordan Lake
4 will be eutrophic. Over 70 percent of the lakes in North Carolina are eutrophic." and that "Algal
5 blooms are common in eutrophic lakes."; and

6 Whereas, in the USACE Notice of Decision to Impound, Colonel Johnstone stated,
7 "I find that most of the lake will be acceptable for boating and primary (water) contact
8 recreation. However, above SR 1008 crossing, I anticipate heavy growth of algae and aquatic
9 plants such as water lilies in response to the high nutrient inflows"; and

10 Whereas, in the USACE Notice of Decision to Impound, Colonel Johnstone stated
11 that, "The trophic state of the lake can affect public water supplies if algal growths become
12 quite large and taste and odor problems develop. This problem may develop on occasion if
13 water is withdrawn above the natural topographical constriction near the confluence of the two
14 rivers up to SR 1008. There are apt to be increased treatment costs These effects are not
15 unusual, however, and can be minimized by careful selection of withdrawal location."; and

16 Whereas, the USACE Notice of Decision to Impound also addressed bacteriological
17 quality in the proposed lake and Colonel Johnstone stated, "The bacteriological quality
18 standards for raw water supply are less stringent than those for recreational activities such as
19 swimming and water skiing.", and "Problem areas are the inflows of both the Haw and New
20 Hope Rivers which sometimes contain excessive bacteriological levels.", and "During the
21 summer months, bacterial standards may be exceeded on the first 1.5 miles of the upper Haw
22 arm of the lake, Robeson Creek Cove and the area above SR 1008 on the New Hope River.";
23 and

24 Whereas, the USACE Notice of Decision to Impound addressed heavy metal
25 concentrations in the proposed lake and Colonel Johnstone stated, "I know of no reliable
26 technique to predict accurately the effects of dilution on the concentrations of heavy metals, but
27 I am confident that dilution will ameliorate these concentrations at their point of withdrawal or
28 discharge from the lake."; and

29 Whereas, in the USACE Notice of Decision to Impound, Colonel Johnstone stated,
30 "Further, the predicted concentrations of heavy metals in the water and fish do not pose a threat
31 to human life or the environment and do not affect the purposes of the project as authorized.
32 However, I will institute a program of sampling and testing to be continued after
33 impoundment."; and

34 Whereas, in the USACE Notice of Decision to Impound, Colonel Johnstone stated,
35 "Adverse impacts include the possibility that portions of the lake will not be desirable for
36 recreation. This has been expected from the start of planning and recreation areas planned
37 accordingly. Then, too, there is the presence of mercury in fish which warrants concern but
38 does not pose a threat to human health or the environment."; and

39 Whereas, in the USACE Notice of Decision to Impound, Colonel Johnstone stated,
40 "Along with flood control, project purposes which will be served impoundment are
41 downstream low-flow augmentation, water supply, fish and wildlife conservation and
42 recreation. The projected water quality within the impounded waters, while reflecting problems
43 present in many lakes and streams in the region, will provide for these original purposes.";
44 Now, therefore,

45 The General Assembly of North Carolina enacts:

46 **PART I. LEGISLATIVE INTENT**

47 **SECTION 1.** It is the intent of the North Carolina General Assembly to address the
48 water quality in the B. Everett Jordan Lake (Lake) by recognizing all of the following to be
49 true:

- 1 (1) The Lake was authorized, designed, and constructed by the federal
2 government and, prior to impoundment, documentation shows that the
3 federal government knew the Lake would be an impaired water body.
- 4 (2) The design of the Lake creates a situation of perpetual impairment regardless
5 of upstream variables. Therefore, the State's existing nutrient management
6 strategies regulating the Lake basin will continue to have little or no effect
7 on water quality improvement in the Lake itself.
- 8 (3) The continued application of the current nutrient management strategy
9 within the Lake basin, which is both inadequate and ineffective, creates an
10 unfair and unattainable regulatory burden on North Carolina's citizens with
11 direct results that include wasteful expenditure of private and
12 taxpayer-funded resources, development restrictions, and the inhibition of
13 economic growth.
- 14 (4) A completely new approach for water quality management is deemed
15 necessary with a primary focus on mitigation of the water quality within the
16 Lake itself, which can only be done by first achieving a complete repeal of
17 the existing session laws and rules that address nutrient management
18 standards within the Lake basin.
- 19 (5) The cost of development and implementation of a new or revised regulatory
20 framework must take into consideration that all of the municipal and county
21 governments within the Lake basin have invested taxpayer dollars at
22 different levels to implement previous nutrient management strategies
23 mandated by the State and federal governments. Therefore, future costs of a
24 new nutrient management and water quality strategy must be fairly
25 distributed and based, in part, on a prorated share of these differing levels of
26 previous good-faith efforts and investments.
- 27 (6) During its 2013 session, the General Assembly will authorize a study to
28 provide recommendations for consideration by the full General Assembly to
29 direct the State's efforts on development of a new regulatory framework to
30 address water quality within the Lake basin to begin as early as May 2014
31 with implementation soon thereafter.

32 **PART II. REPEAL OF EXISTING RULES AND STATUTES**

33 **SECTION 2.(a)** The Environmental Management Commission shall, no later than
34 October 1, 2013, repeal the following rules:

- 35 (1) 15A NCAC 02B .0262 through .0273
- 36 (2) 15A NCAC 02B .0311

37 **SECTION 2.(b)** S.L. 2009-216, Part II of S.L. 2009-484, Section 14 of S.L.
38 2011-394, Section 12.1 of S.L. 2012-187, Subsections 9(c) through 9(g) of S.L. 2012-200, and
39 Subsections 11(a) through 11(e) of S.L. 2012-201 are repealed.

40 **SECTION 2.(c)** The rules to be repealed pursuant to subsection (a) of this section
41 and the Session Laws to be repealed pursuant to subsection (b) of this section shall not be
42 enforced by the State or any of its subdivisions.

43 **PART III. LRC STUDY JORDAN LAKE NUTRIENT LOADING ISSUES**

44 **SECTION 3.** The Legislative Research Commission shall establish the Jordan
45 Lake Study Subcommittee to consider all issues deemed relevant to addressing the water
46 quality in Jordan Lake. The subcommittee shall consist of five Senators appointed by the
47 President Pro Tempore of the Senate and five Representatives appointed by the Speaker of the
48 House of Representatives. The subcommittee shall undertake, at a minimum, the following
49 activities:

- 50 (1) Review the history of Jordan Lake and its nutrient loading issues.
- 51 (2) Evaluate the current condition and uses of Jordan Lake.

- 1 (3) Consider the potential future conditions and uses of Jordan Lake.
- 2 (4) Review the development, policies, and content of the rules and Session Laws
- 3 repealed in Subsections 2(a) and 2(b) of this act.
- 4 (5) Review statutory law for the management of nutrients in the State.
- 5 (6) Receive input from experts in nutrient management on strategies for
- 6 management of nutrients in Jordan Lake.
- 7 (7) Receive input from interested stakeholders, including local governments and
- 8 representatives of agricultural, development, environmental, and other
- 9 interests, on strategies for management of nutrients in Jordan Lake.
- 10 (8) Develop recommendations, including legislative proposals, addressing water
- 11 quality in Jordan Lake. The recommendations should include a projected
- 12 timeline for implementation, including rule development by appropriate
- 13 agencies, boards, and commissions. The recommendations shall consider the
- 14 efficacy of a primary water quality strategy that focuses on treatment and
- 15 remediation of Jordan Lake rather than upstream mitigation strategies, the
- 16 projected costs, the distribution of cost-sharing between local governments
- 17 within the affected basin, and an assessment of the likelihood in achieving
- 18 measureable protection of the water quality in Jordan Lake.

19 The Commission shall report any findings and recommendations to the 2014 Regular
20 Session of the 2013 General Assembly. The Commission shall also transmit any findings and
21 recommendations to the Environmental Review Commission and the Fiscal Research Division.

22 **SECTION 5.** Consultation. – The Department of Environment and Natural
23 Resources and the Environmental Management Commission shall consult with the United
24 States Army Corps of Engineers and the United States Environmental Protection Agency to
25 identify mitigation strategies that focus on treatment and remediation of the lake rather than
26 upstream mitigation strategies.

27 **SECTION 6.** Effective date. – Subsection 2(b) of this act becomes effective
28 October 1, 2013. The remainder of this act is effective when it becomes law.