# GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 2013

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### SENATE BILL 515 PROPOSED COMMITTEE SUBSTITUTE S515-PCS15270-SB-20

Short Title: Jordan Lake Water Quality Act.

(Public)

Sponsors:

Referred to:

#### March 28, 2013 1 A BILL TO BE ENTITLED 2 AN ACT TO REVISE THE NUTRIENT MANAGEMENT STANDARDS APPLICABLE TO 3 THE JORDAN LAKE WATERSHED. 4 Whereas, the United States Congress authorized the United States Army Corps of 5 Engineers (USACE) to create what is now the B. Everett Jordan Lake in 1963; and 6 Whereas, the USACE submitted a Final Environmental Impact Statement (EIS) in 7 November 1971 that stated, "Of primary concern is the eutrophic tendency of the lake. 8 Eutrophication is a term used to describe the natural change in productivity of a lake during 9 aging. It is usually a long-term phenomenon, which may be measured in geologic time .... 10 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 11 12 blooms in the lake."; and 13 Whereas, the USACE stated in the EIS, "Several studies have indicated that the 14 major water quality problem will be associated with anticipated nuisance algal growths 15 resulting from excess nutrients from upstream sources."; and Whereas, the United States Environmental Protection Agency (EPA) commented in 16 17 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 .... 18 19 Impoundment should not take place until there is a strong technical basis for the prediction that 20 nuisance algal growths will not occur."; and 21 Whereas, the USACE, in responding to the EPA's comments in the EIS, stated, "... 22 it is doubtful whether a strong technical basis exists for the prediction that nuisance algal 23 growths will not occur on most existing reservoirs ...."; and 24 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 25 26 water quality problems into the upper surface layers. Therefore, impoundment will create a pollution problem to the detriment of the ecosystem."; and 27 Whereas, the EIS contained a summary of complaints from pending litigation that 28 29 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 30 deficiency of defendants' environmental statement is its de-emphasis on the certainty that the 31 32 water ... will be of exceptionally bad quality."; and 33 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 34 35 Lake permanent conservation pool; and



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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

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

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

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

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

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

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1 2	(1)	The Lake was authorized, designed, and constructed government and, prior to impoundment, documentation	shows that the
3 4 5 6	(2)	federal government knew the Lake would be an impaired wa The design of the Lake creates a situation of perpetual impa of upstream variables. Therefore, the State's existing nutr strategies regulating the Lake basin will continue to have	irment regardless ient management
7		on water quality improvement in the Lake itself.	
8	(3)	The continued application of the current nutrient mana	agement strategy
9		within the Lake basin, which is both inadequate and ineffe	ective, creates an
10		unfair and unattainable regulatory burden on North Carolin	
11		direct results that include wasteful expenditure of	1
12		taxpayer-funded resources, development restrictions, and	the inhibition of
13		economic growth.	
14	(4)	A completely new approach for water quality manage	
15 16		necessary with a primary focus on mitigation of the water of Lake itself, which can only be done by first achieving a set	
10 17		Lake itself, which can only be done by first achieving a co the existing session laws and rules that address nutri	1 I
17		standards within the Lake basin.	ent management
10	(5)	The cost of development and implementation of a new or r	evised regulatory
20		framework must take into consideration that all of the mun	
21		governments within the Lake basin have invested tax	
22		different levels to implement previous nutrient manag	
23		mandated by the State and federal governments. Therefore,	future costs of a
24		new nutrient management and water quality strategy	•
25		distributed and based, in part, on a prorated share of these d	liffering levels of
26		previous good-faith efforts and investments.	
27	(6)	During its 2013 session, the General Assembly will auth	•
28		provide recommendations for consideration by the full Gen	•
29 30		direct the State's efforts on development of a new regulate address water quality within the Lake basin to begin as ea	
30 31		with implementation soon thereafter.	11y as way 2014
32	PART II REPE	AL OF EXISTING RULES AND STATUTES	
33		<b>TON 2.(a)</b> The Environmental Management Commission sh	all no later than
34		repeal the following rules:	
35	(1)	15A NCAC 02B .0262 through .0273	
36	(2)	15A NCAC 02B .0311	
37	SECT	TON 2.(b) S.L. 2009-216, Part II of S.L. 2009-484, Se	ction 14 of S.L.
38	,	n 12.1 of S.L. 2012-187, Subsections 9(c) through 9(g) of S.	L. 2012-200, and
39		through 11(e) of S.L. 2012-201 are repealed.	
40		<b>TON 2.(c)</b> The rules to be repealed pursuant to subsection (	
41		Laws to be repealed pursuant to subsection (b) of this sec	tion shall not be
42	•	tate or any of its subdivisions.	10
43 44		STUDY JORDAN LAKE NUTRIENT LOADING ISSUE	
44 45		<b>TON 3.</b> The Legislative Research Commission shall esta committee to consider all issues deemed relevant to addr	
46	-	Lake. The subcommittee shall consist of five Senators a	-
47	President Pro Tempore of the Senate and five Representatives appointed by the Speaker of the		
48		entatives. The subcommittee shall undertake, at a minimu	-
49	activities:		
50	(1)	Review the history of Jordan Lake and its nutrient loading is	ssues.
51	(2)	Evaluate the current condition and uses of Jordan Lake.	

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1	(3)	Consider the potential future conditions and uses of Jordan Lake.	
2 3	(4)	Review the development, policies, and content of the rules and Session Laws	
		repealed in Subsections 2(a) and 2(b) of this act.	
	(5)	Review statutory law for the management of nutrients in the State.	
	(6)	Receive input from experts in nutrient management on strategies for	
		management of nutrients in Jordan Lake.	
	(7)	Receive input from interested stakeholders, including local governments and	
		representatives of agricultural, development, environmental, and other	
		interests, on strategies for management of nutrients in Jordan Lake.	
	(8)	Develop recommendations, including legislative proposals, addressing water	
		quality in Jordan Lake. The recommendations should include a projected	
		timeline for implementation, including rule development by appropriate	
		agencies, boards, and commissions. The recommendations shall consider the	
		efficacy of a primary water quality strategy that focuses on treatment and	
		remediation of Jordan Lake rather than upstream mitigation strategies, the	
		projected costs, the distribution of cost-sharing between local governments	
		within the affected basin, and an assessment of the likelihood in achieving	
		measureable protection of the water quality in Jordan Lake.	
	The Commission shall report any findings and recommendations to the 2014 Regular		
	Session of the 2013 General Assembly. The Commission shall also transmit any findings and		
	recommendations to the Environmental Review Commission and the Fiscal Research Division.		
		<b>TION 5.</b> Consultation. – The Department of Environment and Natural	
	Resources and the Environmental Management Commission shall consult with the United		
	States Army Corps of Engineers and the United States Environmental Protection Agency to		
	identify mitigation strategies that focus on treatment and remediation of the lake rather than		
)	upstream mitigation strategies.		
,	SEC	<b>TION 6.</b> 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.