

A RESOLUTION REGARDING THE ADOPTION OF GENERAL LEGISLATION TO  
MODIFY THE JORDAN LAKE RULES  
Resolution No. 92/2008-09

WHEREAS, Jordan Lake is an non-natural, engineered reservoir, impounded over 60 years after Carrboro was incorporated, resulting in substantial pre-impoundment development in Carrboro; and

WHEREAS, water quality and specifically eutrophication concerns have been raised for Jordan Lake for over 4 decades, dating to pre-impoundment; and

WHEREAS, the North Carolina General Assembly, Environmental Management Commission and Division of Water Quality are actively pursuing new regulations limiting nitrogen and phosphorus inputs to Jordan Lake; and

WHEREAS, Rules adopted for Jordan Lake in 2008 by the Environmental Management Commission are unprecedented in the state in mandating that the Town of Carrboro and a few other local governments reduce nitrogen from "existing development" by 35 percent and phosphorous by 5 percent; and

WHEREAS, the Town of Carrboro and its citizens have been leaders over the years in protecting the environment in water quality, land use regulation, stream buffer protection, open space preservation, and stormwater management, and support efforts to protect and restore Jordan Lake; and

WHEREAS, the financial impact of the existing development provisions in the rules will likely be significant, and

WHEREAS, the rules as drafted arguably result in selected local governments bearing an unreasonable and unprecedented burden; and

WHEREAS, these costs could cause hardship to Carrboro's citizens, threatening the Town's ability to maintain positive fiscal health in the conduct of everyday business and economic development initiatives; and

WHEREAS, mandates to reduce nutrients from existing development could also force the Town to condemn private property, reducing valuable residential and commercial property from the Town tax rolls;

THEREFORE BE IT RESOLVED BY THE CARRBORO BOARD OF ALDERMEN THAT

- 1) The Board opposes provisions as currently drafted to reduce nutrient runoff from existing development, and requests that the General Assembly modify these provisions to reduce the very substantial impact to local governments especially in the Upper New Hope watershed, and
- 2) The Board could support the existing development provisions if they guarantee financial support that substantially reduces the financial burden to the Town and recognizes the federal and state responsibility for the authorization and construction of Jordan Lake, with water quality concerns dating to preimpoundment; and
- 3) The Board requests that the rules include provisions both recognizing pre-impoundment and pre-baseline development conditions and enabling the accounting and crediting for the Town's efforts prior to 2001, and
- 4) The Board supports further reductions of nutrients to Jordan Lake through the various other measures included in the draft rules, as well as air quality controls that reduce atmospheric deposition of nitrogen.
- 5) A copy of this resolution shall be forwarded to the Town's Legislative Delegation.

The resolution is effective upon adoption.

## JORDAN WATER SUPPLY NUTRIENT STRATEGY

## STATUS:

The Jordan Water Supply Nutrient Strategy Rules await legislative review by the General Assembly.

## HISTORY:

DATE	ACTION	NOTES
2/26/09	House Bill 350 filed in the General Assembly disapproving the Jordan rules	Sponsors: Allred, Blackwood Referred to the House Committee on Environment and Natural Resources; if favorable, Judiciary I
2/12/09	Senate Bill 166 (= House Bill 239) filed in General Assembly disapproving the Jordan rules	Senate Sponsors: Foriest, Vaughan Re-referred to Senate Committee on Rules and Operations House Sponsors: Allen, Gibson, Bordsen, M. Alexander, Faison Referred to the House Committee on Environment and Natural Resources; if favorable, Judiciary I
1/28/09	House Bill 3 filed in General Assembly disapproving the Jordan rules	Sponsors: Allred, McCormick, Blust, Cole, West Referred to the House Committee on Environment and Natural Resources; if favorable, Judiciary I
11/20/08	RRC approves Jordan Nutrient Strategy rules	
11/13/08	NC EMC adopts revised rules in response to RRC comments	
6/8/08	Adopted rules submitted to Rules Review Commission (RRC)	The RRC received the minimum ten letters of objection for each rule, which means all rules are subject to legislative review
5/8/08	NC Environmental Management Commission (EMC) adopts revised rules	Recommended effective date is 4/1/09
9/13/07	Public comment period closes	According to the NC Division of Water Quality summary of public comments, approximately 400 people attended the hearings, with 150 people speaking. More than 7,000 documents, postcards, and emails providing written comment were received.

<b>DATE</b>	<b>ACTION</b>	<b>NOTES</b>
7/12/07 and 7/17/07	Public hearings held	
6/5/07	Jordan rules published in the North Carolina Register	Proposed effective date is 3/1/08

Representative Martha Alexander – Mecklenburg County  
 Representative Lucy Allen – Franklin, Halifax, Nash Counties  
 Representative Cary Allred - Alamance County  
 Representative Alice Bordsen – Alamance County  
 Representative Curtis Blackwood – Union County  
 Representative John Blust – Guilford County  
 Representative Nelson Cole – Rockingham County  
 Representative Bill Faison – Caswell, Orange Counties  
 Representative Pryor Gibson – Anson, Union Counties  
 Representative Darrell McCormick - Iredell, Surry, Yadkin Counties  
 Representative Roger West – Cherokee, Clay, Graham, Macon Counties

Senator Tony Foriest – Alamance, Caswell Counties  
 Senator Don Vaughan – Guilford County

SUMMARY OF REGULATIONS AND IMPACTS ON THE TOWN OF CHAPEL HILL:

1. New Development

Applicability	Town of Chapel Hill and its planning jurisdiction
Requirements	<p>Stormwater management plans required to address nitrogen and phosphorus loads. Loads may not exceed 2.2 pounds per acre per year for nitrogen and 0.82 pounds per acre per year for phosphorus.</p> <p>Stormwater systems must control and treat runoff generated by 1-inch rainfall from all surfaces.</p> <p>Stormwater flows shall not contribute to degradation of waters of the State. At a minimum, post-development peak flow rate shall not exceed pre-development peak flow rate for a 1-year, 24-hour storm.</p> <p>Maintenance plan required for life of development.</p> <p>Compliance and enforcement plan required for life of development.</p> <p>Local government assumes ultimate responsibility for operation and maintenance of high-density stormwater controls.</p> <p>Annual reporting</p>
Threshold	<p>1 acre of land disturbance – single-family and duplex residential development; recreational facilities</p> <p>0.5 acre of land disturbance – commercial, institutional, industrial, multi-family residential, and local government development</p>

Timeline:

Time	Action
0	Effective Date of regulations
18 months	DWQ submits model program and ordinance to EMC
24 months from effective date or 6 months after EMC approves model program	Local governments submit programs to DWQ for preliminary approval
33 months from effective date or 15 months after EMC approves model program	DWQ provides recommendation to EMC. EMC shall approve local program or require revisions. If revisions are needed, local government has 2 months to resubmit to DWQ. DWQ has 2 months to provide follow-up recommendation to EMC.
36 months from effective date, or 3 months after EMC approves local program, or upon 1 <sup>st</sup> renewal of NPDES permit, whichever is later	Local government shall complete adoption and implement program

2. Existing Development

Applicability	<p>Developed lands within Chapel Hill that fall under its general police powers Lands under state and federal control are not included</p>
Requirements	<p>Develop stormwater program to address load reduction and existing development administrative program</p> <p>Load reduction program from existing development (pre-baseline – 1997-2001) to achieve 35% nitrogen and 5% phosphorus reduction goals and a plan for estimating and offsetting loading increases from post-baseline (but prior to implementation of rules) developed lands. Load reduction needed is the difference between the loading rate and 2.2 pounds per acre per year for nitrogen and 0.82 pounds per acre per year for phosphorus</p> <p>Load reduction program shall identify specific load-reducing practices and activities and estimates of load reductions from these practices and activities</p> <p>Load reduction program must include plan and technical analysis for achieving half of each goal within 10 years of effective date</p> <p>Load reduction program shall identify funding mechanisms</p> <p>Existing development administrative program must include plan to ensure maintenance of load reductions for life of development, public education program, mapping component, and component to identify and remove illicit discharges</p> <p>Annual reporting</p>

Timeline:

Time	Action
0	Effective Date of regulations
6 months from effective date	If local government chooses to monitor stream flows to quantify target high-loading sources, it shall submit monitoring design to DWQ
9 months from effective date	DWQ comments on monitoring design. If adequate, local government may delay submittal of load reduction program to DWQ by 1 year.
18 months from effective date	DWQ submits model local program to EMC for approval
24 months from effective date or 6 months after EMC approval of model local program	Local governments submit existing development administrative programs that meet or exceed requirements to NC DWQ for review and preliminary approval
30 months from effective date or 12 months after EMC approval of model local program	DWQ provides recommendation to EMC on existing development administrative program. EMC shall approve local program or require revisions. If revisions are needed, local government has 2 months to resubmit to DWQ. DWQ has 2 months to provide follow-up recommendation to EMC.

Time	Action
33 months from effective date, or 3 months after EMC approval of local program, or upon 1 <sup>st</sup> renewal of NPDES permit, whichever is later	Local government completes adoption and begins implementation of existing development administrative program
42 months from effective date or 24 months after EMC approval of model local program	Local government submits load reduction program
52 months or 34 months after EMC approval of model local program	DWQ provides recommendation to EMC on load reduction program. EMC shall approve local program or require revisions. If revisions are needed, local government has 2 months to resubmit to DWQ. DWQ has 2 months to provide follow-up recommendation to EMC.
55 months or 3 months following EMC approval of load reduction program	Local government completes adoption and begins implementation of load reduction programs
10 years from effective date	Local government submits revised load reduction program, including plan and timeframe for achieving remainder of load reduction goal

3. Riparian Buffer Protection

<p>Applicability</p>	<p>All landowners and those conducting activities in the Jordan watershed, includes state and federal entities, and all local governments.</p> <p>Local government protection programs apply throughout their jurisdictions except where DWQ exercises jurisdiction. DWQ exercises jurisdiction for activities conducted under the authority of the State, the United States, multiple jurisdictions, and local units of government, as well as forest harvesting, agriculture, and areas where there is no local government implementing NPDES, water supply watershed requirements, or voluntary stormwater or riparian initiative.</p> <p>Applies to areas within, or outside with impacts upon, 50-foot wide riparian buffers around perennial and intermittent streams, lakes, reservoirs and ponds. Excludes wetlands. Protects streams present on NRCS soil map or USGS quad topo map, or other more accurate map as approved by EMC.</p> <p>Does not apply to existing and ongoing uses of portions of buffer (i.e. footprint). Does not apply to projects or proposed developments that have met specific state and federal criteria for 401/404 permits. Does not require “development” to trigger rule, only a change in footprint on even a portion of a parcel.</p>
<p>Requirements</p>	<p>Zone 1: first 30 feet from bank, fully vegetated, no disturbance          Zone 2: next 20 feet from bank, may be graded but must be revegetated          Requirement of diffuse flow of runoff prior to entry into buffer          Table of Uses – notes activities that exempt, allowable, or allowable with mitigation. All other uses are prohibited without a variance.  <u>Exempt:</u> permissible without local government authorization provided they adhere to defined limitations of activity  <u>Allowable:</u> use may proceed provided there are no practicable alternatives, requires written authorization from local government  <u>Allowable with mitigation:</u> use may proceed provided there are no practicable alternatives, and appropriate mitigation strategy has been approved, requires written authorization from local government          Applicant submits information for local government to determine status of no practical alternatives. Appeals are referred to the Director.          Variances – local government makes a finding of fact whether there are practical difficulties or unnecessary hardships that prevent compliance. Local government may grant minor variances. Local government prepares preliminary findings for major variances, to be submitted first to the Director and then to the EMC for approval. Minor variances impact only Zone 2 of buffer. Appeals of minor variances go to the Director. Major variances impact Zone 1 of buffer. Appeals of major variances go to Superior Court.          Local governments submit annual reports upon implementation of buffer protection rule.          Buffer protection rule does not preclude other regulations such as for steep slopes, wetlands, floodplains, etc. Local governments may implement more stringent requirements for buffer protection and/or mitigation.</p>





Timeline:

Time	Action
0	Effective Date of regulations
2 months from effective date	DWQ submits model local ordinance to EMC for approval
3 months from effective date	DWQ implements rule for activities it has jurisdiction
6 months after approved model local ordinance (est. max 8 months from effective date)	Local governments submit programs to DWQ for review, includes methods for variance determination, record keeping, enforcement
1 year after approved model local ordinance (est. max 14 months from effective date)	DWQ provides recommendations of local programs to EMC for approval
2 months after submission of local programs to EMC (est. max 16 months from effective date)	Where changes are required, local governments must submit revisions by this date
2 months after submission of revised program (est. max 18 months from effective date)	DWQ provides follow-up recommendations to EMC
2 months after EMC approval of local program	Local government submits load reduction program

4. Riparian Buffer Mitigation

<p>Applicability</p>	<p>Riparian mitigation rule applies where there is authorization for activity "allowable with mitigation" or where variance is granted.</p>
<p>Requirements</p>	<p>Local governments may implement more stringent requirements for buffer protection and/or mitigation.</p> <p>Mitigation requirements and approvals issued by local governments where they enforce buffer protection rule. Mitigation can be by payment of mitigation fee (to EEP or approved private mitigation bank), donation of real property, or restoration or enhancement of non-forested riparian buffer.</p> <p>Areas of impact to Zone 1 are multiplied by 3 for mitigation. Areas of impact to Zone 2 are multiplied by 1.5 for mitigation. Impacts to wetlands in either zone subject to existing wetland mitigation ratios.</p> <p>Location of mitigation must be within same Jordan subwatershed as impact, and same distance or closer than impact. Should be as close to impact as is feasible. Mitigation projects can be elsewhere provided proposal accounts for differences in delivery of nutrients to Jordan Lake.</p> <p>Donated property must contain riparian buffers in need of restoration, are deemed restorable (see rule for specifics), and is identified as priority for restoration in State basin plan. Conservation easements must be in perpetuity. Property value will be equal to or greater than required mitigation fee. If less, applicant pays difference. Area of restorable riparian buffer on property must equal or exceed amount calculated from mitigation multipliers.</p> <p>Restoration/enhancement without property donation requires perpetual conservation easement.</p>

Timeline:

Timeline dependent on implementation of riparian buffer protection rule.

5. Fertilizer Management

<p>Applicability</p>	<p>Commercial cropland; commercial nurseries and greenhouses; golf courses; public recreational lands; road and utility rights-of-way; and commercial or institutional lands, under common management totaling at least 5 acres</p> <p>Any lands where a hired applicator applies nutrients to at least five acres per year</p> <p>Does not apply to residential homeowners</p>
<p>Requirements</p>	<p>Fertilizer application shall be made either:</p> <ul style="list-style-type: none"> <li>• By an applicator who has completed nutrient management training, or</li> <li>• Pursuant to nutrient management plan</li> </ul> <p>A person who hires an applicator to apply nutrients shall</p> <ul style="list-style-type: none"> <li>• Ensure that the applicator has attended and completed nutrient management training, or</li> <li>• Ensure the hired applicator follows a nutrient management plan</li> </ul>

Timeline:

Effective date of regulations

**GENERAL ASSEMBLY OF NORTH CAROLINA  
SESSION 2009**

S

D

**SENATE DRS85032-MC-69 (2/11)**

Short Title: Disapprove Jordan Lake Rules.

(Public)

Sponsors: Senator Foriest.

Referred to:

A BILL TO BE ENTITLED

AN ACT TO DISAPPROVE RULES ADOPTED BY THE NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION AND APPROVED BY THE RULES REVIEW COMMISSION.

The General Assembly of North Carolina enacts:

**SECTION 1.** Pursuant to G.S. 150B-21.3(b1), 15A NCAC 02B .0264 (Jordan Water Supply Nutrient Strategy: Agriculture), 15A NCAC 02B .0268 (Jordan Water Supply Nutrient Strategy: Mitigation for Existing Riparian Buffers), 15A NCAC 02B .0269 (Riparian Buffer Mitigation Fees to the NC Ecosystem Enhancement Program), 15A NCAC 02B .0270 (Jordan Water Supply Nutrient Strategy: Wastewater Discharge Requirements), 15A NCAC 02B .0271 (Jordan Water Supply Nutrient Strategy: Stormwater Requirements for State and Federal Entities), 15A NCAC 02B .0272 (Jordan Water Supply Nutrient Strategy: Fertilizer Management), and 15A NCAC 02B .0273 (Jordan Water Supply Nutrient Strategy: Options for Offsetting Nutrient Loads), as adopted by the North Carolina Environmental Management Commission on May 8, 2008, and approved by the Rules Review Commission on October 16, 2008, are disapproved.

**SECTION 2.** Pursuant to G.S. 150B-21.3(b1), 15A NCAC 02B .0262 (Jordan Water Supply Nutrient Strategy: Purpose and Scope), 15A NCAC 02B .0263 (Jordan Water Supply Nutrient Strategy: Definitions), 15A NCAC 02B .0265 (Jordan Water Supply Nutrient Strategy: Stormwater Management for New Development), 15A NCAC 02B .0266 (Jordan Water Supply Nutrient Strategy: Stormwater Management for Existing Development), 15A NCAC 02B .0267 (Jordan Water Supply Nutrient Strategy: Protection of Existing Riparian Buffers), and 15A NCAC 02B .0311 (Cape Fear River Basin), as adopted by the North Carolina Environmental Management Commission on May 8, 2008, and approved by the Rules Review Commission on November 20, 2008, are disapproved.

**SECTION 3.** This act is effective when it becomes law.



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**GENERAL ASSEMBLY OF NORTH CAROLINA  
SESSION 2009**

H

D

**HOUSE DRH40005-MC-15 (1/6)**

Short Title: Disapprove Jordan Lake Rules.

(Public)

Sponsors: Representatives Allred and McCormick (Primary Sponsors).

Referred to:

A BILL TO BE ENTITLED

AN ACT TO DISAPPROVE RULES ADOPTED BY THE NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION AND APPROVED BY THE RULES REVIEW COMMISSION.

The General Assembly of North Carolina enacts:

**SECTION 1.** Pursuant to G.S. 150B-21.3(b1), 15A NCAC 02B .0264 (Jordan Water Supply Nutrient Strategy: Agriculture), 15A NCAC 02B .0268 (Jordan Water Supply Nutrient Strategy: Mitigation for Existing Riparian Buffers), 15A NCAC 02B .0269 (Riparian Buffer Mitigation Fees to the NC Ecosystem Enhancement Program), 15A NCAC 02B .0270 (Jordan Water Supply Nutrient Strategy: Wastewater Discharge Requirements), 15A NCAC 02B .0271 (Jordan Water Supply Nutrient Strategy: Stormwater Requirements for State and Federal Entities), 15A NCAC 02B .0272 (Jordan Water Supply Nutrient Strategy: Fertilizer Management), 15A NCAC 02B .0273 (Jordan Water Supply Nutrient Strategy: Options for Offsetting Nutrient Loads), as adopted by the North Carolina Environmental Management Commission on May 8, 2008, and approved by the Rules Review Commission on October 16, 2008, are disapproved.

**SECTION 2.** Pursuant to G.S. 150B-21.3(b1), 15A NCAC 02B .0262 (Jordan Water Supply Nutrient Strategy: Purpose and Scope), 15A NCAC 02B .0263 (Jordan Water Supply Nutrient Strategy: Definitions), 15A NCAC 02B .0265 (Jordan Water Supply Nutrient Strategy: Stormwater Management for New Development), 15A NCAC 02B .0266 (Jordan Water Supply Nutrient Strategy: Stormwater Management for Existing Development), 15A NCAC 02B .0267 (Jordan Water Supply Nutrient Strategy: Protection of Existing Riparian Buffers), as adopted by the North Carolina Environmental Management Commission on May 8, 2008, and approved by the Rules Review Commission on November 20, 2008, are disapproved.

**SECTION 3.** This act is effective when it becomes law.



\*DRH40005-MC-15\*



Established 1771

• COUNTY COMMISSIONERS  
George Lucier, Chair  
Sally Kost, Vice Chair  
Mike Cross  
Carl Thompson  
Tom Vanderbeck

• COUNTY MANAGER  
Charlie Horne

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P. O. Box 1809, Pittsboro, NC 27312-1809 • Phone: (919) 542-8200 • Fax: (919) 542-8272

February 18, 2009

Steve Stewart, Town Manager  
301 West Main Street  
Carrboro, NC 27510

Re: Attached resolution: Jordan Lake Rules

Dear Steve,

On February 16, 2009 at their regular board meeting the Board of Commissioners adopted the attached resolution. As you will see upon reading it, the resolution comes as a response to the introduction of House Bill 3 titled, "Disapprove Jordan Lake Rules". The Board is encouraging the General Assembly to keep Jordan Lake Rules in place and continue the process to implement those rules. As part of their comments leading to adoption the board requested us to send the resolution to jurisdictions which have a vital interest in keeping Jordan Lake water quality high.

We hope that your jurisdiction will consider a similar resolution.

Please pass the resolution along to your Mayor and council.

Sincerely,

Charlie Horne,  
County Manager

**RESOLUTION OF THE BOARD OF COMMISSIONERS OF CHATHAM COUNTY IN  
SUPPORT OF THE PROPOSED JORDAN RESERVOIR WATER SUPPLY NUTRIENT  
STRATEGY RULES 15A NCAC 02B .0262-.0273 & .0311**

**WHEREAS**, House Bill 3 has been introduced for consideration by the General Assembly; and

**WHEREAS**, the proposed legislation would disapprove Jordan Lake Management rules as promulgated and approved by the Environmental Management Commission and the Rules Review Commission; and

**WHEREAS**, the Jordan Lake Reservoir lies almost entirely within the boundaries of Chatham County; and

**WHEREAS**, the Jordan Lake Reservoir is a popular recreation destination for over 1 million visitors each year including residents of Chatham; and

**WHEREAS**, the Jordan Lake Reservoir is a major drinking water source for Chatham County as well as for Cary and other cities and towns; and

**WHEREAS**, the State of North Carolina first directed local governments to reduce nitrogen in waters that flow to the Jordan Lake Reservoir in 1997 under the Clean Water Responsibility Act; and

**WHEREAS**, the Jordan Lake Reservoir is on the EPA 303(d) list of impaired waters due to excessive nutrients from point and non-point sources, and has been since 2002; and

**WHEREAS**, the Jordan Lake Reservoir Nutrient Strategy rules were developed by the NC Division of Water Quality through a lengthy stakeholder process and were adopted by the NC Environmental Management Commission (EMC) on May 8, 2008 and approved by the Rules Review Commission on November 11, 2008; and

**WHEREAS**, the Jordan Lake Reservoir Nutrient Strategy rules are based on sound scientific monitoring and modeling to apportion decreases in the nutrient load from all point and non-point sources in the Jordan Lake watershed in order to improve water quality; and

**WHEREAS**, the Jordan Lake Reservoir cannot meet water quality standards unless nutrient loads from all current and future sources are reduced, including those from wastewater, and from stormwater from existing and new development; and

**WHEREAS**, the threat to the water quality in the Jordan Lake Reservoir and the drinking water supply of Chatham County and other drinking water uses, as well as recreations users will continue until all sections of the rules are approved by the NC General Assembly;

**NOW, THEREFORE, BE IT RESOLVED BY THE CHATHAM COUNTY BOARD OF COMMISSIONERS** that members of the North Carolina General Assembly are hereby requested to approve the Jordan lake Reservoir Nutrient Strategy rules ~~in their entirety~~ in order to protect the public health and welfare of the citizens of Chatham County and other residents of North Carolina,

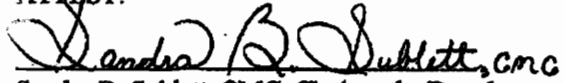


Adopted, this the 16<sup>th</sup> day of February, 2009.



George Lucier, Chairman

ATTEST:



Sandra B. Sublett, CMC, Clerk to the Board  
Chatham County Board of Commissioners

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RESOLUTION SUPPORTING THE ADOPTION OF  
GENERAL LEGISLATION TO MODIFY THE JORDAN LAKE RULES

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WHEREAS, the City of Durham and its citizens have been leaders over the years in protecting the environment in wastewater treatment, water quality, land use regulation, buffer protection, open space preservation, and stormwater regulation;

WHEREAS, since the impoundment of Jordan Lake in 1983, Durham's citizens have sustained special and extraordinary costs to prevent nutrients from reaching Jordan Lake, such costs including over 40 million dollars over the last fifteen years to reduce nitrogen and phosphorus in wastewater and over 30 million dollars to address stormwater pollution;

WHEREAS, Rules adopted for Jordan Lake in 2008 by the Environmental Management Commission are unprecedented in the state in mandating that the City of Durham and a few other local governments reduce nitrogen from "existing development" by 35% and phosphorus by 5%, with a time frame for achieving such reductions;

WHEREAS, cost estimates of the impact of those Rules, using reliable data from state experts, show that Durham's citizens will pay at least 570 million dollars over the next 20 years to fund retrofits to comply with the Rules, in addition to costs they will pay for additional nutrient reductions in wastewater treatment;

WHEREAS, compliance with the existing development requirement will cause Durham's stormwater rates to increase at least seven-fold, with rates for smaller homes increasing from \$26 a year to \$200 a year, and for larger homes from \$54 a year to \$416 a year;

WHEREAS, these costs are unnecessary for protection of the Lake, will not achieve expected results, will cause significant hardship to Durham's citizens, and will hamper further economic development;

WHEREAS, mandates to reduce nutrients from existing development could also force the City to condemn private property, and would result in considerable valuable residential and commercial property being removed from the City's tax base;

WHEREAS, prior to construction of Jordan Lake by the Army Corps of Engineers, water quality problems were predicted by scientists from UNC-Chapel Hill, NC State, and Duke, by conservationists, and by many local governments and these concerns led to widespread opposition in the 1960's and 1970's to the construction of the Lake;

WHEREAS, in fact Jordan Lake performs better than predicted, in part because local governments and authorities in the Upper New Hope arm – Durham City, Durham County, and the Orange Water and Sewer Authority (OWASA) -- have funded approximately 100 million dollars of wastewater treatment upgrades to reduce nitrogen and phosphorus in the Lake;

WHEREAS, Jordan Lake functions well for all of its intended uses – flood control, improved downstream water quality, conservation of fish and wildlife, drinking water supply,

and recreation – even though its suitability for uses such as drinking water were doubted at the time of the Lake's creation;

WHEREAS, studies have shown that nitrogen loads have **declined** in the Upper New Hope and Haw River arms over the last twenty years and further declines will occur without imposition of the existing development rule;

WHEREAS, the Jordan Rules were promulgated based on limited sampling of Chlorophyll *a*, an imperfect predictor, with samples taken in years influenced by drought and unusual weather conditions, and the consultant responsible for the Lake model noted the "considerable analytic uncertainty" in the measurements used;

WHEREAS, under the Rules, jurisdictions in the Upper New Hope arm, including the City of Durham, will be required to impose the strictest limits on nutrient runoff for new development that exist anywhere in North Carolina;

WHEREAS, the City needs time to "optimize" its South Durham plant and to study, plan, bid, and contract for additional nitrogen and phosphorus upgrades, and the date of 2016 proposed in the Rules that were originally published by the State allows for such time; now, therefore,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DURHAM THAT:

1. The Council opposes portions of the Jordan Rules as enacted by the Environmental Management Commission, in particular,

- the mandate to reduce nutrient runoff from existing development;
- implementation of new nitrogen limits for point sources prior to 2016;
- enforcement of the buffer requirements of the Rules by local governments rather than by the State, as has been done in the Neuse and Tar Pamlico programs;
- identification of the Jordan Basin as a "critical water supply watershed."

2. The Council supports further reducing nutrients in Jordan Lake through, among other measures, further reduction of nutrients in wastewater plant discharges to all arms of the Lake; implementation of buffers; additional controls on new development, including projects controlled by local governments, DOT, and the state; mandatory changes in agricultural practices; changes in fertilizer content and application practices; implementation of "Phase 2" stormwater programs throughout the Jordan Basin; and expected reductions in atmospheric nitrogen.

3. The Council urges the General Assembly to modify requirements relating to existing development for the Jordan Basin so that, at most, they parallel what was implemented in the Tar-Pamlico and Neuse Basins, watersheds with water bodies that have more severe pollution problems than does Jordan Lake.

4. The Council authorizes the Mayor and City staff to take all necessary steps to implement the above objectives, including, where necessary, supporting compromises that achieve the general objectives of this Resolution.

5. This Resolution is effective upon adoption.

  
 CITY CLERK



**ORANGE WATER AND SEWER AUTHORITY**

*Quality Service Since 1977*

March 20, 2009

Mr. Roger Stancil  
 Chapel Hill Town Manager  
 405 Martin Luther King Jr. Boulevard  
 Chapel Hill, NC 27514

**SUBJECT: INFORMATION FOR THE MARCH 26, 2009 ORANGE COUNTY  
 ASSEMBLY OF GOVERNMENTS (AOG) MEETING  
 REGARDING JORDAN LAKE**

Dear Roger;

Please include the enclosed information with the agenda materials for the March 26<sup>th</sup> AOG meeting. The following summary information is provided:

- Proposed Jordan Lake Nutrient Management Rules – OWASA's perspective
- Update of OWASA's Long-Range Water Supply Plan

As you know, the OWASA Board has a regular Board meeting the evening of March 26<sup>th</sup>; however, Randy Kabrick, OWASA Board Chair and Ed Holland, OWASA Planning Director will attend the AOG meeting.

Sincerely,

Ed Kerwin  
 Executive Director

**Attachments**

- c: Laura Blackmon, Orange County Manager (w/attachments)  
 Eric Peterson, Hillsborough Town Manager (w/attachments)  
 Steve Stewart, Carrboro Town Manager (w/attachments)  
 OWASA Board of Directors (w/attachments)  
 Robert Epting, OWASA General Counsel (w/attachments)

**PROPOSED JORDAN LAKE NUTRIENT MANAGEMENT RULES – March 20, 2009**

**PURPOSE:** To provide updated information to Orange County's elected leaders about the likely impacts of the Jordan Lake Nutrient Management Rules on Orange Water and Sewer Authority (OWASA).

**CURRENT STATUS:** The Jordan Lake Rules were adopted by the NC Environmental Management Commission (EMC) in May 2008. The NC Rules Review Commission (RRC) approved the Rules with some modifications in November 2008, but because the RRC received at least 10 public objection letters, the Rules are now under review by the NC General Assembly during the 2009 Session. If the General Assembly does not revise/disapprove of the rules during the Session, they will automatically go into effect in the summer of 2009. Legislation has been introduced to the NC House/Senate opposing the Rules in total (sponsors include legislators representing Alamance, Iredell, Surry, Yadkin, Guilford, Rockingham, Cherokee, Graham, Clay, Macon, Caswell, Orange, Halifax, Nash, Mecklenburg, Franklin, Anson and Union Counties).

**DISCUSSION:** The OWASA Board submitted comments on the EMC's proposed rules in July 2007 (attached). The main points of that letter, and what, if any, changes were subsequently made to the proposed Rules in response to those comments are listed below. Also provided is any substantive information that has changed since OWASA's comments were submitted in July 2007.

- OWASA noted the substantial scientific uncertainty underlying the rules and recommended that the nutrient reduction goals be revisited at regular intervals of not more than 5 years. *The currently proposed Rules require a review of the Jordan Lake strategy "after at least 10 years following the effective date."*
- OWASA recommended that the unnecessarily stringent, one-size-fits-all chlorophyll *a* water quality standard be re-evaluated as part of the rules development process. *No action has been taken on this.*
- OWASA did not believe that any additional capital improvements would be needed to meet the Rules' requirements before wastewater flows at OWASA's Mason Farm Wastewater Treatment Plant (WWTP) reach its current rated capacity (14.5 million gallons per day [MGD] maximum month flow, or average daily flow of 12 MGD). It is now believed that additional capital improvements may be required when average daily flows reach 10 MGD (during the past four years average flows have been approximately 7.5 MGD). The timing and estimated costs for any required capital improvements will be determined during a WWTP Capacity Analysis that OWASA intends to conduct in Fiscal Year 2010.
- OWASA anticipated operating costs would increase by about \$500,000/year once the Total Nitrogen (TN) limit goes into effect. However, based on recent chemical price increases, OWASA now estimates the initial annual cost increase will be about \$825,000/year (with other yet to be determined cost increases associated with increased energy usage and biosolids management requirements).
- OWASA supports nutrient reduction trading opportunities allowed by the Rules, but more recent information indicates that it is unlikely that nutrient trading and offset arrangements will provide any benefits to point source dischargers in Jordan Lake's Upper New Hope Arm.
- OWASA supported a 2016 compliance date for point source TN reduction. *The proposed rules are currently written to require compliance by 2014.*

**CONCLUSION:** OWASA supports any practical initiative that promotes water quality protection, but notes that implementation of the currently proposed Rules will have two major impacts on all OWASA customers:

1. Capital and annual operations and maintenance costs associated with additional wastewater treatment mandated by the Rules will require significant and sustained increases in future sewer rates and fees.
2. OWASA's WWTP will likely not be able to achieve the stringent nitrogen limits at average daily flows of more than 14.5 MGD without major breakthroughs in treatment technology. Future compliance may only be possible through some combination of severe limits on new connections to the system; severe reduction/elimination in the volume of septage (septic tank waste) accepted for treatment; and/or increased diversion of wastewater effluent via non-discharge strategies.