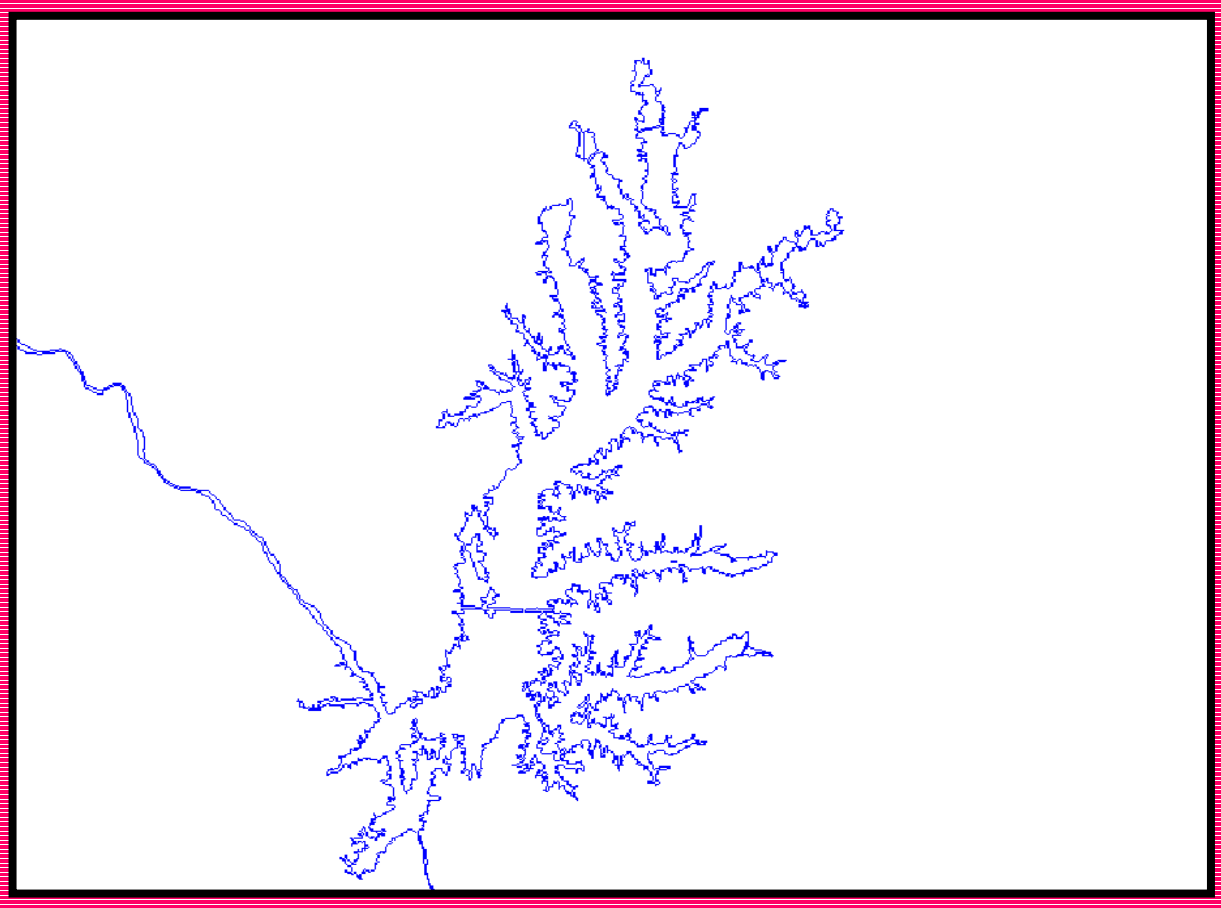
Jordan Lake Water Supply Storage Allocations Round Two and Proposed Increase in Interbasin Transfer

Hearing Officers' Report
Volume I



MAY 2001

Prepared for the
Environmental Management Commission
by
North Carolina Department of Environment and Natural Resources
Division of Water Resources

Jordan Lake Water Supply Storage Allocations Round Two
and
Proposed Increase in Interbasin Transfer

Hearing Officers' Report
Volume I

Public Hearings

March 5, 2001 - Ground Floor Hearing Room, Archdale Building, Raleigh
March 6, 2001 - Fayetteville State University, Shaw Auditorium, Fayetteville

North Carolina
Department of Environment and Natural Resources
Division of Water Resources

Environmental Management Commission

May 2001

Jordan Lake Water Supply Storage Allocations Round Two and Proposed Increase in Interbasin Transfer

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* In an effort to conserve resources the Division of Water Resources will make Volume II available on the internet. You may review it at http://www.ncwater.org/reports/jordan/index.html . We will have a few hard copies and several electronic (Microsoft Word) copies available for those who do not have access to the internet. To receive a copy please write to Tom Fransen, 1611 Mail Service Center, Raleigh, NC 27699 – 1611. Please indicate whether you prefer a hard copy or an electronic copy.

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	County of Cumberland Joint Planning Board	
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	Willie J. Dorman	
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	Robin Hayes Garcia	
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Part I
Hearing Officers' Recommendations and Interbasin Transfer Certificate

Jordan Lake Water Supply Storage Allocations
HEARING OFFICERS' RECOMMENDATIONS

Public hearings on the Interbasin Transfer Certification Petition for the Towns of Cary, Apex, and Morrisville and Wake County (RTP South); and proposed Jordan Lake Water Supply Storage Allocations were held on March 5, 2001 at 5:00 p.m. at 512 N. Salisbury Street, Ground Floor Hearing Room, Archdale Building, Raleigh and on March 6, 2001 at 5:00 p.m. at Shaw Auditorium, Fayetteville State University, Fayetteville. A total of 57 oral comments and 71 written comments were received during the comment period. Division of Water Resources staff responses to the comments are included in the 'Response to Comments Received' section of this report.

As a result of the comments received during the public process and requirements set forth in the North Carolina General Statutes, the Hearing recommends that the Environmental Management Commission adopt the following:

1) The Jordan Lake Water Supply Storage Allocation recommendations are:
   a) No increase in Chatham County's existing allocation of 6 mgd;
   b) No allocation for Harnett County;
   c) Allocate an additional 5.0 mgd to the Towns of Cary and Apex for a total allocation of 21.0 mgd;
   d) Allocation 2.5 mgd to the Town of Morrisville;
   e) Allocate 1.5 mgd to Wake County/Research Triangle Park.
2) Modify the Jordan Lake water supply storage contracts by adding the following provisions:
   a) All allocation holders will be required to enact ordinances similar to the Neuse River buffer rules for the parts of their jurisdictions that are within the Jordan Lake watershed for protection of the lake
   b) All allocation holders that have access facilities will be required to provide access at their existing intake site to other Jordan Lake water allocation holders that need access to utilize their allocation to the extent that this additional use is determined to be feasible by the Division of Water Resources. The cost associated with getting any necessary permits, engineering design, and associated construction costs are the responsibility of the allocation holder(s) requesting the access.
3) Grant the Towns of Cary, Apex, and Morrisville and Wake County an increase in the their interbasin transfer certificate from 16 mgd to 24 mgd with the conditions as written in the following attached certificate.

E. Leo Green
Environmental Management Commission

David M. Moreau
Environmental Management Commission

Edwin S. Melvin
Environmental Management Commission

ENVIRONMENTAL MANAGEMENT COMMISSION

Certificate Authorizing the Towns of Cary, Apex, and Morrisville and Wake County
to Increase Their Transfer of Water
from the Haw River basin to the Neuse River basin
under the Provisions of G.S. 143-215.22I

On September 13, 2000, the Towns of Cary, Apex, and Morrisville and Wake County (for RTP South) petitioned the Environmental Management Commission (EMC) for an increase in the existing Cary/Apex interbasin transfer certificate from 16.0 to 27.0 million gallons per day, incidental to their proposed increased withdrawals from Jordan Lake and discharge of treated wastewater to tributaries of the Neuse River. Public hearings on the proposed transfer increase were held in Raleigh on March 5, 2001 and in Fayetteville on March 6, 2001 pursuant to G.S. 143-215.22I. A hearing officer's report was prepared in April of 2001 and mailed to members of the EMC on May 2, 2001.

The EMC considered the petitioner's request at its regular meeting on May 10, 2001. According to G.S. 143-215.22I (g), the EMC shall issue a transfer certificate only if the benefits of the proposed transfer outweigh the detriments of the proposed transfer, and the detriments have been or will be mitigated to a reasonable degree.

The EMC may grant the petition in whole or in part, or deny it, and may require mitigation measures to minimize detrimental effects. In making this determination, the EMC shall specifically consider:

1. The necessity, reasonableness, and beneficial effects of the transfer
2. Detrimental effects on the source river basin
2a. The cumulative effect on the source major river basin of any water transfer or consumptive water use
3. Detrimental effects on the receiving basin
4. Reasonable alternatives to the proposed transfer
5. Use of impounded storage
6. Purposes and water storage allocations in a US Army Corps of Engineers multi-purpose reservoir
7. Any other facts or circumstances necessary to carry out the law

In addition, the certificate may require a drought management plan. The plan will describe the actions a certificate holder will take to protect the source basin during drought conditions.

The members of the EMC reviewed and considered the complete record which included the hearing officer's report, staff recommendations, the applicant's petition, the Final Environmental Impact Statement, the public comments relating to the proposed interbasin transfer, and all of the criteria specified above. Based on that record, the Commission makes the following findings of fact.

Finding of Fact

THE COMMISSION FINDS:

(1) **Necessity, Reasonableness, and Benefits of the Transfer**

North Carolina has been enjoying significant population and job growth over the last decade. Growth in the Triangle is centered on the Research Triangle Park and the surrounding communities of Durham, Raleigh, Cary, Apex, and Morrisville. The proposed transfer of water will provide water to three of these fast growing communities in the Triangle. Their current combined population is about 122,900 with a maximum day water use of 23.4 million gallons per day (mgd) and projected to grow to a population of 325,400 with maximum day water use of 53.6 mgd by 2030. This water will also support economic development and job creation in the portion of RTP located in Wake County as well as the workers who are attracted to the Triangle region to fill these jobs. Raleigh and Durham each have dedicated sources of water that are adequate to meet current needs but are inadequate in their current state of development to meet long term demands for these communities. Raleigh and Durham do not have enough water to supply Cary, Apex, and Morrisville to meet their long-term needs.

Cary and Apex are located on the eastern boundary of the Jordan Lake Project and have invested in development of the only water supply intake on the lake, with approval of the state, sized to allow the withdrawal of 50 mgd of water. The Cary-Apex water treatment plant provides water to Cary, Apex, Morrisville, RTP, and Raleigh-Durham International Airport. The Chatham County water system also receives raw water through this intake to supply water to the eastern part of the county.

The state permitted the development of a raw water intake on the eastern shore of Jordan Lake to supply surrounding communities from this regional water supply. Cary and Apex received permission to use Jordan Lake water to meet their community needs and support economic development in and around RTP. They received permission to transfer 16 mgd of water from the Haw River Basin to the Neuse River Basin. This amount is no longer adequate to meet the communities' water demands. Durham and Raleigh have assisted the communities receiving water from the Cary-Apex water system by providing water to the system but can not continue because they need the water to meet demands within their own service areas.

These petitioners have made a request to transfer enough water to meet their future needs. The petitioners' combined 2030 projected transfer amount is 24.1 mgd plus an additional 2.9 mgd contingency amount for a total requested amount of 27 mgd. The projected 2009 transfer amount is 27 mgd, which will drop to 17.9 mgd in 2010 when the regional water reclamation facility becomes operational. The 24.1 mgd transfer amount assumes that the Towns of Cary and Apex will construct a regional water reclamation facility that would discharge to the Cape Fear River Basin by 2010, therefore limiting the need for additional future transfers.

The transfer of water will benefit the Research Triangle Region by guaranteeing water to support the economic development and associated population growth that have been encouraged by the establishment of the Research Triangle Park.

Based on the record the Commission finds the transfer is necessary to supply water to the growing communities of this area. Water from the source basin is readily available and within a short distance from the service area. The applicants have reasonably mitigated this need by returning treated wastewater to the source basin by December 31, 2009, and therefore the transfer is a reasonable allocation to these communities. The transfer will greatly benefit these communities by providing raw water of high quality for residential and industrial purposes.

The Commission finds that the appropriate transfer amount should not include a contingency factor, therefore 24 mgd is the appropriate necessary and reasonable transfer amount.

(2) **Detrimental Effects on the Source Basin**

In order to assess the direct impacts of the proposed transfer on the source basin, the petitioners participated in the development of a Cape Fear River Basin Hydrologic Model that was developed for water supply planning, using Moffat & Nichol and the Danish Hydraulic Institute as contractors. The model considers all major water withdrawals (water supply and irrigation) and discharges within the Cape Fear River basin, including those into and out of Jordan Lake. As required under G.S. 143-215.22I(f)(2), local water supply plans were considered in developing the model. In addition, industrial and agricultural withdrawals were model inputs. Model runs for seven alternatives were evaluated for present and 2030 water demands. Impacts were assessed for the Jordan Lake watershed and downstream to Lock and Dam Number 1, including impacts at Fayetteville.

The source for all of the petitioners' water is the water supply pool of Jordan Lake. The water supply pool is operated entirely separate from the low flow augmentation pool. The low flow augmentation pool, not the water supply pool, is dedicated to maintaining flows in the Cape Fear River downstream of Jordan Lake dam. Therefore, the petitioners' water supply withdrawals will have no significant impact on the downstream flows as demonstrated with the model. A comparison of the alternatives showed that the proposed transfer will not have any significant impact on Jordan Lake surface water elevation, minimum releases from the dam, water quality pool levels, the target flows at Lillington, flows at Fayetteville, and water quality pool levels compared to the other alternatives and to present conditions (see Appendix B in the EIS). As shown in the following figure (Figure 14 from the EIS) there are no significant differences in flows at Fayetteville.

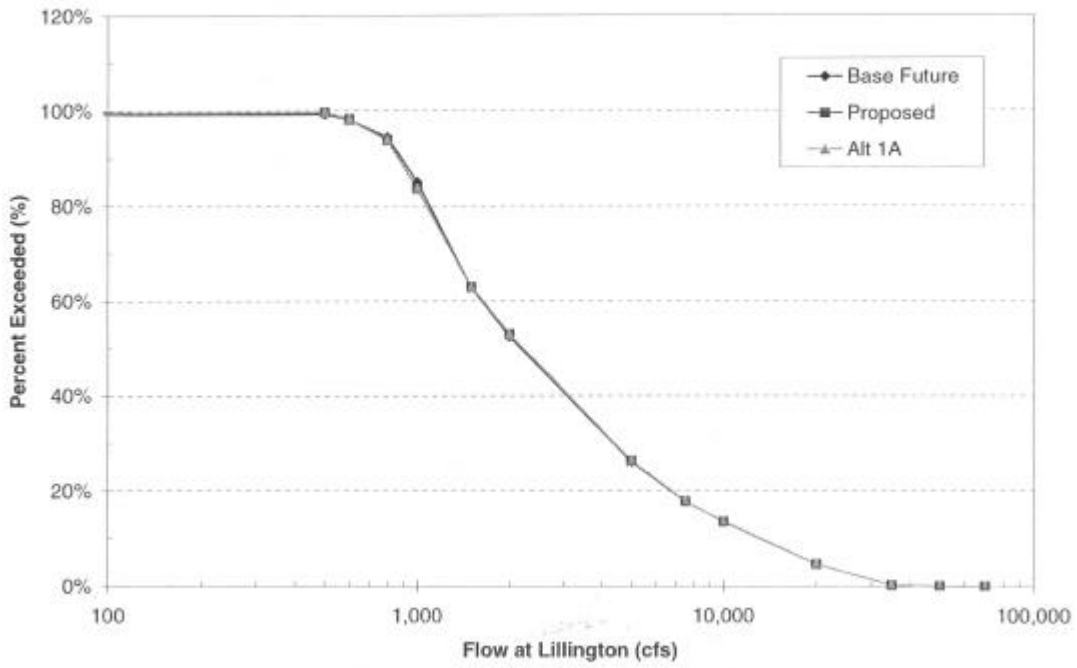
Approximately two-thirds of Jordan Lake's conservation storage is dedicated to maintaining minimum flows in the Cape Fear River, compared with the one-third dedicated to water supply. Downstream users benefit from this low-flow augmentation pool without requiring a Jordan Lake allocation and at no cost. Upstream users do not benefit from the low flow augmentation pool. The historic low flow of the Cape Fear River at Lillington was 75 cfs prior to regulation by Jordan Dam. The target flow at Lillington is now 600 cfs, supported by the low flow augmentation pool of Jordan Lake. This target flow is 8 times as great as the historic low flow, and equivalent to 388 mgd. Even allowing for instream flow requirements for habitat, an enormous amount of water is available to downstream users. Based on the 1997 Local Water Supply Plans the projected water supply demand for the middle Cape Fear River (Jordan Lake to Fayetteville) is 93.5 mgd. The target flow of 388 mgd is over 4 times as great as the projected municipal water supply demand.

Fayetteville's water supply withdrawals would not be affected by the proposed transfer or Jordan Lake allocations. Fayetteville's allowable withdrawals will only be affected by new or increased withdrawals between Lillington and Fayetteville and by water quality issues in the reach of the Cape Fear River below their water supply intake and wastewater discharge. Because wastewater assimilation is directly related to flows, no significant changes in wastewater assimilation are expected from the proposed action. Similarly, no impacts were identified for hydropower generation, navigation or recreation.

Secondary effects from growth such as increased runoff, erosion, and loss of open space are expected to have negative impacts on water quality and fish and wildlife habitat. These impacts will be mitigated to a reasonable degree through existing regulations and programs, as well as new initiatives. The most notable of these initiatives are Cary's Stream Buffer Ordinance and Open Space and Historic Resources Plan

The Commission finds that it is reasonable to minimize the impacts of secondary effects caused by growth in the Towns of Cary, Apex and Morrisville and Wake County through the implementation of ordinances similar to the Neuse River Buffer rules for the parts of their jurisdictions that are within the Jordan Lake watershed for protection of the lake.

Figure 14. Cumulative Impacts of Alternatives on Cape Fear River Flows at Fayetteville



(2a) **Cumulative effect on Source Basin of any transfers or consumptive water use projected in local water supply plans**

Local water supply plan data, including current and projected water use and water transfers, were used to develop the input data sets for the Cape Fear River Basin Model. The model was used to evaluate current and future scenarios of basin water use.

Based on the modeling discussed in Finding No. 2, the Commission finds the cumulative effects of this and other future water transfers or consumptive uses as described in G.S. §143-215.22I(f)(2a) will be insignificant.

(3) **Detrimental Effects on the Receiving Basin**

The proposed transfer will utilize existing permitted wastewater discharges to the Neuse River basin; therefore no plant expansions will be required. Previous studies for the existing plants indicated no significant direct impacts to water quality or wastewater assimilation on the receiving streams. Because stream flows in the Neuse River basin are not expected to change significantly due to the proposal, no impacts are likely to occur to navigation, recreation, or flooding. According to 1998 Neuse River Basinwide Water Quality Plan: "Over 80% of the freshwater streams in the basin that have been monitored are either impaired or rated as fully supporting but threatened. …. A major cause of this impairment, especially in the upper basin, is population growth and urbanization, and every indication is that this strong growth will continue for decades to come. In addition to the tremendous challenges ahead in balancing the growth in the basin with the restoration of its waters, it is also clear that if we are to prevent more waters from

becoming impaired in the future, and if the nutrient-related problems in the lower basin and lakes are to be solved, it can no longer be business as usual in the Neuse."

Based on the record the Commission finds the transfer will support continued population growth and the attendant impacts of that growth. These impacts include effects on wastewater assimilation, fish and wildlife habitat, and water quality similar to the secondary growth effects described in Finding No. 2, above. However, these impacts will be minimal. Reasonable mitigation is prohibiting additional wastewater treatment facilities in the Neuse River basin as a result of this transfer and to limit the applicants' existing Neuse River wastewater treatment facilities to their current permitted levels.

(4) **Alternatives to Proposed Transfer**

The petitioners evaluated six alternatives to the proposed transfer. The alternatives considered include:

Alternative 1A: No IBT Increase and No Additional Jordan Lake Allocations
- No increase in the existing 16-mgd (average day basis) Jordan Lake allocation
- No increase in the existing IBT certificate (16 mgd on a maximum day basis)
- No construction of a regional treatment and water reclamation facility
- No other additional discharges to the source basin, in western Wake County

Alternative 1B: No IBT Increase with Additional Jordan Lake Allocations
- Increases in Jordan Lake water supply allocations
- No increase in existing IBT certificate (16 mgd on maximum day basis)

Alternative 2: Obtain Water From the Neuse River Basin
- No increase in existing IBT certificate (16 mgd)
- Regional Cape Fear WWTP
- Purchase of finished water from the Neuse River basin

Alternative 3: Increase Wastewater Discharges to Cape Fear River Basin
- No increase in existing IBT certificate (16 mgd)
- Additional Jordan Lake water supply allocations
- Relocation of existing Apex and Cary WWTP discharges to Cape Fear basin
- Regional Cape Fear WWTP

Alternative 4: Merger of Water and Sewer Utility Operations of Town of Cary and City of Durham
- Institutional arrangement offsets existing Durham transfer (Neuse to Haw)
- No increase in existing IBT certificate (16 mgd)
- Additional Jordan Lake water supply allocations
- Regional Cape Fear WWTP

Alternative 5: No Regional Treatment and Water Reclamation Facility
- Discharge through existing WWTPs in Neuse River basin
- Additional Jordan Lake water supply allocations
- 45 mgd IBT

The table on the following page compares the proposed transfer with the six alternatives. Factors used in the comparison of alternatives include:

- required increase in interbasin transfer
- direct and indirect impacts
- ability to meet future water needs
- capital cost
- construction of a regional water reclamation facility
- outside water purchases
- expansion of Cary/Apex water treatment plant

Except for Alternative 1A, which does not serve the projected water supply needs of the petitioners, the alternatives will not substantially reduce the expected impacts of the proposed transfer increase. The only significant impacts associated with the proposed transfer are secondary impacts associated with growth. All of the alternatives will have essentially the same growth related impacts due to high rates of regional growth.

Based on these comparisons, the Commission finds that the proposed alternative is the most feasible means of meeting the petitioners' long-term water supply needs while minimizing overall impacts and cost.

Summary of Alternatives

Item	Alternatives						
	Proposed Action	**1A No Action**	**1B No Action**	**2 Water From Neuse**	**3 Move WWTP Discharges**	**4 Merger with Durham**	**5 No Regional WWTP**
Increase in IBT (mgd)	11	0	0	0	0	0	29
Significant Direct Impacts	No	No	No	Yes	Yes	No	Yes
Significant Secondary Impacts	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Additional Jordan Lake Allocations	Yes	No	Yes	Yes	Yes	Yes	Yes
2030 MDD Water Demands (mgd)	53.6	19	43.8	53.6	53.6	53.6	53.6
Maximum IBT (mgd)	25[1]	16	16	16	16	19 (Neuse to Haw)	45
Total Capital Cost (million)	$225.7	$11.1	$206.6	$206.9	$279	$248	$84.0
Water Reuse	3.8 mgd	3.8 mgd	3.8 mgd	3.8 mgd	3.8 mgd	3.8 mgd	3.8 mgd
Construct Regional WWTP (2030 max month capacity)	18.0 mgd	No	18.0 mgd	18.0 mgd	18.0 mgd	18.0 mgd	No
Finished Water Purchases (2030 max day demand)	No	No	No	9.2 mgd	No	No	No
Expand Cary/Apex WTP (capacity beyond 40 mgd, max day basis)	20.0 mgd	No	9.0 mgd	9.0 mgd	20.0 mgd	20.0 mgd	20.0 mgd

Note: [1]Projected IBT in 2030 is approximately 25 mgd. The requested amount of 27 mgd includes some contingency

(5) **Impoundment Storage**

This criterion is not applicable, as the petitioners do not have an impoundment.

(6) **Jordan Lake Purposes/Water Supply**

The source of the water for this transfer is Jordan Lake, which is a multipurpose reservoir constructed by the United States Army Corps of Engineers. One of the federally authorized purposes of this reservoir is water supply. Water is allocated from this reservoir intermittently. The applicants for this transfer plan to secure an allocation prior to initiating this transfer.

The Commission finds that the transfer and allocations are consistent with the federally authorized project purposes of Jordan Lake. Also, the Commission finds that to be consistent with the use of Jordan Lake as a regional water supply Cary/Apex are required to provide access through their intake with other Jordan Lake Water Allocation Holders that need access to their allocation. The cost associated with getting any necessary permits, engineering design, and associated construction costs are not the responsibility of Cary/Apex.

(7) **Other Considerations**

The Commission finds that to protect the source basin during drought conditions, to mitigate the future need for allocations of the limited resources of this basin, and as authorized by G.S. § 143-215.22I(h), a drought management plan is appropriate. The plan should describe the actions that the Towns of Cary, Apex, Morrisville and Wake County (for RTP South) will take to protect the Cape Fear River Basin during drought conditions.

The Commission notes that future developments may prove the projections and predictions in the EIS to be incorrect and new information may become available that shows that there are substantial environmental impacts associated with this transfer. Therefore, to protect water quality and availability and associated benefits, modification of the terms and conditions of the certificate may be necessary at a later date.

Decision

Based on the hearing record and the recommendation of the hearing officers, the Commission, on May 10, 2001, by duly made motions concludes that by a preponderance of the evidence based upon the Findings of Fact stated above that (1) the benefits of the proposed transfer outweigh the detriments of the proposed transfer, and (2) the detriments of the proposed transfer will be mitigated to a reasonable degree. Therefore, and by duly made motions, the Commission grants the petition of the Towns of Cary, Apex, Morrisville, and Wake County (with modification) to increase their transfer of water from the Haw River basin to the Neuse River basin. The permitted transfer amount shall be 24 million gallons per day (mgd) on a maximum day basis from the effective date. This certificate supercedes any other transfer certificates held by the Towns of Cary and Apex under G.S. § 143-215.22I and any other laws. This certificate is effective immediately. The certificate is subject to the following conditions, imposed under the authority of G.S. § 143-215.22I:

1. Facilities to return reclaimed water to the Cape Fear River basin shall be operational and returning water to the basin by January 1, 2010. If the holders of this certificate fail to have facilities operational and returning reclaimed water to the Cape Fear River basin operational by January 1, 2010, that will result in the termination of this certificate.

2. The holders of this certificate shall not increase their Neuse River basin wastewater discharge above their current permitted capacities as a result of this transfer.

3. The holders of this certificate shall manage the authorized transfer amount in such a way that none of the individual petitioners (Towns of Cary, Apex, Morrisville, and Wake County (for RTP South)) are prevented from fully using their respective Jordan Lake water supply allocations.

4. If the holders of this certificate discontinue their cooperative service agreement with each other, the maximum day permitted transfer will be adjusted by the Division of Water Resources based on the 2030 projected transfer of each applicant at that time.

5. Prior to transferring water under this certificate, The holders of this certificate shall work with the Division of Water Resources to develop a compliance and monitoring plan subject to approval by the Division. The plan shall include methodologies and reporting schedules for reporting the following information: maximum daily transfer amounts, compliance with permit conditions, progress on mitigation measures, drought management, and reporting. A copy of the approved plan shall be kept on file with the Division for public inspection. The Division of Water Resources shall have the authority to make modifications to the compliance and monitoring plan as necessary to assess compliance with the certificate.

6. If either the EIS is found at a later date to be incorrect or new information becomes available such that the environmental impacts associated with this transfer are substantially different from those projected impacts that formed the basis for the above Findings of Fact and this certificate, the Commission may reopen the certificate to adjust the existing conditions or require new conditions to ensure that the detriments continue to be mitigated to a reasonable mitigate degree.

7. The Towns of Cary and Apex will be required to provide access at their existing intake site to other Jordan Lake water allocation holders that need access to utilize their allocation to the extent that this additional use is determined to be feasible by the Division of Water Resources. The cost associated with getting any necessary permits, engineering design, and associated construction costs are the responsibility of the allocation holder(s) requesting the access and not Cary and Apex.

8. Prior to transferring water under this certificate, the Towns of Cary, Apex, and Morrisville, and Wake County (for RTP South) shall develop individual water shortage response plans subject to approval by the Division. The holders of this certificate shall develop a drought management plan for the interbasin transfer, incorporating the individual water shortage response plans and subject to approval by the Division. The plans shall tie specific water conservation actions to the percent storage remaining in each of the petitioners' Jordan Lake water supply accounts. A copy of the approved plans shall be kept on file with the Division for public inspection. The Division of Water Resources shall have the authority to approve modifications to the drought management plan as necessary.

9. Within six months from the effective date of this certificate, the Towns of Cary, Apex and Morrisville and Wake County (for RTP South) shall enact ordinances similar to or more protective than the Neuse River buffer rules (15 A NCAC 2B.0233) for the parts of their jurisdictions that are within the Jordan Lake watershed. These buffer requirements shall be subject to approval by the Division of Water Resources after consultation with the Division of Water Quality and shall be adopted as local ordinances.

NOTICE: The holders of this certificate are jointly and severally responsible for compliance with the terms, conditions and requirements stated herein, and are therefore jointly and severally liable for all penalties assessed to enforce such terms, conditions and requirements as provided in G.S. §143-215.6A.

This is the _____ day of _____, 2001.

_____
David H. Moreau, Chairman

Part II
Summary Table of Public Comments, and Staff Responses to Comments Received

Jordan Lake Water Supply Storage Allocations – Summary Table of Public Comments, and Key to Staff Responses

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
Louise Alabaster Private Citizen	Letter – March 8, 2001	• Vote against Cary, Apex and Raleigh taking more water from the Cape Fear River.	4H
Rose Alfred	Verbal Statement (*) - March 6, 2001 Public Hearing	• * Had problems with the recorder and did not receive the requested written statement.	
Linda Lee Allan Fayetteville Area Economic Development Corporation	Verbal Statement with written copy of statement - March 6, 2001	• Concerned about the effect that the decision will have on the future assimilative capacity of the Cape Fear River. • If there is any doubt about negative impacts of this action to Fayetteville, err on the side of caution to protect Fayetteville. • The Triangle created their problem and has the means to solve it themselves. They shouldn't look to poorer downstream neighbors for relief.	1H, 1G, 4H
Lorretta A. Armstrong Private Citizen	Letter – March 8, 2001	• Deny the permit. • Cary should be required to return the water, regardless of the cost. • Further studies by more impartial people should be conducted.	2B, 4F, 4H
Tal Baggett Cumberland County Commissioner	Verbal Statement with written copy of Statement - March 6, 2001	• Allowing Cary to transfer water out of the basin may deny Cumberland County the water it needs in the future. • Deny the permit.	1E, 1G, 4H
John Bantsolas Private Citizen	Attendee – March 6, 2001 Public Hearing, Letter – March 7, 2001	• Deny the permit. • Do not allow the petitioners to start taking additional water until they build a plant to return water to the Cape Fear Basin.	2B, 4H
Martin Beach Pender County Commissioner	Letter – February 26, 2001	• The negative impact on water quality to the Cape Fear River outweighs the benefits of an interbasin transfer. • The water quality issues have not been sufficiently studied. • The EIS deals with water quantity and not water quality. • The EIS does not include an accurate historical low-flow impact assessment. • The EIS does not address critical water supply uncertainties faced by downstream users. • The EIS does not objectively evaluate irrigation withdrawals.	1A, 1B, 1E, 1H, 1J, 4H
Robert Brickhouse Private Citizen	Letter – March 6, 2001	• Require petitioners to return the water to the Cape Fear Basin, regardless of cost. • This transfer seems all right if it balances the existing exchange of water by	2B. 4H

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
		Durham from the Neuse to the Cape Fear.	
Don Broadwell, Sr.	Verbal Statement (*) - March 6, 2001 Public Hearing	• *Had problems with the recorder and did receive the requested written statement. • Reasonable to maintain natural flow of river. • Water should be returned to the Cape Fear. Cost is what is preventing this return and this is not a valid reason. • EMC need to consider all such interbasin transfers and not permit them unless they are going to be returned at some point in the future.	1E, 2B, 4B, 4G, 4H
Hugh Caldwell Director of Public Utilities City of Wilmington	Attendee – March 5, 2001 Public Hearing, Letter – March 7, 2001	• EIS did not address the water quality impacts and assimilative capacity of the IBT on the Lower Cape Fear Basin where some stream segments have been placed on the 303d list. • No specific plans for a future reclamation facility discharging tot he Cape Fear River Basin, a water supply issue. • EIS does not consider the effect of the loss to the cape Fear River Basin due to Durham application for allocation from Jordan Lake.	1E, 1H, 1O
Robert Glenn Capps Private Citizen	Letter – March 8, 2001	• Cary should return the water to the Cape Fear River Basin.	2B, 4H
Jose Cardona	Verbal Statement (*) - March 6, 2001 Public Hearing	• *Had problems with the recorder and did not receive the requested written statement.	
Elaine Chiosso Executive Director Haw River Assembly	Letter – March 9, 2001	• Opposed in principal to interbasin transfers. • The transfer should be temporary. • Set a date for the petitioners to build a regional WWTP that returns the water to the Cape Fear River. • Require 100 ft buffers on all streams within the petitioners' jurisdictions, especially the Jordan Lake watershed. • Require stronger and, ultimately, regional stormwater controls; the same as required in the Neuse River Basin, at a minimum. • Petitioners should show the EMC how they will leave at least 25% of their remaining undeveloped land undeveloped. • The EMC should use DENR's recently adopted "smart growth" principles as a guide and ask the petitioners to do the same. • Petitioners should be required to create or strengthen their water conservation	1I, 2C, 3A, 4A, 4G, 4H

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
		plans.	
Bob Cogswell City Attorney Fayetteville	Verbal Statement (*) - March 6, 2001 Public Hearing	• *Had problems with the recorder and did receive the requested written statement. • Deny the permit.	4H
Margaret Cogswell Private Citizen	Letter – Received March 12, 2001	• Require Cary, Apex and Raleigh to return the water to the Cape Fear River Basin. • Do not grant any additional Jordan Lake allocations to the petitioners until they are prepared to return the water to the Cape Fear River Basin.	2B
William B. Coleman, Jr. Town Manager Cary	Verbal Statement - March 5, 2001 Public Hearing, Verbal Statement with written copy of statement - March 6, 2001 Letter to support verbal statement - (dated) March 6, 2001 Letter – February 27, 2001, Letter – March 9, 2001	• Grant the permit based on the petition, without revision. • The petition meets all the statutory requirements. • The petitioners documented their need for water, caused by proximity to Research Triangle Park. • The petition protects the long-term needs of downstream communities. • Petitioners have made significant efforts to conserve water and mitigate secondary impacts due to growth. • Petitioners have made significant compromises in their petition, such as committing to build a water reclamation facility to return water to the Cape Fear River, reducing their requested interbasin transfer to 27 MGD. • The EIS indicated there are no direct impacts on downstream flows from the proposed interbasin transfer. • The hydrologic model used to assess impacts was developed with full stakeholder participation from the Cape Fear River Basin. • The EIS is not critically flawed or narrowly focused. The EIS adequately addressed all impacts of concern. • The Jordan Lake low flow augmentation pool is managed separately from the water supply pool, so the allocation and interbasin transfer have no impact on the ability of the lake's ability to meet the downstream flow target. • The proposed transfer will tend to balance net transfers from the Neuse to the Cape Fear River Basin. • The least expensive alternative would have been to request an interbasin transfer of 45 MGD and not build a regional WWTP to return water to the Cape Fear River. The EIS showed no direct impacts from this alternative, and would save the petitioners $142 million.	1A, 1B, 1C, 1D, 1F, 1H, 1I, 1J, 1K, 1O, 1M, 2A, 2B, 2C, 3A, 3B, 4C, 4F, 4G, 4H

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
		• The petitioners disagree with the proposed condition that the interbasin transfer be reduced from 27 MGD to 16 MGD after 2010; equivalent to denying the permit. • The additional cost of denying the permit would be $55 to 90 million in capital costs, not including operation and maintenance costs. It would also result in under-utilization of existing wastewater facilities. • Reducing the permitted interbasin transfer to 16 MGD after 2010 would require a minimum $55 million capital investment by 2010, without any corresponding benefit to the environment or to downstream communities. • By not requesting an interbasin transfer of 45 MGD, the petitioners have committed to minimize the interbasin transfer by returning water to the Cape Fear River Basin. • There is no rational basis for requesting that the proposed action in the EIS be redefined. • There is no technical basis for requiring a reversion of the interbasin transfer to 16 MGD after completion of a water reclamation facility in the Cape Fear River Basin. • There is no basis for conditioning future Jordan Lake allocations to the petitioners on completion of a Cape Fear WWTP. • The only reason for ignoring existing interbasin transfers is to maximize water in the Cape Fear River Basin, rather than balance naturally occurring flows. • The EIS showed no impact of the interbasin transfer on the Jordan Lake low flow augmentation pool, or its ability to meet the low flow target at Lillington. • There is no evidence that the US Congress intended that the Jordan Lake water supply pool should augment downstream flows. • The expert consulted for the development of the hydrologic model indicated that crops raised in the future could require more irrigation water, but that the total acreage irrigated will likely decrease substantially. Therefore, alternative-modeling scenarios assumed that overall irrigation demands would remain the same. • Changing the irrigation assumptions for the hydrologic model will not change the relative difference between modeling scenarios; therefore the conclusions	

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		would remain the same. • The temporary impact on flows while filling the Randleman Lake has no impact on the long-term ability of the Jordan Lake low flow augmentation pool to meet target flows, and is not related to the interbasin transfer. • Information in the Randleman Lake final EIS indicates that the lake will augment low flows and slightly decrease average flows. • The low flows predicted in the EIS are conservatively low, by not including Randleman Lake in the modeling. • Fayetteville PWC and their consultants, and numerous other stakeholders were involved with every step of the model development and application process. • The model was developed based on the US Army Corps of Engineers' guidelines for releasing water from Jordan Lake, and the Corps did not follow these guidelines in 1998. • The goal of the low flow augmentation pool is not to maintain a flow of 600 cfs at Lillington, but to meet water quality standards. • A DWR analysis of historic flows and model output indicates that the model predicts low and average flows well in the Cape Fear River mainstem. • The model is always perfect in meeting the 600 cfs target at Lillington, but the COE cannot manage the reservoir as accurately. • The only time that Jordan Lake failed to meet the target at Lillington because of insufficient storage in the low flow augmentation pool was in the Fall of 1998. • The petitioners' and Fayetteville PWC's applications were reviewed in the same context during the second round of Jordan Lake allocations. • While there is some uncertainty over the long-term yield available from the Cape Fear River for Fayetteville, this yield is somewhere in the range of 60 to 90 MGD. • The yields from the Cape Fear River are available due to releases from the Jordan Lake low flow augmentation pool, without allocation from the water supply pool. Therefore, the interbasin transfer has no impact. • Many of the comments opposing the interbasin transfer were based on misinformation and were not factual. • The EMC must base their interbasin transfer decision only on accurate facts	

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
		and true statements. • Upstream communities also have rights to water from the Cape Fear River. • The water supply capacity was added to Jordan Lake specifically to store water for communities in proximity to the lake. • Jordan Lake's capacity to store water to augment low flows in the Cape Fear River, enough to supply 200 MGD, is not available for use by upstream users. • Cary and Apex pay the state for the use of their Jordan Lake water supply pool allocation, but downstream communities do not pay for the benefits they receive from the low flow augmentation pool or the flood control pool. • A major concern of downstream communities is not that there will be less water for their use, but that there will be less water for wastewater assimilation after their use. • Before asking upstream users to spend millions to increase, not just maintain, the flows available to dilute their wastewater, downstream users should reduce follow the petitioners' leads and use conservation measures and reclaimed water to reduce demands and discharges. • It is standard practice for applicants and/or their consultants to prepare the environmental documentation related to water and sewer projects. • The EIS and model were developed under the direction of DWR. • The Wildlife Resources Commission stated that Mr. Pechmann's comments due not represent the WRC. • The WRC's comments on the EIS included that they concurred the interbasin transfer has little direct impact and that significant impacts are related to development. • The WRC made specific recommendations for mitigating secondary impacts due to growth, and mitigation efforts are being implemented. • Throughout the EIS scoping process, there have been no objections to DWR's recommended Jordan Lake allocations to the petitioners. The expanded water treatment plant will be used whether or not the interbasin transfer is granted. • The WRC, Public Water Supply, and DWR agreed that potential interbasin transfer impacts would be addressed in the interbasin transfer EIS. • Petitioners have agreed to a permit condition requiring a WWTP be built in the Cape Fear River Basin by 2010.	

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
		• The need for the interbasin transfer is primarily based on the fact that the petitioners' service areas straddle the boundary between the Cape Fear and Neuse River Basins. • The petitioners' interbasin transfer request is based on a planning period through 2030. Cary's long range water supply plan indicates that the 27 MGD interbasin transfer will be sufficient through 2050. • The Research Triangle Park is the primary stimulus of growth in the Cary/Apex/Morrisville area.	
David Cooke Wake County Manager	Verbal Statement (*) with written copy of statement – March 6, 2001 Public Hearing	• *Had problems with the recorder and did receive the requested written statement. • Grant the permit. • The requested interbasin transfer is consistent with Wake County's Water & Sewer Master Plan. • The EIS clearly illustrates there are no direct impacts to the Neuse and Cape Fear River Basins. • Wake County is developing a Watershed Management Plan to protect the environment.	1B, 1E, 1H, 4G, 4H
Skipper Crow Private Citizen	Letter – March 13, 2001	• Cary & Apex should bear the cost of returning the water to the Cape Fear River Basin. • Cary & Apex generated their own problems by not adequately planning for the growth over the past decade.	1G, 2B, 4A, 4H
Jackie L. Danker Private Citizen	Letter – March 8, 2001	• Deny the interbasin transfer until the petitioners have a working plant to return our water to the Cape Fear River Basin.	2B
Colonel Addison D. Davis, IV Fort Bragg Garrison Commander	Verbal Statement with written copy of statement - March 6, 2001	• Concerned that the proposed interbasin transfer might reduce the availability of water for Fort Bragg, jeopardizing training and deployment.	1E, 1F, 1M
Mayor Edwin Deaver Town of Hope Mills	Verbal Statement with written copy of statement - March 6, 2001	• Make the increased interbasin transfer temporary. • Before making any future allocations to the applicants, require construction of a WWTP that will return the entire increased transfer amount to the Cape Fear River Basin. • If the allocations are approved as recommended, less than half of the storage available for use outside of the lake's watershed will be available for	1C, 1I, 1J, 1K, 2B, 4H

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
		downstream users. • The need for water for irrigation has not been adequately evaluated. • We do not know what effects Randleman Dam will have on downstream users. • We have no confirmation of the safe yield of Jordan Lake's water supply storage.	
Margaret Dickson	Verbal Statement (*) - March 6, 2001 Public Hearing	• *Called and hope to get a follow up written statement.	
Willie J. Dorman Private Citizen	Letter – March 10, 2001	• Deny the permit.	4H
Robert Easterling Chariman Lee County Environmental Affairs Board	Letter – March 2, 2001	• Concerned that IBT reduces flow down the river. Precedent for future transfers. • Concern over long-range effects. Long range water supply planning is needed through the basin. • IBT's should be reduced or eliminated by 2010. • Buffer rules should be enacted. • Require a long-range plan for water distribution along the Cape Fear River Basin.	1E, 1F, 4G, 4H
Reid Gantt Private Citizen	Attendee – March 6, 2001 Public Hearing, Letter – March 8, 2001	• Require petitioners to return all water to the Cape Fear River. • Concerned that the interbasin transfer will result in lower downstream water levels and have a negative impact on boating.	1E, 2B
Robin Hayes Garcia Private Citizen	Letter – Received March 12, 2001	• Require petitioners to return all water to the Cape Fear River.	2B
Barbara Garrison Private Citizen	Letter – March 7, 2001	• Require petitioners to return all water to the Cape Fear River. • Do not grant the additional Jordan Lake allocations until the petitioners are held to the above condition.	2B
Robert D. Garrison Private Citizen	Letter - March 7, 2001	• Require petitioners to return all water to the Cape Fear River. • Do not grant the additional Jordan Lake allocations until the petitioners are held to the above condition.	2B
Winifred McBryde Grannis	Letter – March 8, 2001	• Require petitioners to return all water to the Cape Fear River.	2B

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
Private Citizen			
Lenox D. Harrelson Private Citizen	Letter – March 7, 2001	• Require petitioners to return all water to the Cape Fear River.	2B
Clinton Harris Private Citizen	Verbal Statement (*) - March 6, 2001 Public Hearing	• *Had problems with the recorder and did receive the requested written statement. • Called and hope to get a follow up written statement.	
John Henley County Commissioner Cumberland	Verbal Statement - March 6, 2001 Public Hearing	• Require petitioners to return all water to the Cape Fear River. • Concerned about who paid for the EIS.	2B, 4F
Mayor Winston C. Hester Sanford City Council	Letter – March 7, 2001	• Allow a temporary increase in their existing interbasin transfer amount, but only until 2010. • Require the petitioners build a plant returning treated wastewater to the Cape Fear River to reduce their interbasin transfer amount to 16 MGD by 2010.	1I, 2B
Robert P. Heuts Director Lee County Economic Development Corp.	Letter – March 9, 2001	• Allow a temporary increase in their existing interbasin transfer amount, but only until 2010. • Require the petitioners build a plant returning treated wastewater to the Cape Fear River to reduce their interbasin transfer amount to 16 MGD by 2010. • Conduct a study to address all water future water demands and water available in the Cape Fear River Basin.	1I, 2B, 4B, 4G
Arjay Hinek Private Citizen	Letter – March 9, 2001	• Deny the petition. • The proposed interbasin transfer is not equitable. • The study was far too narrow to consider ecological integrity. • The models do not account for political alienation. • Further, objective research must be done.	1D, 1E, 1H, 2B, 4G
Bill Holman Executive Director Clean Water Management Trust Fund	Attendee - March 5, 2001 Public Hearing, Hard copy Attachment – January 5, 2001	• Consider the *DENR Working Principles to Encourage Smart Growth, to Avoid, Minimize and Mitigate Direct, Secondary and Cumulative Impacts, and to Protect Air, Water and Natural Resources*.	1D, 1E, 1H, 1J, 1K, 2C, 4A, 4G, 4H
Charles Holt Private Citizen	Verbal Statement with written copy of statement - March 6, 2001	• Require petitioners to return all water to the Cape Fear River. • Require the petitioners to pay for water withdrawn from the Cape Fear River Basin until the water is returned to the Basin.	2B, 4H

Jordan Lake Water Supply Storage Allocations – Summary Table of Public Comments, and Key to Staff Responses

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
Lee and Floy Holt Private Citizen	Letter – March 7, 2001	• Deny the permit.	4H
Mayor Billy D. Horne Town of Stedman	Attendee – March 5, 2001 Public Hearing, Attendee - March 6, 2001 Public Hearing, Letter – March 6, 2001 Public Hearing	• Make the increased transfer temporary. • Require petitioners to construct a new operational WWTP in the Cape Fear River Basin for return of the entire increased interbasin transfer amount, prior to any future allocations of water to the petitioners. • Downstream users face water supply uncertainties. • An accurate historical low-flow impact assessment is missing. • Irrigation withdrawals have not been objectively evaluated. • Jordan Lake safe yield is not confirmed.	1A, 1C, 1E, 1I, 1J, 2B
Charlie Horne Chatham County Manager	Letter – March 15, 2001	• Chatham County has no objection to granting the interbasin transfer permit.	4H
Mayor David L. Jones City of Wilmington	Letter – March 7, 2001	• Concerned about impacts of the increased interbasin transfer on low flow augmentation and the assimilative capacity of the Lower Cape Fear River Basin. • The EIS did not assess impacts to water quality in the Lower Cape Fear River Basin. • The conclusions in the EIS assume the construction of a water reclamation facility discharging to the Cape Fear River Basin, but there are no specific plans for this facility. • The EIS did not consider the effects of a reduction in Durham's current interbasin transfer from the Neuse to the Cape Fear River Basin.	1A, 1B, 1E, 1H, 1O, 3A
Weldon H. and Mary H. Jordan Private Citizens	Letter – March 8, 2001	• Deny the permit.	4H
Burton A. Kassel Private Citizen	Letter – March 7, 2001	• Deny the permit. • Do not grant any additional Jordan Lake allocations to the petitioners until they have a treatment plant online to return the water to the Cape Fear River Basin.	2B, 4H
Patricia Keller Private Citizen	Verbal Statement – March 6, 2001 Public	• Concerned that Cary and Apex may be taking water that should be going to downstream communities in the Cape Fear River Basin.	1G

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
	Hearing		
Betty H. Kelly Private Citizen	Letter – March 7, 2001	• Deny the permit.	4H
Mary Kiesau North Carolina Sierra Club	Verbal Statement with written copy of statement - March 5, 2001	• The increased interbasin transfer amount should be temporary. • The petitioners should be required to build a regional WWTP to return the water to the Cape Fear River Basin by a certain date, with a stiff penalty if construction is delayed. • Require a 100 ft buffer on all streams within the petitioners' jurisdictions, particularly in the Jordan Lake watershed. • Require stronger local and, ultimately, regional stormwater controls. • Western Wake County should show the EMC how they will leave the remaining 25% of undeveloped land undeveloped. • The EMC should use the DENR "smart growth" principles as a guide and ask local governments and RTP to do the same. • The local governments should be encouraged or required to create or strengthen water conservation programs.	1I, 2B, 2C, 3A, 4A, 4G, 4H
James M. Kizer South Central Chapter of Professional Engineers of North Carolina, and Homebuilders Association of Fayetteville	Verbal Statement (*) - March 6, 2001 Public Hearing	• Had problems with the recorder and did receive the requested written statement. • Require Cary to have a WWTP within 10 years returning highly treated wastewater to the Cape Fear River Basin. • Concerned that the petitioners helped to develop the hydrologic model. • Concerned that Cary was permitted to construct their intake on Lake Jordan when the interbasin transfer was still in review.	2B, 4F, 4H
Dr. Lee Maria Kleiss Fayetteville State University	Verbal Statement (*) with written copy of statement - March 6, 2001 Public Hearing	• Had problems with the recorder and did receive the requested written statement. • Require Cary to place in escrow the money necessary to build a WWTP to return the water to the Cape Fear River. • Assess an increasing fine for every additional gallon of water withdrawn, but allow half the fine to go toward building the new WWTP. • Much more longer term planning is needed.	2B, 4A, 4G, 4H
Mike Koivisto Morrisville Assistant Town Manager	Verbal Statement with written copy of statement - March 5,	• Supports the interbasin transfer due to growth. • Morrisville has implemented water restrictions to help conserve the available	2C, 4H

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
	2001, Verbal Statement - March 6, 2001 Public Hearing	water supply and has worked to educate and inform citizen on conservation issues.	
Joan Landry Private Citizen	Letter – January 30, 2001	• Town of Cary adopted a new buffer ordinance to ensure that water supply is protected. • However, Cary exempted itself from buffer rules in the process of planning 10 foot paved greenway paths along perennial streams (10 foot paved roadway within 20 feet of bachelor Branch stream).	1D, 4H
Steven Lawrence	Verbal Statement (*) - March 6, 2001 Public Hearing	• Had problems with the recorder and did not receive the requested written statement Called and hope to get a follow up written statement.	
Bobby Long Ultimate Products	Letter – March 15, 2001	• Do not pull Jordan and Falls down to levels that deteriorate fishing and recreation. • Glad there is consideration to widen buffers.	1D, 1E, 4H
Susan Lopresti Executive Director Apex Chamber of Commerce	Letter – March 5, 2001	• Supports IBT and promotes regional cooperation and prudent conservation.	1A, 1G, 4H
Marvin W. Lucas 17th House District	Verbal Statement with written copy of Statement - March 6, 2001	• Equity – Whatever amount of water that is received must be properly treated and returned to it original premise.	2B, 4H
D. MacDonald	Letter – March 8, 2001	• Equity – minimal responsible action is to allow use by mandate discharge to the same tidal basin.	2B, 4H
Marcia Mackethan	Verbal Statement (*) - March 6, 2001 Public Hearing	• Had problems with the recorder and did not receive the requested written statement.	
James H. Marple Citizens for Responsible Water Management	Attendee – March 6, 2001 Public Hearing, Letter – March 10, 2001	• Proposal to reallocate water resources must be accompanied with a full description of alternative (NEPA). • Alternatives must be identified by impartial experts and presented publicly for open discussion. • EMC needs to factor in federal responsibility for the pollution of waters of the US. • The model is not valid because of conflict of interest issue.	2A, 2B, 2E, 4A, 4G, 4H

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
		• Comprehensive watershed management plan that would maximize retention of rainfall to ensure adequate supplies of pure water from all with minimal contamination on receiving bodies. • State officials need to understand Detention/Retention/Infiltration (DRI) to realize that new development incrementally increase available water while decreasing pollution. • NC officials have failed to make conveniently available to all residents' critical information relating to management of water resources in the Cape Fear River Basin and have consistently failed to work with local official to formulate Comprehensive Plans for the Cape Fear and Neuse basin. Hence the proposed plan is arbitrary and capricious adjuration for the rights of every resident in the basin. • Due diligence was not expended in identifying and exploring alternatives to the proposed action. • EMC needs to condition its approval of the proposed transfer upon adoption of rainwater management planning and design techniques that augment Cape Fear River flows. • Investigate the potential of planning using NRCS rainwater retention methods. It is incumbent to use impartial experts such as public servants and researchers in this process. • What are alternatives? Hydrologic model is suspect due to its designers. Has state looked at all other water needs and possibilities? Is EMC fully educated? Have detention/retention/infiltration been looked at? No one is above responsibility. State officials are at fault for misrepresentation and mis-education. Rainfall catchement. • The public has not had the adequate opportunity to examine the fact relating to alternatives to the interbasin transfer of water and so cannot be expected to provide the fullest measure of meaningful comments to the EMC. • Comment period need to be extend to at least another month to allow concerned citizens to find and digest all data.	
Steve Martin University Architect Fayetteville State University	Verbal Statement - March 6, 2001 Public Hearing	• Equity- water taken from the basin needs to be returned to the basin. • The Fayetteville area is experiencing and preparing for growth.	1G, 2B, 4H

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
Robert A. Massey Jr. Fayetteville City Council	Verbal Statement - March 6, 2001 Public Hearing	• Deny permanent transfer. • If there is a pressing need to 'temporally' increase the amount of water take and if this can be done without downstream harm then it will be permissible. • A permanent increase is not permissible and one needs to look at the reasons why water taken from a basin is not returned to the basin.	1I, 2B, 4H
Mayor Milo McBryde City of Fayetteville	Verbal Statement with written copy of statement- March 6, 2001	• Deny without equity. Require that Cary and Apex build a wastewater treatment plant that will discharge back into the cape Fear River the water that is taken form it.	2B
John McCowley Southeastern Regional Economic Development Commission	Verbal Statement - March 6, 2001 Public Hearing	• Against it, but did not say deny. Equity issue of what you borrow you give back.	2B, 4H
David McDuffee Private Citizen	Letter – March 8, 2001	• Equity – Do not permit any additional transfer unless it can be returned. It's unfair.	2B, 4H
Marian McPhaul, Executive Director Lower Cape Fear River Program	Letter – March 5, 2001 Also submitted a report titled *Environmental Assessment of the Lower Cape Fear River system, 199- - 2000, Report No. 00-01*. This report will be located at NC DWR for anyone wishing to read its contents.	• EIS did not address WQ. Transfer should be temporary. WWTP should be online before any future rounds are considered. This should be enforced with specified penalties. • Applicant should show they are considering other regional water supply solutions. • Any transfer reduced the flow of water to downstream stakeholders that otherwise would have been available for assimilative capacity.	1H, 1I, 2B, 3A, 4A
Ben O. Merritt, Jr	Letter – Received March 9, 2001	• Equity – Do not permit any additional transfer unless it can be returned. It's unfair.	2B, 4H
Jean M. Merritt, Jr	Letter – Received March 9, 2001	• Equity – Do not permit any additional transfer unless it can be returned. Its unfair.	2B, 4H

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
James L. Messer Private Citizen	Attendee – March 6, 2001 Public Hearing, Letter March 7, 2001	• Equity – a systems input and output can have a major impact on the systems processes, resulting in perturbations that are not seen for years. • The State should demand that Cary and Apex initiate a program to correct the existing shortfall; not permit any additional drawing until all water drawings are replaced to state of equilibrium. • State should fine (or tax) against Cary and Apex communities as a means of compelling these municipalities to remedy the current and future water equilibrium shortfalls.	2B, 4H
Douglas Modde Private Citizen	Verbal Statement (*) - March 6, 2001 Public Hearing	• Water must be returned. • The Fayetteville area can and will experience growth. • Drought conditions have affected the area already.	1G, 2B, 4H
Hampton Moore Private Citizen	Attendee - March 6, 2001 Public Hearing, Letter - March 6, 2001 Public Hearing	• Equity – Do not permit any additional transfer unless it can be returned.	2B, 4H
Walter Moorman Retired Professional Engineer	Verbal Statement - March 6, 2001 Public Hearing	• Approve only if all four conditions in the slide show are binding. • Would prefer for the request to be denied altogether.	4H
C. Kim Nazarchyk	Letter – March 7, 2001	• Equity. • EIS flawed due to Cary paying for it.	2B, 4H
Mick Noland Chief Operating Officer PWC-Fayetteville	Verbal Statement (*) with written copy of statement – March 6, 2001 Public Hearing, Letter – March 8, 2001	• *Had problems with the recorder and did receive the requested written statement. • Temporary IBT until WWTP on Cape Fear River is built, once built -revert IBT down to current level, all by 2010 or earlier. WTP built before additional allocation considered. • Applicants are under no obligation to developing a wastewater facility unless the EMC so conditions this IBT. 45 MGD maximum IBT would occur without the Cape Fear River WWTP. • Wastewater treatment plant should be built before allocation for Cary/Apex and their partners beyond Round 2. • Disagree that the IBT increase offsets some of the IBT that occurs into the Cape Fear River Basin. • EIS is flawed due to focus on only the water supply pool and not the	1A, 1B, 1C, 1D, 1F, 1G, 1H, 1I, 1J, 1K, 1L, 1M, 1O, 2B, 2C, 3A, 3B, 4A, 4D, 4F, 4G, 4H

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
		combined pools to include the water quality pool. EIS misses the vital point that the water supply and water quality pools are linked. • EIS makes the critical assumption that agricultural withdrawals will not increase. There is no evidence to this effect. • Randleman Lake was excluded in the EIS and data was not provided on how cape Fear River low flow regime would be affected by Randleman operations. • Average flow reduction in the Deep river would be tremendous during the period in which the Randleman Reservoir was being filled, with an 82 percent reduction in average flow at the dam site. • Monthly inflows to Randleman Lake during several simulated historical periods in which the reservoir was drawn down and total outflows would have been limited to a minimum release. Flow reductions will substantially reduce flows in the Cape Fear River, especially during dry periods such as those represented by the historical periods. • Base 1998 scenario in the EIS does not represent existing conditions since it does not accurately portray historical flow conditions. • Contravention of the Lillington minimum target flow has become a regular occurrence (unfortunately). • DWRs comparison of the Cape Fear River Basin Model with US Geological Survey Flow Statistics does not consider the lowest 10 percent of daily stream flows. • Jordan water quality pool is fully depleted in 11 of the 69 simulated years for up to 80 days in a single August to February period. • In the Base 1998 scenario in theEIS Lillington flow drop down to about 100 cfs or less during one out of seven years on average. This would be catastrophe for downstream users. • Jordan water quality pool depletion means downstream users are already facing critical water supply uncertainties. • Violation of minimum flow violates the original intent for Jordan Lake. • State determines how much water supply storage should be reserved to augment water quality pool storage depletion (States previous recognition that use of the water supply pool and or sedimentation pool would be needed to continuously maintain the 600 cfs flow.	

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		• Only 22 MGD will remain for use outside of the Jordan Lake water shed after Round 2 allocations. • Jordan Lake safe yield is not confirmed. • Supporting EIS does not include a complete evaluation of cumulative impacts. • A truly objective evaluation of the IBT cannot be made when DENR already approved the facilities to make use of the IBT. • Unanswered questions about whether Environmental Review of Cary/Apex water treatment facility expansion was conducted in accordance with DENR's North Carolina Environmental Policy Act (NCEPA) Rules. • Accurate historical low flow impact assessment is missing. • EIS scenario demonstrates that the Jordan Lake water quality pool is already insufficient for downstream needs as it is fully depleted in 11 of the 69 simulated years. • Water supply to downstream communities is rapidly dwindling. If the 28 MGD is granted, only 22 MGD of the maximum of the 50 MGD diversion will remain. • Safe yield for Jordan Lake has not been confirmed. • Fails to understand how a truly objective evaluation of the IBT EIS is possible when DENR had already approved the facilities to make use of the IBT. • Available supply is dwindling without regard to downstream communities.	
Larry B Norris President Fayetteville Technical Community College	Verbal Statement - March 6, 2001 Public Hearing, Letter – March 7, 2001	• Deny, if approved, then with time limits until equity can be achieved. • Questions the accuracy of Statistical data and models for long-term impacts.	1E, 1F, 1M, 2B, 4H
John Pechmann North Carolina Wildlife Resources Commission	Verbal Statement with written copy of statement - March 6, 2001	• Concerned with decreased water quality in Neuse Basin due to IBT. Impact aquatic resources in affected areas. • Concerned with water loss in Cape Fear Basin, which could impede reproductive success of certain fish species. Also decrease the ability of the river to assimilate wastes. Drawdown will affect wetlands in the Jordan Reservoir watershed area. • Additional water will lead to additional growth resulting in secondary impact example runoff.	1D, 1O, 4H

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
		• The commission is opposed to the project as currently proposed.	
Richard Perry Private Citizen	Letter – March 7, 2001	• Equity – Do not permit any additional transfer unless it can be returned. It's unfair.	2B, 4H
Hal Price Biogen	Verbal Statement - March 5, 2001 Public Hearing, Attendee - March 6, 2001 Public Hearing, Letter - March 6, 2001 Public Hearing	• Supports IBT due to need and growth at Biogen.	4H
Dr. and Mrs. Joe Quigg Private Citizens	Letter – March 8, 2001	• Equity – Do not permit any additional transfer unless it can be returned. • Do a new thorough EIS funded by the Sate and conducted by an impartial research organization with impeccable credentials.	2B, 4F, 4G
Senator Tony Rand	Verbal Statement - March 6, 2001 Public Hearing	• Equity – we do not object to Cary taking water as long as they put it back.	2B
Jimmy Randolph, President Sanford Area Chamber of Commerce	Letter – March 9, 2001	• Need a study analyzing the whole basin. • Issue a temporary IBT with the stipulation of WWTP and equity by 2010. Then reduction to current 16 MGD.	1I, 2B, 4G
Ray Rapuano Cisco Systems, Inc.	Verbal Statement with written copy of statement - March 5, 2001, Attendee – March 6, 2001 Public Hearing	• Support IBT – view the Town of Cary's proposal as an assurance that Cisco will have an adequate, reasonable priced water supply to help its RTP campus meet it planned growth.	4H
John Rigsbee Chairman Cary Chamber of Commerce	Verbal Statement - March 5, 2001 Public Hearing	• Supports IBT. After vocation and business IBT is the third key factor in the communities future success.	4H
James Robertson President Research Triangle Foundation	Verbal Statement - March 5, 2001 Public Hearing , Attendee - March 6, 2001 Public	• Supports IBT. • The Cape Fear River Hydrological model (developed with extensive collaborative stakeholder input) results indicates that even with 45 MGD IBT there will no be significant impact on downstream flows. 45 MGD refers to	2I, 4H

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
	Hearing, Letter - March 6, 2001 Public Hearing	the worst case where the treatment plant will not be built and the transfer amount would increase form 27 MGD to 45 MGD. • The suggestion to reduce the transfer request in less than 10 years is going to introduce as aspect of uncertainty to decision makers in new and expanding industry that could be devastating. • The current IBT petition is without question comprehensive, precise and determines scientifically that there are no negative effects from the water allocations and IBT increases.	
Thornton Rose Private Citizen	Verbal Statement (*) - March 6, 2001 Public Hearing	• *Had problems with the recorder and did receive the requested written statement. • Reduction of stream flow will have an impact on the assimilative capacity of the river. • Consider the increased flow into the Neuse River particularly during storm surges. • Transfer must not be granted till Cary has in operation their required facilities to the treat the water and return it with adequate monitoring equipment.	1H, 2B, 4H
Raymond J. Rundus Private Citizen	Letter – March 9, 2001	• Equity – Do not permit any additional transfer unless it can be returned.	2B, 4H
Robert Saunders Chair PWC	Attendee - March 6, 2001 Public Hearing, Letter - March 6, 2001 Public Hearing	• Urge EMC to be responsible to the future generations for quality water supply source.	4A, 4G, 4H
S. L. Shackleford Private Citizen	Attendee – March 6, 2001 Public Hearing, Letter – March 7, 2001	• Equity – Do not permit any additional transfer unless it can be returned. Do not use political power.	2B, 4H
Danny Shaffer Private Citizen	Verbal Statement (*) with written copy of statement – March 6, 2001 Public Hearing	• *Had problems with the recorder and did receive the requested written statement. • Equity. • EIS paid for by the people who want the water – lacks credibility • Cary/Apex have proceeded with construction of the wastewater treatment plant prior to EMC decision. Bad planning. • Give Cary no water until they have in place facilities to return that water to the river basin from which it was drawn.	2B, 3A, 4H

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
Kim Shaffer/ Francesca Shaffer Private Citizens	Letter – March 8, 2001	• EIS is suspect. • Equity – Do not permit any additional transfer unless it can be returned. Should not be sold to the town with the most money.	1G, 2B, 4H
Senator Larry Shaw	Verbal Statement - March 6, 2001 Public Hearing + 15 page hard copy attachment	• The condition that Cary and Apex build a wastewater treatment plant on the Cape Fear River within 10 years is insufficient. • Withdrawal of water will significantly impact water sources in the future. • Examine the population growth in Cumberland County and understand that Cumberland County too must plan for future growth. • Why was PAC's request for a water allocation denied? • Pollution in the Cape Fear continues to be significant environmental factor. Therefore the construction of a Wastewater Treatment Plant cannot and should not be used as a bargaining chip for Fayetteville future needs • In 1996 the State decided that most of Cape Fear had reached it limit for wastewater. • Fayetteville's Glenville Lake is not sufficient to supply for growing needs • Cary vowed to have a treatment plan on line by 2000 and did not follow through. • The studies that the State and Cary used as a proof there will be no increase in environmental damage form the water withdrawal was financed by Cary • Nearly half the member of the EMC which will rule in Cary's permit come from Wake county. • Basically require Equity.	1B, 1E, 1H, 1M, 2B, 4A, 4H
Rollin Shaw Fayetteville City Council	Verbal Statement with written copy of statement - March 6, 2001	• Deny the proposal for an increased interbasin transfer of water from the Cape Fear River Basin. • The situation discussed is different from other interbasin transfers because this water from the Cape Fear River Basin is being taken forever and is not returned. • Must look at growth in Cape Fear Basin.	2B, 4G, 4H
Harriett Shooter Private Citizen	Letter – March 8, 2001	• Deny or at least return it. Its all about money.	2B, 4H
Ronald Singleton, Director Chatham County	Verbal Statement with written copy of statement - March 5,	• Chatham County does not object to the Cary/Apex IBT or water allocation but does ask that final action be taken only after the final approval of Cary/Apex-Chatham Co Water Intake Service Agreement.	4H

Jordan Lake Water Supply Storage Allocations – Summary Table of Public Comments, and Key to Staff Responses

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
Public Works	2001		
Rudolph Singleton Law firm of Hunchens and Senter representing PWC and the City of Fayetteville	Verbal Statement (*) - March 6, 2001 Public Hearing	• *Had problems with the recorder and did receive the requested written statement. • The EMC should legally and equitably force Cary/Apex to return all Jordan Lake water or require them to secure it elsewhere.	2B, 4H
Neil Smith Private Citizen	Verbal Statement (*) - March 6, 2001 Public Hearing	• *Had problems with the recorder and did receive the requested written statement. • Triangle communities have not shown a good faith effort to utilize their current resource adequately example subdivision with less use of land surface, reuse of water. • Political agenda of the Triangle is to take the easiest path out. • Use the water, borrow all you need but return it where you found it.	2B, 2C, 4A
Nolan Smith Private Citizen	Letter – Received March 8, 2001	• Equity – Do not permit any additional transfer unless it can be returned. Cary has the tax base to do this. Downstream members have their right and need for this water for future growth. • EMC is comprised of members mainly from the Cary/Apex/RTP area.	1M, 2B, 4H
Judith P. Sorrell Private Citizen	Letter – March 8, 2001	• Equity – Do not permit any additional transfer unless it can be returned. It's not equitable.	2B, 4H
Bill Speight Sunbelt Business Brokers	Letter – March 6, 2001	• Equity – Do not permit any additional transfer unless it can be returned. It will be needed downstream to sustain growth in the future.	2B, 4H
Bob Stevens Broadway Town Manager	Letter – March 7, 2001	• Need a study analyzing the entire basin – urban growth, agricultural need, flow assimilation, and water supply. • Temporary IBT with the stipulation of WWTP and equity by 2010. Then reduction to current 16 MGD.	1I, 4G
Marie T. and George C. Stewart Private Citizens	Attendee – March 6, 2001 Public Hearing, Letter – March 7, 2001	• Equity – Do not permit any additional transfer unless it can be returned. It's not fair.	2B, 4H
Sally and John Suberati Private Citizens	Letter – March 5, 2001	• Equity – Do not permit any additional transfer unless it can be returned. Its arrogance. Many decisions are based on moony and shortsightedness of powers.	2B, 4H

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
State of North Carolina County of Cumberland Joint Planning Board	Resolution, received March 9, 2001	• Opposed to the interbasin transfer. • Set maximum daily interbasin transfer of 27 MGD until 2010 and then reduce it to 16 MGD. • Require Cary and Apex to have a wastewater treatment plant functioning and online by year 2010. • Require petitioners to enact ordinances similar to Neuse Buffer Rules for parts within Jordan Lake. • Require petitioners to develop a compliance and monitoring plan for reporting maximum and daily transfer amounts, compliance, progress on mitigation and drought management activities.	1D, 1I, 2B, 4H
Mark Sullivan Private Citizen	Letter – March 7, 2001	• Equity – Do not permit any additional transfer unless it can be returned. • It limits the potential for growth for downstream users.	1M, 2B
Don Talbot Fayetteville City Council	Attendee - March 6, 2001 Public Hearing, Letter – March 7, 2001	• Equity. Any water taken should be returned cleaner than when received. • How will supply from Jordan Lake during low stages be handled. • Request should be denied until a satisfactory wastewater treatment facility is built.	1B, 1C, 2B
Lura Tally Retired Senator	Verbal Statement with written copy of statement - March 6, 2001	• Equity – The importance of keeping the volume in the Cape Fear River emphasizes the need for the return of original water (cleaned) into the basin.	2B
Rodney Tart Director Harnett Co Dept of PU	Letter – March 5, 2001	• Based on the FEIS and Mike Basin analyses Harnett County does not object to the transfer (27-MGD). • Harnett county supports inclusion of the condition that Interbasin Transfer certificate requiring applicant to begin returning water to the Cape Fear basin in 2010. • No additional transfer beyond 27 MGD should be authorized until a drought management plan is in effect, water is returning to the basin in 2010, a safe yield of the Lake be confirmed, the effect of Randleman dam are evaluated and the low flow impact assessment be completed. • Harnett County wishes to remain on record for the request for allocation from Jordan Lake due to long term needs.	1B, 1C, 1H, 1K, 2B, 4H
Kurt Taube Executive Director	Attendee - March 5, 2001 Public Hearing,	• EIS does not consider low flow periods. WQ pool is insufficient for downstream needs.	1A, 1B, 1C, 1D, 1E, 1H, 1I, 1J, 1K, 1M, 2B, 2C,

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
Lower Cape Fear Water & Sewer Authority	Letter - March 5, 2001 Public Hearing, Letter – March 7, 2001, Attendee – March 6, 2001 Public Hearing	• Jordan water quality pool is fully depleted in 11 of the 69 simulates years for up to 80 days in a single August to February period. • In the Base 1998 scenario in the EIS Lillington flow drop down to about 100 cfs or less during one out of seven years on average. This would be catastrophe for downstream users. • Jordan water quality pool depletion means downstream users are already facing critical water supply uncertainties. • Violation of minimum flow violates the original intent for Jordan Lake. • State determine how much water supply storage should be reserved to augment water quality pool storage depletion (states previous recognition that use of the water supply pool and or sedimentation pool would be needed to continuously maintain the 600 cfs flow. • Water quality modeling component needed. The Division of Water Quality Cape Fear Basin Management Plan set out there is no to little assimilative capacity in the Lower Cape Fear River. • EIS does not address the water quality impacts of the IBT on the Lower Cape Fear River Basin. • Authority is not opposed to transfer of: (1) Approve temporary IBT only. Reduce to 16 MGD by 2010. (2) WWTP be online before consideration in Round 3. Would assist Wake County and others to speed up the regional system (3) Petitioners research other water sources, which would help with regional planning.	4H
Gill Taylor	Letter – March 6, 2001	• Equity – Do not permit any additional transfer unless it can be returned. Creating a future problem for the Lower Cape Fear Region.	1M, 2B
Greg Taylor Bladen County Commissioner	Verbal Statement with written copy of statement - March 6, 2001	• Deny the transfer. • Concerned with possible affects of Randleman Dam. • What is the safe yield of Jordan Lake? • Concerned about the future availability of the water supply downstream. • The decision to approve the interbasin transfer was made when DENR approved the improvements to Cary's water system specifically designed to facilitate this interbasin transfer. • The only question now is whether DENR will put requirements on Cary and Apex. Must have equity within 10 years. DENR approvals of Cary's WTP,	1C, 1E, 1K, 1M, 2B, 3A

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
		etc are suspect.	
C. L. Thaggard Private Citizen	Letter – March 8, 2001	• Equity – Do not permit any additional transfer unless it can be returned. It shortchanges the downstream users.	1M, 2B, 4H
Heather Thomas Private Citizen	Verbal Statement with written copy of statement - March 5, 2001	• Go to Robert Easterling and read a letter written by him.	
Larry Thomas Public Works Director City of Sanford	Verbal Statement with written copy of statement - March 5, 2001 Attendee - March 6, 2001 Public Hearing, Letter - March 6, 2001 Public Hearing, Letter – March 8, 2001	• EIS is incomplete. Study needed on entire basin based on future demand due to urban growth, agricultural needs and flows necessary to maintain a healthy river. • Maximum IBT should not increase beyond 16 MGD. A temporary IBT may be issued until 2010. WWTP on Cape Fear by 2010, drop to 16 MGD by 2010. • The low flow augmentation storage of Jordan Lake is designed to maintain a minimum flow of 600 cfs at Lillington. No one has determined what portion of this flow is necessary to maintain a healthy environment. • Corp of Engineers did not consider Randleman Dam, increased use by irrigation and use by downstream communities when they determined the size of augmentation storage in the Jordan Lake. Believes that augmentation storage is inadequate to maintain the flows at Lillington. Hence water supply storage will be necessary to supplement the augmentation storage in the future. • Received these copies from Mr. Thomas – Draft Methodology for estimating the Maximum Daily Water Withdrawal Rate from Five Predefined Points on the Cape Fear River Mainstream, Cape Fear River withdrawals Workgroup handouts, Water Supply Plan (1997) for the City of Sanford.	1B, 1C, 1E, 1G, 1H, 1I, 1J, 1K, 1M, 2B, 4A, 4G, 4H
Nellie Tomlinson Cary Chamber of Commerce	Verbal Statement - March 5, 2001 Public Hearing	• Supports the transfer. • Cary has a very successful water conservation program. • Bulk reclaiming water program. • 100 foot buffer zone around most stream, lakes and creeks including the Cape Fear River Basin. • Nuese projected population build out of Cary over the next 20 years and keep development slow. • New and unprecedented storm water management rule governing quality and	1D, 2C, 3B, 4A, 4H

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
		quantity of runoff.	
Sharon Valentine Private Citizen	Verbal Statement (*) with written copy of statement – March 6, 2001 Public Hearing	• *Had problems with the recorder and did receive the requested written statement. • No longer have water flowing into the Cape Fear downstream as we once had. • Cape Fear River drainage issue near Harrison Creek causing stagnation in a swamp and not a free flowing river. • The aquifer on the farm has dropped 40 feet since 1988 due to drought. Small creeks have dried up. Climatic conditions are changing.	1B, 1E, 1M, 4H
Kimberly VanBorkulo Private Citizen	Attendee - March 6, 2001 Public Hearing, Letter - March 6, 2001 Public Hearing	• Deny – affect fish spawning, results in over sedimentation and prevents growth for downstream communities. • Require greater water conservation in Neuse River Watershed. • Require a permanent cap on Cape Fear/Neuse interbasin transfer. • Carrying capacity for ecosystem needs to balance carrying capacity for human settlements.	1B, 1E, 1H 1M, 2B, 2C, 3B
Peggy Vick Private Citizen	Verbal Statement (*) - March 6, 2001 Public Hearing	• *Had problems with the recorder and did not receive the requested written statement.	
Walter Vick Private Citizen	Verbal Statement (*) - March 6, 2001 Public Hearing	• *Had problems with the recorder and did not receive the requested written statement.	
Dickie Vinent PWC	Attendee – March 6, 2001 Public Hearing, Letter – March 7, 2001	• Equity. Perception that one is taking advantage of another. Cary currently already disposes some of their sludge from their WWTP in Cumberland County.	1G, 1M, 4H
William Warfel Private Citizen	Letter – March 6, 2001	• Equity – the time may come when downstream users may need the water. • Do not know the true environmental consequence.	1G, 1M, 2B, 4H
Lee Warren Chairman Cumberland County Board of Commissioners	Verbal Statement - March 6, 2001 Public Hearing	• Equity – "We don't ask that you not allow Cary not to use the water from the Cape Fear River Basin, all we ask you to do is return it to the Cape Fear River Basin."	2B, 4H
Henry L. Warwick	Letter - March 7,	• Equity – no reason. Simply do not allow the transfer unless they return it.	2B, 4H

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
Private Citizen	2001		
Mayor Keith Weatherly Town of Apex	Verbal Statement with written copy of statement - March 5, 2001	• Support. • EIS issued by Department clearly demonstrates no direct detrimental impacts • Requested transfer will only cancel net interbasin transfer from Neuse River Basin into the Cape Fear River Basin. • Supports a future regional wastewater treatment plant. • Developed a growth management plan that puts in place a 4% annual growth rate for the future. Addresses secondary impacts. • Water Allocation Committees proposed condition to reduce IBT to 16 MGD after 2010 has no technical merit because there is no direct impact from the proposed transfer. Furthermore building the infrastructure this would require would pose tremendous environmental risk and will be a terrible waste of public resources.	1D, 1E, 1F, 1H, 1I, 1O, 4A, 4G, 4H
D. Weaver Private Citizen	Letter – March 9, 2001	• Reiterates concerns expressed by Mr. Kurt Taube. EIS does not consider low flow periods. WQ pool is insufficient for downstream needs. Water quality modeling component needed. Approve temporary IBT only. Reduce to 16 MGD by 2010. WWTP be online before consideration in Round 3. Research other water sources, which would help with regional planning. • Conflict concerning the date base used for analysis.	1A, 1B, 1C, 1D, 1E, 1H, 1I, 1J, 1K, 1M, 2B, 2C, 4H
Calvin B. Wells Private Citizen	Letter – March 7, 2001	• Equity. Return the water. Grossly unfair to downstream communities.	1G, 1M, 2B
Charles West Private Citizen	Letter – March 7, 2001	• Equity – no reason. Simply do not allow the transfer unless they return it.	2B, 4H
Katie West Private Citizen	Letter – March 7, 2001	• Equity – no reason. Simply do not allow the transfer unless they return it.	2B, 4H
WFNC News Talk Radio	Editorial Comments – February 28, 2001 and March 6, 2001	• Cary unfilled past pledges to return treated water. • EIS show no environmental consequence but the study was paid for by petitioner. • Eight of the 17 EMC members are from the Triangle Area. • Pipelines were built before state approval of transfer. • Less water means reduced quality. • Must return the water.	2B, 2H, 3A, 4H
Edward L. Williams	Verbal Statement (*)	• *Had problems with the recorder and did not receive the requested written	

Name & Association	Type and Date of Comments	Summary of Comments	Key to Staff Responses
Private Citizen	- March 6, 2001 Public Hearing	statement .	
John C. Williams III Private Citizen	Letter – March 7, 2001	• Equity – no reason. Simply do not allow the transfer unless they return it.	2B, 4H
Carlos Zukowski	Verbal Statement (*) - March 6, 2001 Public Hearing	• *Had problems with the recorder and did receive the requested written statement. • Equity – The Triangle is stealing water.	1G, 1M, 2B, 4H

Jordan Lake Water Supply Storage Allocations
Responses to Comments

Introduction

Because many comments were repeated, responses were grouped for easier reading. Please see the response key in 'Summary Table of Public Comments and Key to Staff Responses' to track appropriate keys following each comment and then trace the appropriate response to the section below:

Key	1. Impacts on Downstream Uses	Response to Key Found on Page:
A	The base 1998 modeling scenario is supposed to represent existing basin conditions in 1998 and is used as a baseline to compare alternatives. The model did not accurately predict the low flows in 1998.	II - 31
B	The Jordan Lake water quality pool is insufficient for downstream uses; in the past, the 600-cfs target at Lillington has frequently not been met.	II - 32
C	The safe yield of Jordan Lake may have been overestimated.	II - 33
D	The EIS needs to provide information on whether the cumulative impacts of all water withdrawals and transfers are acceptable.	II - 33
E	If Triangle communities do not replace water they remove from the Cape Fear River, they will cause problems downstream.	II - 33
F	The proposed IBT will have minimal impact on the flow at Lillington. However water resources will become more limited in the Cape Fear River, and in the long term, it will be prudent to plan to return water that is removed from the river basin.	II - 34
G	The Triangle is financing its growth by using water resources that belong to downstream users.	II - 34
H	The study did not account for pollution in the Cape Fear River and the need for flow to assimilate wastewater.	II - 34
I	The Interbasin Transfer certificate should be temporary. If water quality declines in the Cape Fear River, the certificate can be revoked or cut back.	II - 34
J	Future agricultural withdrawals should be described	II - 35
K	Randleman Lake should have been included in the	II - 35

	model runs.	
L	A modeling scenario should be included for comparison to the Base 1998 case that represents the proposed alternative with only the existing and recommended Jordan Lake allocations.	II - 35
M	The proposed IBT may inhibit growth in the Fayetteville region.	II - 35
N	Future hearings should be held in a downstream community and not Cary. Comment noted.	II - 36
O	Durham's application for an allocation from Jordan Lake that will result in a net loss to the Cape Fear Basin by correcting an existing IBT from the Neuse was not considered in the EIS.	II - 36
Key	**2. Alternatives**	**Response to Key Found on Page:**
A	The alternative to purchase water from Raleigh should be reevaluated. The adopted Wake County Water & Sewer Master Plan includes a recommendation that Raleigh's water treatment plant capacity be expanded to 96 MGD by 2003, to 120 MGD by 2011, and to 136 MGD by 2025. Raleigh recently adopted a Capital Improvement Program that allocates $54 million for expanding Raleigh's water treatment capacity.	II - 36
B	The Triangle Communities should build a wastewater treatment facility that will correct the interbasin transfer of water before they withdraw more water from Jordan Lake.	II - 36
C	What conservation efforts are ongoing in the Triangle? Conservation should be used prior to interbasin transfer.	II - 36
Key	**3. Interbasin Transfer Calculation**	**Response to Key Found on Page:**
A	The interbasin transfer calculation assumes construction of a proposed regional wastewater treatment plant with discharge to the Cape Fear River. This assumption should not be made, as the treatment plant is not guaranteed.	II - 37
B	Aggressive conservation was assumed in the IBT calculations. If this conservation does not occur, there may be significant impacts on downstream uses.	II - 37
Key	**4. Miscellaneous Comments**	**Response to Key Found on Page:**
A	Good planning would dictate that the state grow in areas where there are resources to support the growth	II - 38
B	The legislature should fund a study to ensure that	II – 38

	North Carolina will not experience the water issues that the west is struggling with. Comment noted.	
C	The Triangle does not need water.	II – 38
D	Fayetteville has invested in state-of-the-art water and wastewater treatment, and the Triangle communities should do so as well.	II – 39
E	The free market method of supply and demand should be used to determine who gets water. Communities and entities that offer the highest price should get the water. Comment noted.	II – 39
F	The EIS should be evaluated objectively without consideration of construction already underway on water treatment plant. Comment noted.	II – 39
G	As North Carolina continues to grow, water resources in the Cape Fear River Basin will become more limited. The Division of Water Resources should continue to develop a comprehensive model of future Cape Fear River water use.	II – 39
H	Comment Noted	II – 39

Impacts on Downstream Uses

A. The base 1998 modeling scenario is supposed to represent existing basin conditions in 1998 and is used as a baseline to compare alternatives. The model did not accurately predict the low flows in 1998.

The Cape Fear River Basin ("CFRB") Hydrologic Model cannot accurately predict the low flows in 1998 because of the way Jordan Lake releases were managed. The CFRB model was developed based on the Army Corps of Engineers rules and guidelines for releasing water. The CFRB model cannot take into account human subjectivity in releasing water. In 1998, the Corps released higher amounts of water in the spring, only to realize in the fall that the water quality pool was almost depleted. The Corps then worked with the Division of Water Resources and the Division of Water Quality to ratchet back the minimum releases to ensure that the water quality pool was not depleted while downstream water quality conditions were maintained. Monitoring indicated that this did not impact downstream uses. The Base 1998 scenario was not meant to mimic observed daily flows during specific time periods such as 1998, but to provide a baseline, under current conditions (including the guide curve), for comparison of hydrologic indicators among different scenarios. The CFRB model scenarios presented in the EIS accurately portray the relative differences in hydrologic indicators that are expected between proposed and current conditions. While the absolute flows would change if the CFRB model could be used to mimic 1998

low flows, the relative difference between current and proposed conditions would not change significantly.

B. The Jordan Lake water quality pool is insufficient for downstream uses; in the past, the 600-cfs target at Lillington has frequently not been met.

The source for all of the applicants' water is the water supply pool of Jordan Lake. The water supply pool is operated entirely separate from the low flow augmentation pool. The low flow augmentation pool, not the water supply pool, is dedicated to maintaining flows in the Cape Fear River downstream of Jordan Lake dam. Therefore, the applicants' water supply withdrawals will have no significant impact on the downstream flows as demonstrated with the CFRB model. A comparison of the alternatives showed that the proposed transfer will not have any significant impact on Jordan Lake surface water elevation, minimum releases from the dam, water quality pool levels, the target flows at Lillington, flows at Fayetteville, and water quality pool levels compared to the other alternatives and to present conditions (see Appendix B in the EIS). As shown in Figure 14 in the EIS there are no significant differences in flows at Fayetteville.

Approximately two-thirds of Jordan Lake's conservation storage is dedicated to maintaining minimum flows in the Cape Fear River, compared with the one-third dedicated to water supply. Downstream users benefit from this low-flow augmentation pool without requiring a Jordan Lake allocation and at no cost. Upstream users do not benefit from the low flow augmentation pool. The historic low flow of the Cape Fear River at Lillington was 75 cfs prior to regulation by Jordan Dam. The target flow at Lillington is now 600 cfs, supported by the low flow augmentation pool of Jordan Lake. This target flow is 8 times as great as the historic low flow, and equivalent to 388 MGD.

The CFRB model shows that the IBT will not reduce the amount of downstream flow that can be maintained. This is because the Lake's water quality pool, the full amount of which is reserved only for insuring downstream flow, is managed separately from the water supply pool. This means that water withdrawn for the IBT will not reduce the amount available to ensure downstream flow. Therefore, the IBT cannot affect downstream flow, so there is no impact to be addressed in the EIS. Furthermore, failure to always meet the 600-cfs target does not necessarily mean that the water quality pool is insufficient for downstream uses. The 600-cfs flow target at Lillington was set based on some assumptions regarding the adequacy of the water quality pool, without the benefits of a detailed analysis using a tool such as DWR's CFRB model, and therefore it is a somewhat arbitrary target. Even though it is clear that the downstream flow would not be affected by the IBT, the applicants realize this is obviously an important issue to downstream entities. Thus, the CFRB model was used to examine the impact the proposed IBT would have on the frequency that the flow target of 600-cfs at Lillington can be met. This modeling effort, which is presented in the EIS, clearly shows that the ability to achieve the 600-cfs target is uninfluenced, or even mildly enhanced, by the proposed IBT. Table 12 and Appendix B shows the target would be met (on a daily basis for the sixty-nine year modeling period) 65% of

the time under Base Future conditions, and 65.1% under proposed conditions. The target would be met 65.7% of the time under Base 1998 conditions, and 65.9% of the time under the newly modeled "Proposed Incremental A" scenario (discussed under item I.L. below)

C. The safe yield of Jordan Lake may have been overestimated.

The Division of Water Resources feels that the modeling completed to date supports the use of 100 MGD as a good estimate of the safe yield of the Jordan Lake water supply pool. In addition, DWR is planning to work with the COE in evaluating and updating the drought management plan for the project. The drought management plan will influence the return period for this yield. The issue of safe yield will be evaluated during Round 3 of the Jordan Lake water supply allocation process with the CFRB model. It should be noted that the Jordan Lake water supply allocations are actually allocations of a storage volume, not a withdrawal amount. Therefore, while average annual withdrawal rates are used in discussing the allocations, the withdrawal of each allocation holder will ultimately be limited to the volume of water in their separately tracked portion of the water supply pool. If the water supply pool is depleted there will be no withdrawals and therefore cannot impact the water quality pool. Again, the purpose of this EIS was to evaluate the impacts of the proposed action under the current guide curve and operational practices of Jordan Lake.

D. The EIS needs to provide information on whether the cumulative impacts of all water withdrawals and transfers are acceptable.

The EIS does examine the cumulative impacts of future water withdrawals and discharges in Appendix B. The EIS indicates that low flows will actually increase when the proposed interbasin transfer is modeled along with estimated future withdrawals and discharges throughout the Cape Fear River Basin. This is because wastewater discharges will increase streamflow, especially downstream of reservoirs, during low flow periods, as shown in the EIS Appendix B, section 5.2. Also in the EIS Appendix B, Table 12 shows that flows at Lillington should exceed the target of 600 cfs as follows (based on daily flows over the 69-year study period):

Base Future: 64.5 percent of the time
Alternative 1A Cumulative (no increase in IBT): 65.5 percent of the time
Proposed Cumulative: 66.1 percent of the time

Therefore, the cumulative effect of increased withdrawals and discharges in the Cape Fear River basin above Lillington is to slightly increase flows at Lillington and other points downstream of Jordan Lake.

E. If Triangle communities do not replace water they remove from the Cape Fear River, they will cause problems downstream.

The only mechanism for the proposed IBT to cause problems downstream is if it resulted in substantially lower flows in the Cape Fear River. Modeling that was performed to evaluate the different alternatives indicates that there is negligible difference in expected downstream flows when comparing the proposed

interbasin transfer to the base future case. The modeling results are summarized in Appendix B of the EIS. Cary and other towns in the Triangle are planning to replace a portion of the water withdrawn from Jordan Lake, and are working toward building a proposed regional water reclamation facility that will discharge wastewater to the Cape Fear River Basin.

F. The proposed IBT will have minimal impact on the flow at Lillington. However water resources will become more limited in the Cape Fear River, and in the long term, it will be prudent to plan to return water that is removed from the river basin.
Cary and other towns in the Triangle are working toward building a proposed regional water reclamation facility that will discharge wastewater to the Cape Fear River Basin.

G. The Triangle is financing its growth by using water resources that belong to downstream users.
Water is not a commodity that belongs to any one area or community in the state. Rather, it is everyone's responsibility to ensure its protection from both a quantity and quality standpoint. The EIS and IBT certification processes are designed to ensure that the needs of potential users and impacts of the proposed action are adequately considered.

H. The study did not account for pollution in the Cape Fear River and the need for flow to assimilate wastewater.
The only mechanism for the interbasin transfer to impact water quality and the ability of the river to assimilate wastewater would be if it resulted in substantially lower flows in the Cape Fear River. The modeling results indicate that, with the proposed IBT, flows near Lillington and Fayetteville will remain basically unchanged from the base future condition, in which the Jordan water supply pool is allocated according to the current plan. The water that is transferred under the proposed interbasin transfer is associated with withdrawal of water from Jordan Lake's water supply pool, and will not impact the water quality pool which is used for low flow augmentation as explained in I.B. Inflows to and releases from the water quality pool are managed separately from the water supply pool.

I. The Interbasin Transfer certificate should be temporary. If water quality declines in the Cape Fear River, the certificate can be revoked or cut back.
The only mechanism for the interbasin transfer to impact water quality would be if it resulted in substantially lower flows in the Cape Fear River. The modeling results indicate that, with the proposed IBT, flows near Lillington and Fayetteville will remain basically unchanged from the base future condition, in which the Jordan water supply pool is allocated according to the current plan. Therefore, there are no changes expected in water quality as a result of the proposed interbasin transfer.

J. Future agricultural withdrawals should be described.

Irrigation water for agricultural use was included in the modeling scenarios. Available evidence indicates that agricultural use is more likely to decrease than increase in the future. The consultants who developed the CFRB model suggested that while total agricultural acreage will probably decrease in the future, some newer crops may use more water, so the total agricultural use may not change significantly. Therefore, to be conservative, future agricultural withdrawals were assumed, based on guidance from the Division of Water Resources, to be identical to the withdrawals made in 1998. The consultants' expert advised that future needs for agricultural use should not be based on past trends, and that assuming the total needs remain constant is a reasonable approach. Using 1998 irrigation statistics should be fairly conservative, as it was a low flow year.

K. Randleman Lake should have been included in the model runs.

Omitting Randleman Lake from the CFRB model runs is a conservative assumption. Randleman Lake was omitted from the CFRB model runs based on guidance from the Division of Water Resources (DWR). DWR has indicated that this is conservative as including Randleman results in increased flows in the Deep River since there will be a minimum release from Randleman Dam. In addition, Randleman Lake will result in flow into the Haw River subbasin from the Deep River subbasin; thereby increasing the Haw River flows.

L. A modeling scenario should be included for comparison to the Base 1998 case that represents the proposed alternative with only the existing and recommended Jordan Lake allocations.

An additional CFRB model scenario ("Proposed Incremental A") has been developed. The following table shows the resulting low flow statistics for this "Proposed Incremental A" scenario as compared to the Base 1998 scenario.

Scenario	7Q10 at Lillington (cfs)	7Q10 at Fayetteville (cfs)
Base 1998	132.6	406.2
Proposed Incremental A	205.0	462.6

Under the Proposed Incremental A scenario, flows at Lillington exceed the 600-cfs target 65.9 percent of the time, compared to 65.7 percent of the time under the Base 1998 scenario.

*M. The proposed IBT may inhibit growth in the Fayetteville regio*n.

The only mechanism for the interbasin transfer to impact growth in Fayetteville would be if it resulted in substantially lower flows in the Cape Fear River. As discussed in I.B. the flows at Fayetteville will not be significantly impacted. Fayetteville's water supply withdrawals would not be affected by the proposed transfer or Jordan Lake allocations. Fayetteville's allowable withdrawals will only be affected by new or increased withdrawals between Lillington and Fayetteville and by water quality issues in the reach of the Cape Fear River below their water

supply intake and wastewater discharge. Because wastewater assimilation is directly related to flows, no significant changes in wastewater assimilation are expected from the proposed action.

N. Future hearings should be held in a downstream community and not Cary.
Comment noted.

O. Durham's application for an allocation from Jordan Lake that will result in a net loss to the Cape Fear Basin by correcting an existing IBT from the Neuse was not considered in the EIS.
Durham's allocation request from Jordan Lake was denied and was thus not examined individually. However, all CFRB model scenarios, other than the new "Proposed Incremental A" scenario, were based on the assumption that the remainder of the water supply pool was allocated to unknown users, which could potentially include Durham. It was also assumed that fifty percent of the remaining allocated amount was returned to the Cape Fear River basin. Durham's future projected wastewater was also included in the base future scenarios.

Alternatives

A. The alternative to purchase water from Raleigh should be reevaluated. The adopted Wake County Water & Sewer Master Plan includes a recommendation that Raleigh's water treatment plant capacity be expanded to 96 MGD by 2003, to 120 MGD by 2011, and to 136 MGD by 2025. Raleigh recently adopted a Capital Improvement Program that allocates $54 million for expanding Raleigh's water treatment capacity.
Raleigh has indicated that they will not sell Cary more water, for either the short or long term. While the Wake County Water and Sewer Master Plan recommended major expansions of Raleigh's water supply system, the expanded capacity was targeted to serve only the eastern portions of Wake County. The Plan also recommended that withdrawals from Jordan Lake be expanded to 38.4 MGD (average annual) to meet long-term needs from western Wake County communities.

*B. The Triangle Communities should build a wastewater treatment facility that will correct the interbasin transfer of water before they withdraw more water from Jordan Lak*e.
Cary and other towns in the Triangle are working toward building a proposed regional water reclamation facility that will discharge wastewater to the Cape Fear River Basin.

*C. What conservation efforts are ongoing in the Triangle? Conservation should be used prior to interbasin transfe*r.
Conservation efforts are outlined in section 6.2.3.4 of the EIS. The western Wake communities requesting the IBT certificate have water conservation programs, and the water use associated with the requested IBT amount is based on

aggressive conservation efforts and assumes a per capita water demand rate for Cary and Apex that is considerably lower than the per capita demand rate generically assumed for the rest of Wake County. The following table shows projected per capita water demands used to develop the 2030 water needs in the EIS for Cary and Apex in comparison to average demands developed for Wake County communities for the Water and Sewer plan.

Community	Average per capita demand (gpcd)
Cary	82
Apex	88
Wake County Water and Sewer Plan	130

Interbasin Transfer Calculation

A. The interbasin transfer calculation assumes construction of a proposed regional wastewater treatment plant with discharge to the Cape Fear River. This assumption should not be made, as the treatment plant is not guaranteed.

The interbasin transfer request is based on the assumption that a new WWTP will be built that discharges to the Cape Fear River Basin. Without a discharge returning water to the Cape Fear River basin, the 27 MGD IBT will only support average day withdrawals from Jordan Lake of about 20 MGD which would only satisfy the applicants projected needs until 2007. To meet higher demands, Cary would have to limit growth or pursue one of the other alternatives presented in the EIS. An additional modeling scenario (Alternative 6) was investigated that included average annual Jordan Lake withdrawals of 20 MGD and no return to the Cape Fear River, which would result an IBT equal to the requested 27-MGD amount. Under this scenario, the 600-cfs target at Lillington would be exceeded 64.4 percent of the time, compared to 64.5 percent under the Base Future scenario. This indicates that even if the proposed WWTP is not built, the impact of a 27-MGD IBT on downstream flows in the Cape Fear River would be insignificant. The updated Table 12 from Appendix B of the EIS shown above contains the results of this additional CFRB model run. The communities have agreed to request an IBT assuming that wastewater is returned to the Cape Fear River basin within a very short time frame. The purpose for including this assumption in the IBT calculations and the proposed request was to demonstrate the communities' commitment to returning water to the Cape Fear River Basin.

B. Aggressive conservation was assumed in the IBT calculations. If this conservation does not occur, there may be significant impacts on downstream uses.

The amount of the interbasin transfer request is based on aggressive conservation in the Triangle communities. If this conservation does not occur, the communities will reach the limit of the IBT sooner, and there is no mechanism to exceed that amount. Then the communities will need to pursue other alternatives to supply water to their citizens for the 30-year planning time frame. If the request is

approved, Cary would not be able to exceed the approved IBT amount and so impacts would not differ from those presented in the EIS.

Miscellaneous Comments

A. Good planning would dictate that the state grow in areas where there are resources to support the growth.

One of the purposes of Jordan Lake is to supply water. Consequently, the reservoir was built with a reserved water supply pool. Another purpose of the reservoir is flow augmentation downstream to protect water quality. To meet this use, a separate pool of water exists that cannot be withdrawn for water supply purposes. The yield analysis and allocation rules for Jordan Lake's water supply pool recognize that some of the water supply will not be returned.

B. The legislature should fund a study to ensure that North Carolina will not experience the water issues that the west is struggling with.

Comment noted.

C. The Triangle does not need water.

North Carolina has been enjoying significant population and job growth over the last decade. Growth in the Triangle is centered on the Research Triangle Park and the surrounding communities of Durham, Raleigh, Cary, Apex, and Morrisville. The proposed transfer of water will provide water to three of these fast growing communities in the Triangle. Their current combined population is about 122,900 with a maximum day water use of 23.4 million gallons per day (MGD) and projected to grow to a population of 325,400 with maximum day water use of 53.6 MGD by 2030. This water will also support economic development and job creation in the portion of RTP located in Wake County as well as the workers who are attracted to the Triangle region to fill these jobs. Raleigh and Durham each have dedicated sources of water that are adequate to meet current needs but are inadequate in their current state of development to meet long term demands for these communities. Raleigh and Durham do not have enough water to supply Cary, Apex, and Morrisville to meet their long-term needs.

Cary and Apex are located on the eastern boundary of the Jordan Lake Project and have invested in development of the only water supply intake on the lake, with approval of the state, sized to allow the withdrawal of 50 MGD of water. The Cary-Apex water treatment plant provides water to Cary, Apex, Morrisville, RTP, and Raleigh-Durham International Airport. The Chatham County water system also receives raw water through this intake to supply water to the eastern part of the county.

The state permitted the development of a raw water intake on the Eastern Shore of Jordan Lake to supply surrounding communities from this regional water supply. Cary and Apex received permission to use Jordan Lake water to meet their community needs and support economic development in and around RTP. They

received permission to transfer 16 MGD of water from the Haw River Basin to the Neuse River Basin. This amount is no longer adequate to meet the communities' water demands. Durham and Raleigh have assisted the communities receiving water from the Cary-Apex water system by providing water to the system but can not continue because they need the water to meet demands within their own service areas.

These applicants have made a request to transfer enough water to meet their future needs. The petitioners' combined 2030 projected transfer amount is 24.1 MGD plus an additional 2.9 MGD contingency amount for a total requested amount of 27 MGD. The projected 2009 transfer amount is 27 MGD, which will drop to 17.9 MGD in 2010 when the regional water reclamation facility becomes operational. The 24.1 MGD transfer amount assumes that the Towns of Cary and Apex will construct a regional water reclamation facility that would discharge to the Cape Fear River Basin by 2010, therefore limiting the need for additional future transfers.

The transfer of water will benefit the Research Triangle Region by guaranteeing water to support the economic development and associated population growth that have been encouraged by the establishment of the Research Triangle Park. The need for water is presented in Section 2 of the EIS in more detail.

D. Fayetteville has invested in state-of-the-art water and wastewater treatment, and the Triangle communities should do so as well.
The Triangle communities have also installed state-of-the-art wastewater treatment and have limits equivalent or more stringent than those for communities downstream of Jordan Lake – often including additional requirements for nutrient removal.

E. The free market method of supply and demand should be used to determine who gets water. Communities and entities that offer the highest price should get the water.
Comment noted.

F. The EIS should be evaluated objectively without consideration of construction already underway on water treatment plant.
Comment noted.

G. As North Carolina continues to grow, water resources in the Cape Fear River Basin will become more limited. The Division of Water Resources should continue to develop a comprehensive model of future Cape Fear River water use.
As part of the third round of water supply allocation from Jordan Lake, DWR will be developing a long-range Cape Fear River Basin Water Supply Plan. The CFRB model will be used as part of that planning effort. Also, DWR intends to provide long-term support for the CFRB model so that it can be used address water use issues now and in the future.

H. Comment Noted