

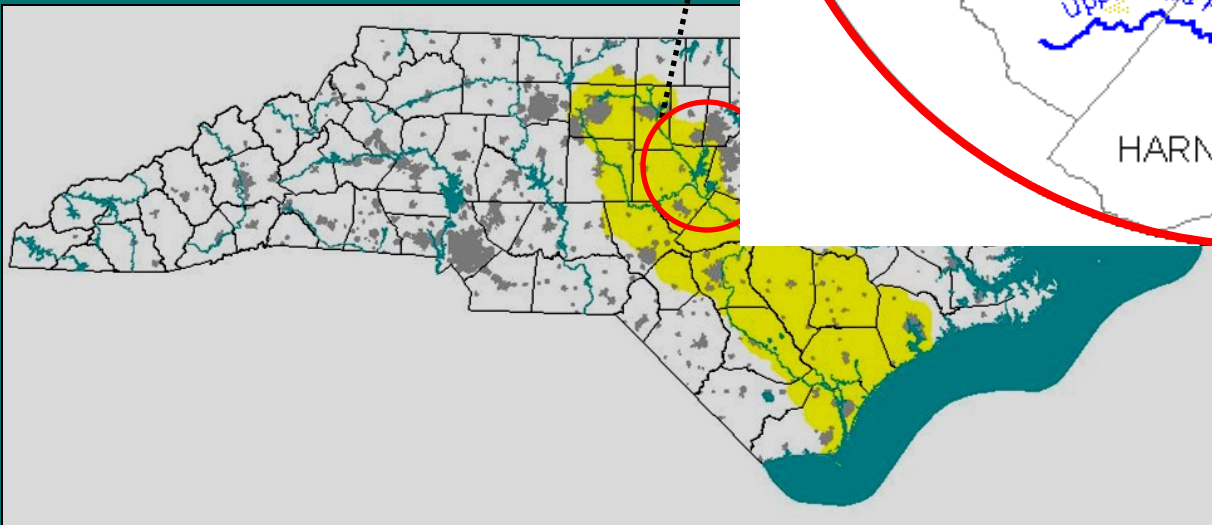
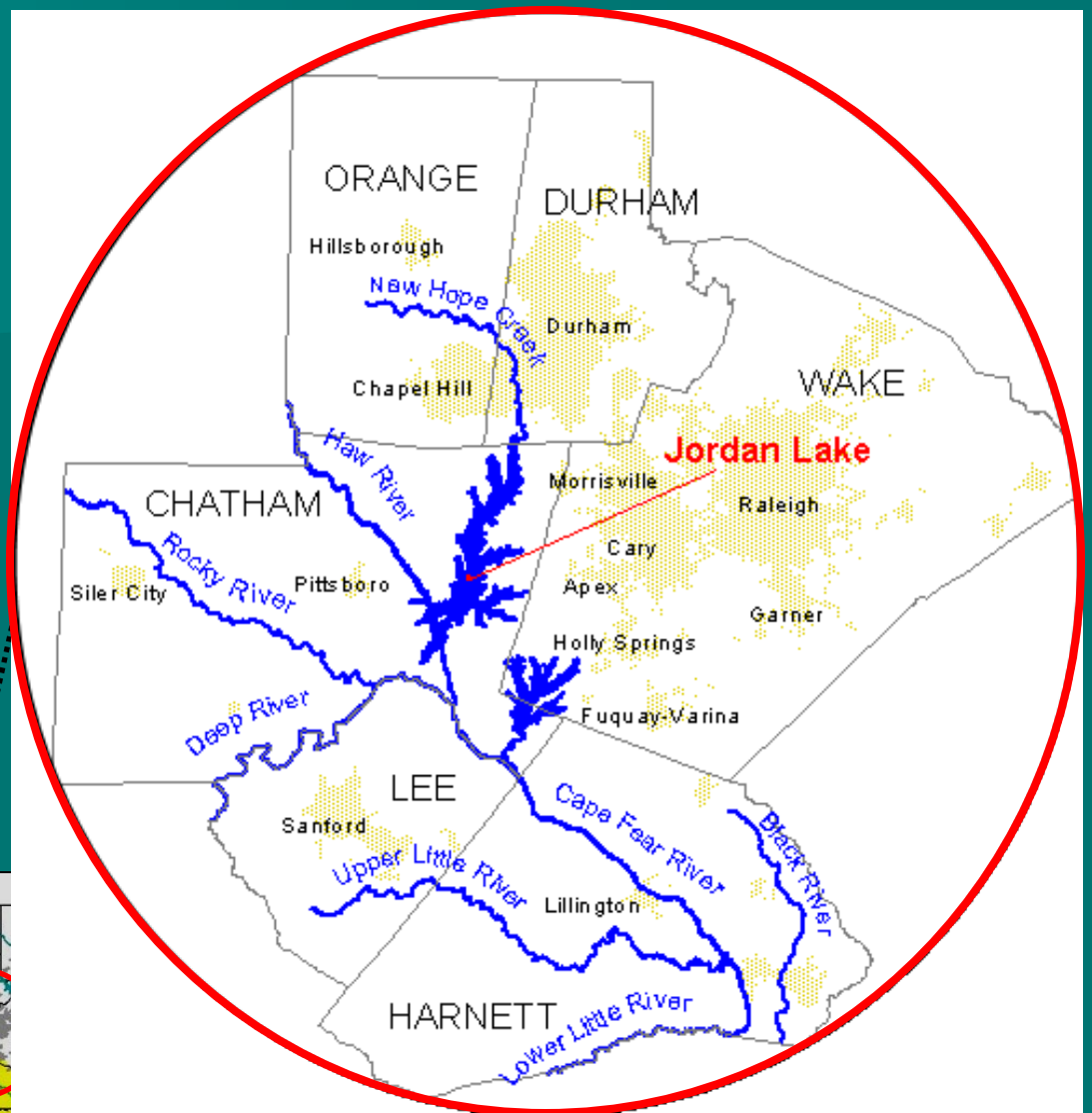
Jordan Lake Water Supply Allocation Process Round 4

December 8, 2011

Tom Fransen
Division of Water Resources



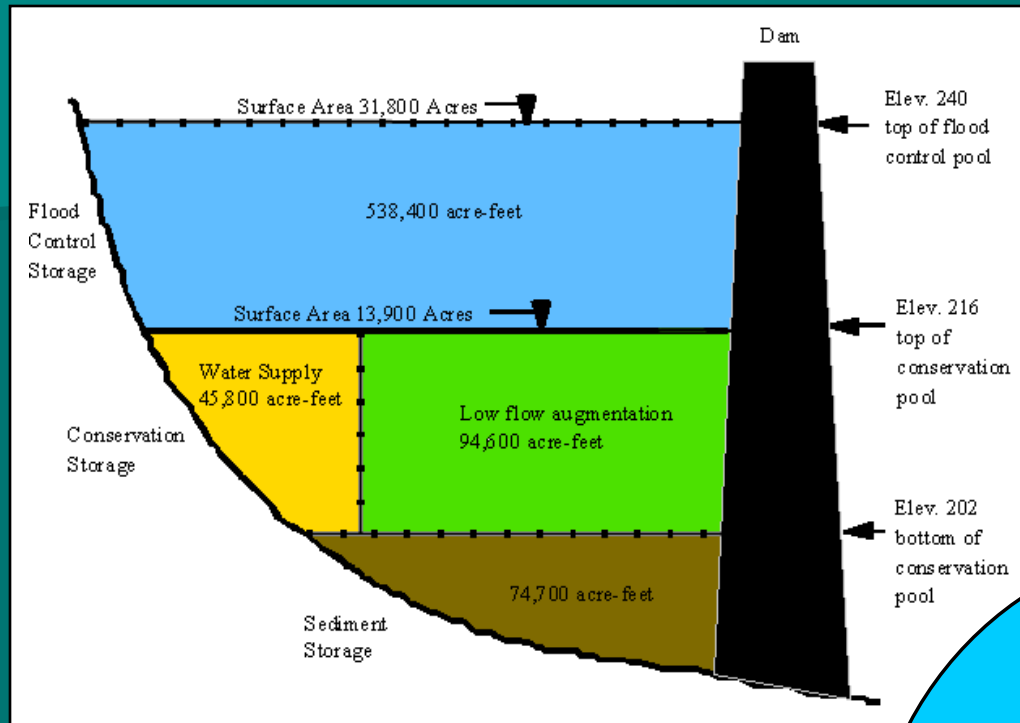
Jordan Lake Overview



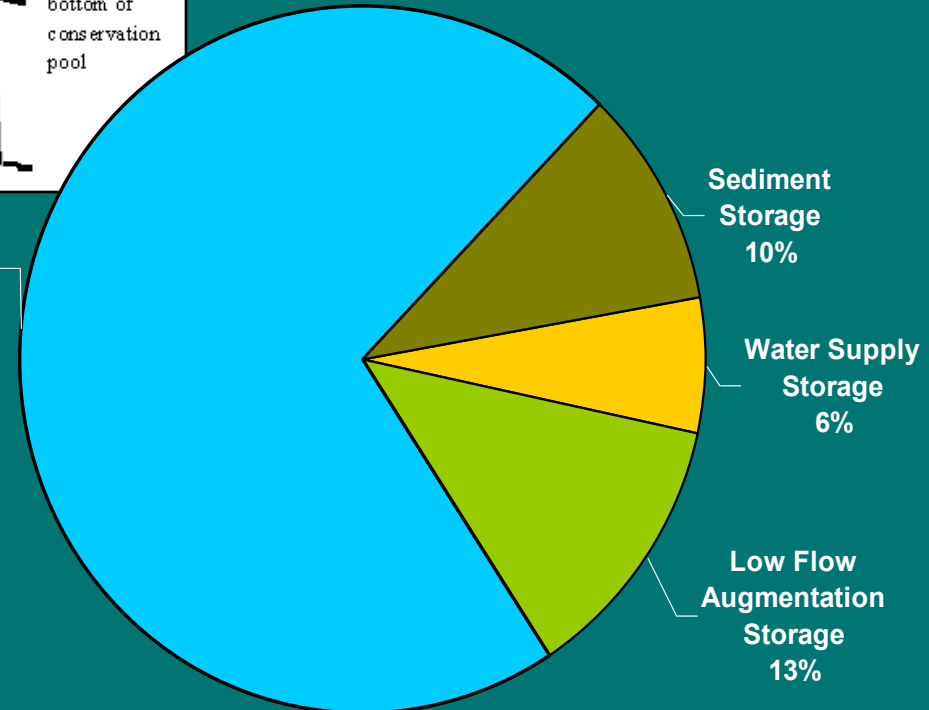
Jordan Lake Regulations

- North Carolina has a contract with the federal government for “water storage space” in B. Everett Jordan Lake.
- The NC General Statutes (G.S. 143-354(a)(11)) give the EMC responsibility to allocate this storage to units of local government having a need for water supply storage. Water can NOT be allocated to industries.
- The NC Administrative Code (15A NCAC 2G.0500) outlines the specific procedures to be used by the EMC in allocating the Jordan Lake water supply storage.

Reservoir Operations



Flood Control Storage
71%

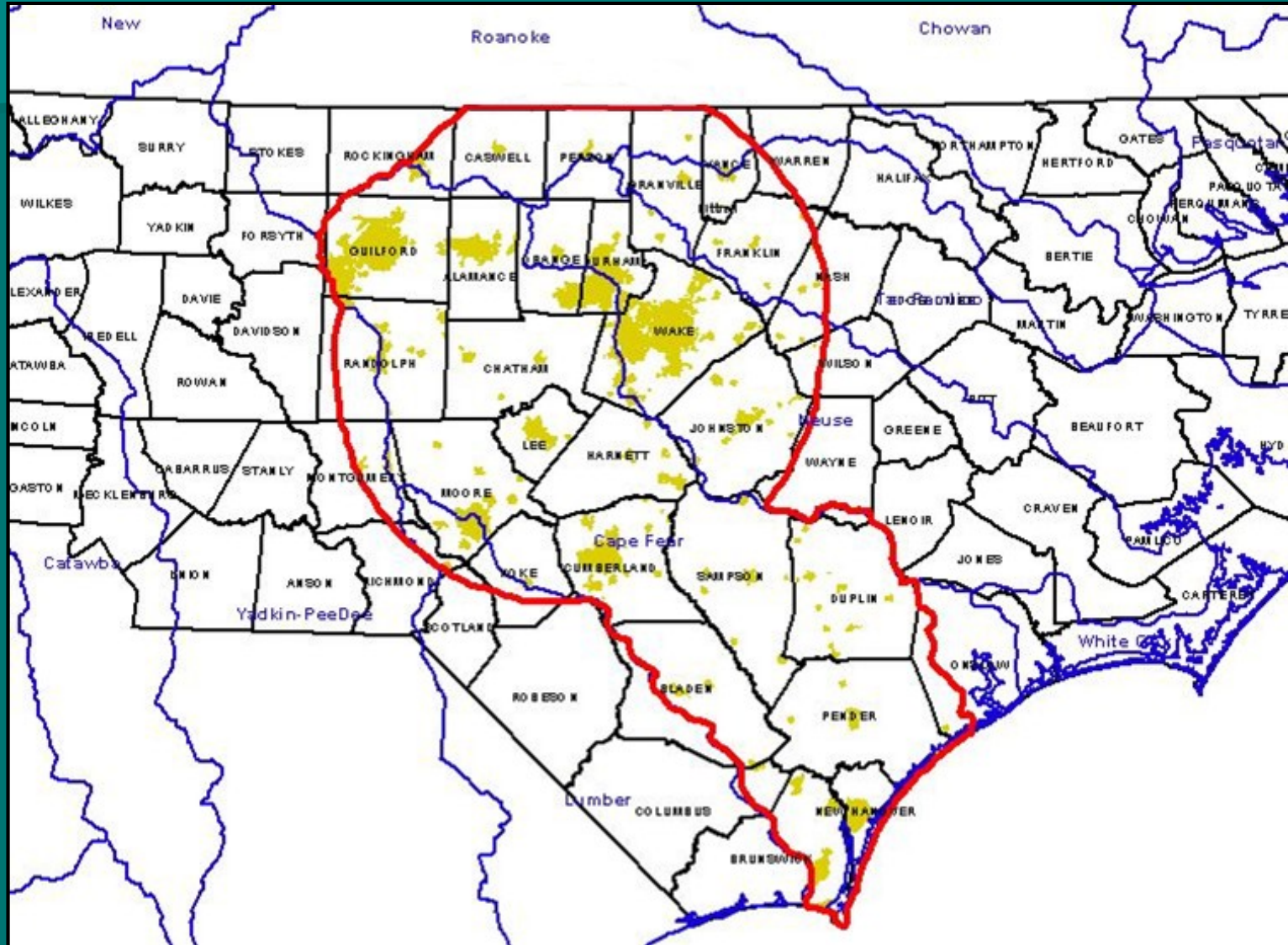


Jordan Allocation History

- 1967 – Jordan Lake construction begins
- 1982 – Lake filled to normal water level
 - Water supply allocation rule making is started.
 - 1st round of water supply allocations is started.
 - 1988 – EMC approves 1st round of water supply allocations.
- 1996 – 2nd round of allocations are started.
 - 1997 – EMC approves 2nd round of allocations that did not need an IBT certification.
 - 2000 – EMC approves 2nd round of allocations that needed an IBT certification.
- 2000 – 3rd round of allocations started.
 - 2002 – EMC approves 3rd round of allocations.
- 11/20/2009 – Received request to start 4th round of allocations.

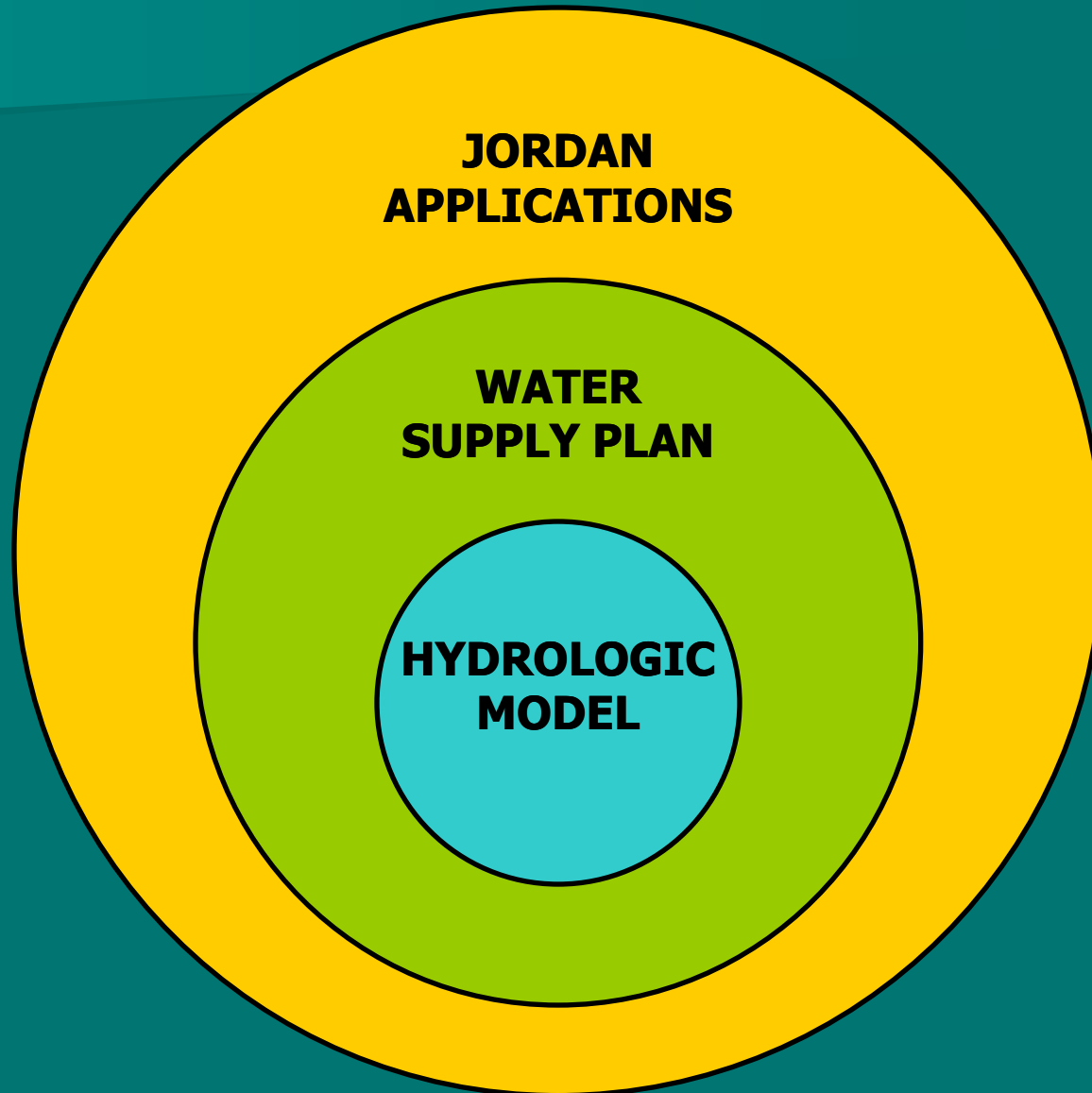
Round 4 Allocation Process

Regional Approach



Round 4 Allocation Process

Three Simultaneous Tracks



Round 4 Allocation Process

Relevant Planning Horizons

- Cape Fear Water Supply Plan is based on a 50-year planning horizon.
- Level I allocations are made based on 20-year projections *and* when withdrawals are planned to begin within five years of receiving the allocation.
- Level II allocations are made based on longer term needs of up to 30 years.

Jordan Allocation Timetable

DATE	APPLICATION DEVELOPMENT	WATER SUPPLY PLAN	HYDROLOGIC MODEL
February, 2010	PUBLIC INFORMATION MEETING (2/24/10)		
March, 2010			INITIAL MEETING (3/17/10)
April, 2010	"LETTER OF INTEREST" DUE		
January, 2012	WATER USERS PROVIDE HISTORICAL WITHDRAWAL DATA AND OPERATIONAL POLICIES.		
April, 2012	WATER USERS PROVIDE PROJECTIONS THROUGH 2060 AND ALTERNATIVE WATER SOURCES.	DRAFT MODEL AVAILABLE FOR TESTING.	
May, 2012			UPDATED MODEL COMPLETED.
August, 2012		WATER SUPPLY PLAN, FIRST DRAFT AVAILABLE FOR REVIEW.	
September, 2012	APPLICANTS SUBMIT DRAFT APPLICATIONS.	COMMENTS ON FIRST DRAFT DUE.	
November, 2012		WATER SUPPLY PLAN, SECOND DRAFT AVAILABLE FOR REVIEW.	
December, 2012	APPLICANTS SUBMIT FINAL APPLICATIONS.	COMMENTS ON SECOND DRAFT DUE.	
January, 2013	FINAL WATER SUPPLY PLAN AND DWR'S ALLOCATION RECOMMENDATIONS PRESENTED AT THE EMC'S JANUARY MEETING.		
November, 2013	EMC FINAL DETERMINATION AT THE EMC'S November MEETING.		

Round 4 Allocation Process

Differences

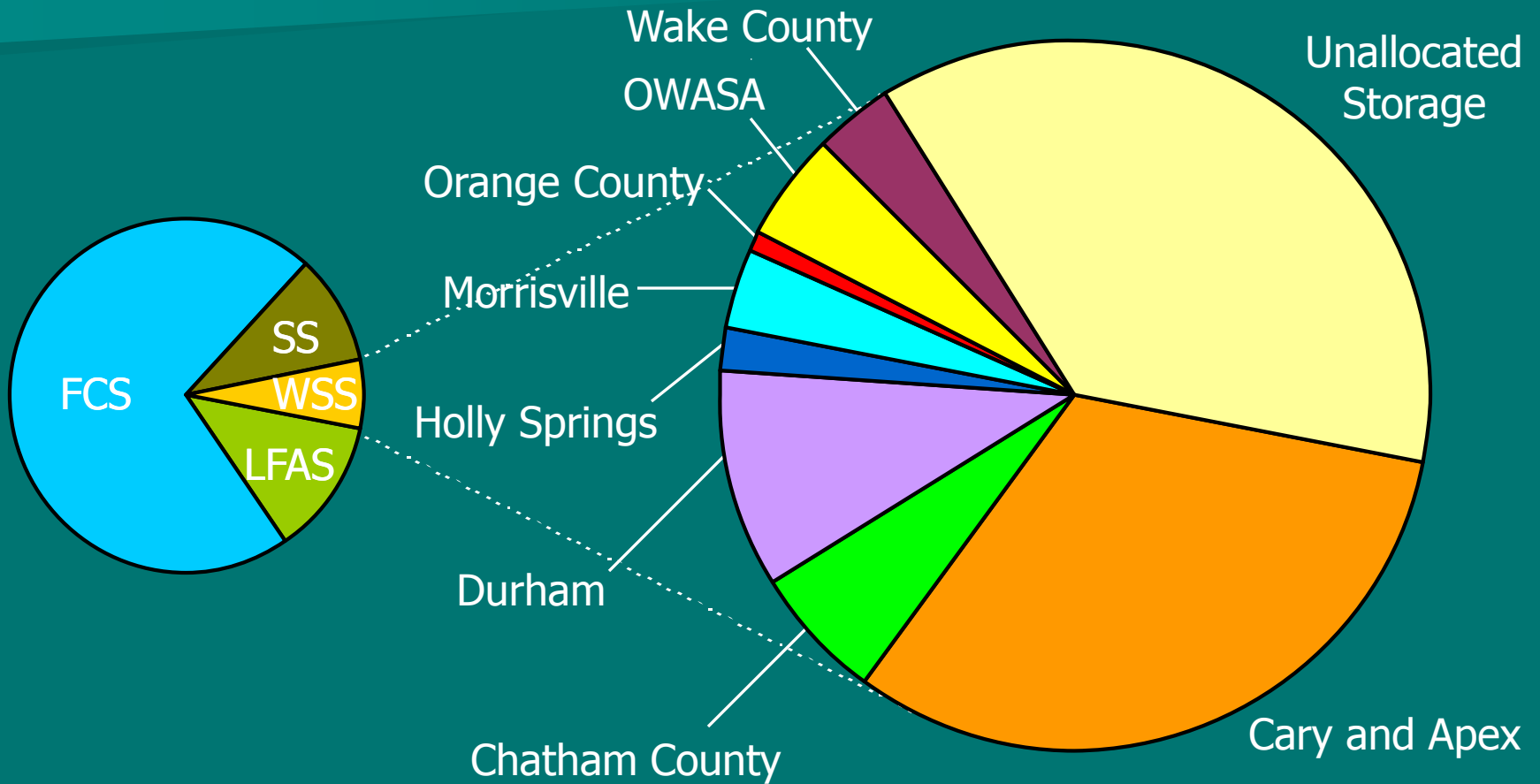
- The allocation requests will be based on the results of the long-range basin water supply evaluation.
- All existing allocation holders must submit an application justifying their existing allocation even if they do not plan on requesting a change.
- EMC has not yet determined how IBT vs. non-IBT allocations will be handled.
- DWR staff will review the 50% diversion requirement and make a recommendation as to whether a rule change is warranted.

History of Jordan Lake Water Supply Allocations

	Round 3 Current 2002	Round 2b 2000	Round 2a 1997	Round 1 1988
	Total (percent)	Total (percent)	Total (percent)	Total (percent)
<i>Cary and Apex</i>	32.0	21.0	16.0	16.0
<i>Chatham County</i>	6.0	6.0	6.0	6.0
Durham	10.0	0.0	0.0	0.0
Holly Springs	2.0	2.0	2.0	0.0
<i>Morrisville</i>	3.5	2.5	0.0	0.0
Orange County	1.0	1.0	1.0	1.0
OWASA	5.0	10.0	10.0	10.0
<i>Wake County - RTP</i>	3.5	1.5	0.0	0.0
Hillsborough	0.0	0.0	0.0	5.5
Orange-Alamance	0.0	0.0	0.0	3.5
Total	63.0	44.0	35.0	42.0

Current Allocations

Fraction of Total Lake Volume



Allocation Costs

- Jordan Lake was financed and constructed by the Federal government. G.S. 143-215.38 authorizes the State, acting through the EMC, to assume repayment responsibilities for these costs.
- Level I Allocations must pay a % of capital costs, interest, and O&M.
- Level II Allocations must pay interest and O&M.

Current estimated costs

All costs are for 1% of storage

- Capital costs are **\$48,880**.
- The USACoE charges 3.225% interest on the capital costs beginning when the lake was constructed (assume **\$1,415.13**).
- O&M costs vary each year (historical range from **\$300-\$800**)

Round 4 Allocation

Payment Requirements

15A NCAC 02G.0505(b) Recipients of Level I allocations are required to pay a proportional share of the state's total water supply storage capital and interest costs over a term suitable to the recipient and the Commission, but by 2012.... After 2012, the Commission may review and adjust repayment requirements to assure equitable and efficient allocation of the resource.

As it currently stands, any Level 1 allocation payments required after 2012 would be due as a lump sum.

Questions Received from OWASA - 1

- Yes I made a comment about the potential for OWASA's allocation being at risk based on the very early information that was being presented at a Jordan Lake Water Partnership meeting
 - The context was the partnership was looking at early draft supply and demands numbers and DWR staff was asked what our initial thoughts were and if we saw any issues that might need to be addressed. I never said OWASA would lose their allocation, only they are at risk of losing or having it reduced without a strong justification, based on the information presented. The comment was never intended to be DWR's official response, just an initial reaction to what was presented. Remember the EMC makes allocation decisions not DWR.

Questions Received from OWASA - 2

- What is the process to convert Level II to a Level I allocation?
 - *15A NCAC 02G.0504(f) When holders of Level II allocations have documented an immediate need and wish to commence withdrawals within five years, their Level II allocations will be changed to Level I upon review and approval by the Commission.*
- What does “use” mean?
 - *15A NCAC 02G.0504(b) The Commission will assign Level I allocations of Jordan Lake water supply storage based on an intent to begin withdrawing water within five years of the effective date of allocation...*
 - *DWR Staff considers withdrawal being either a direct or indirect withdrawal from the reservoir.*

Questions Received from OWASA - 3

- What is the process for a temporary emergency Level II to Level I allocation?
 - *There is no process for doing temporary allocations.*
- Does the conversion required a board resolution?
 - *No, just a letter from the board chairman or director for converting from Level II to Level I. New allocations required a letter of intent to enter into a financial commitment (15A NCAC 02G.0503(a)(8))*

Questions Received from OWASA – 4a

Granting & Retention of Allocations

OWASA currently has a Level 2 allocation.

- How can OWASA evaluate the risk of losing either its current Level 2 allocation or not getting a Level 1 allocation outside the round #4 process?
- What formal notification will OWASA receive from the EMC if loss of its allocation is imminent?
- How many public hearings is the EMC required to hold after this determination? Would OWASA still retain its access pending an appeal? Given how long the round #4 process is taking, would the appeal process stretch out over a year or more?

Questions Received from OWASA – 4b

Granting & Retention of Allocations

OWASA currently has a Level 2 allocation.

- Under what conditions would a Jordan Lake partner risk losing an allocation? Is there a process outside the current round #4 discussions which would lead to OWASA losing its Level 1 or 2 allocation? Outside the Jordan Lake Partnership, DWR, EMC who else weighs in on those
- decisions? What is the process for appealing a DWR or EMC decision?

Questions Received from OWASA – 4c

Granting & Retention of Allocations

OWASA currently has a Level 2 allocation.

- *15A NCAC 02G.0504(i) Where applications for allocations exceed storage capacity, the Commission will assign, reassign, or transfer allocations based on the applicants' or holders' need(s) and alternative water sources available (as defined in the application requirements), the existing or proposed average degree of utilization of the resource (relative to the total allocation application), the level of financial commitment (relative to the applicant's or holder's total costs in developing Jordan Lake as a water supply source), the effects on the lake's yield, and the level of sharing facilities or other cooperative arrangements with other local governments.*
- *15A NCAC 02G.0504(a) For future allocation decisions, additional public meetings may be held as determined by the Commission.*

Questions Received from OWASA - 5

- The Level 1 requirement to “plan to begin withdrawals in 5 years”
 - Does “plan to withdraw in case of severe drought, and only after primary sources get depleted” meet the requirement?
 - Does “plan to withdraw on a short-term basis” (perhaps a limited quantity over only a few days) meet the requirement? In other words, is the requirement met by simply an intent to withdraw, or is it met only when there is a demonstrable need to withdraw?
 - *15A NCAC 02G.0504(b) The Commission will assign Level I allocations of Jordan Lake water supply storage based on an intent to begin withdrawing water within five years of the effective date of allocation...*
 - *The current rules do not adequately address the use of Jordan as someone’s emergency source. We are going to need to work with OWASA to adapt the application and evaluation process to be fair for all applicants.*

Questions Received from OWASA - 6

- Impact of conservation on allocation decisions
 - How much does the degree of water conservation within each utility's service area factor into allocation decisions? (I did not see this mentioned anywhere as a factor.) Does a utility with water-efficient customers receive greater overall support, i.e., more of a buffer for their projected needs?
 - *Conservation is not specifically stated in the rules but has been considered by the EMC in previous allocation decisions.*

Questions Received from OWASA - 7

- In any reallocation decisions, do new legitimate Level 1 requests take precedence over existing Level 2 allocations? Do existing Level 2 allocations take precedence over new Level 2 requests? Under what circumstances could a utility lose its existing and legitimate Level 2 allocation?
 - *15A NCAC 02G.0504(i) Where applications for allocations exceed storage capacity, the Commission will assign, reassign, or transfer allocations based on the applicants' or holders' need(s) and alternative water sources available (as defined in the application requirements), the existing or proposed average degree of utilization of the resource (relative to the total allocation application), the level of financial commitment (relative to the applicant's or holder's total costs in developing Jordan Lake as a water supply source), the effects on the lake's yield, and the level of sharing facilities or other cooperative arrangements with other local governments.*

Questions Received from OWASA - 8

- Impact of severe drought on allowed withdrawals
 - If a utility with Level 1 allocation waits to turn on its Jordan Lake tap until a drought becomes severe, does it get a proportionate share of the pre-drought capacity or only a proportionate share of the remaining capacity?
 - *An allocation is for a storage amount. There is a running account for all users to now how much storage has been used and how much is still available.*
 - *The basic equation for the accounting is:*
 - *Inflow – Outflow = Change in Storage*
 - *Inflow is adjust for evaporation and can be negative during critical drought periods.*
 - *Outflow = a users withdrawal*

Questions Received from OWASA - 9

- Role of inter-local water agreements on allocation decisions?
 - *15A NCAC 02G.0504(i) Where applications for allocations exceed storage capacity, the Commission will assign, reassign, or transfer allocations based on the applicants' or holders' need(s) and alternative water sources available (as defined in the application requirements), the existing or proposed average degree of utilization of the resource (relative to the total allocation application), the level of financial commitment (relative to the applicant's or holder's total costs in developing Jordan Lake as a water supply source), the effects on the lake's yield, and **the level of sharing facilities or other cooperative arrangements with other local governments.***

Questions Received from OWASA – 10

- The allocation is expressed as a percentage of available Jordan Lake water, in OWASA's case 5%. Actual yield is determined by the conditions of Jordan Lake at the time of withdrawal.
 - *Allocation are for a storage amount. The yield or "safe" yield is an estimate of the available water during a worse case drought to assist in determining if the allocation storage is the correct amount.*

Questions Received from OWASA - 11

- In response to OWASA Board questions, OWASA's staff developed a model to assess the impact of 2 back-to-back droughts of the severity of 2001-2002 to determine the risk of severe water shortages through 2035 (when OWASA will be bringing significant new capacity on-line).
 - Can DWR use OWASA's model to determine projected yield from Jordan Lake through similar conditions?
 - *DWR is updating our Cape Fear model to be able to address these types of questions. We are always available to discuss differences in modeling results.*

Questions Received from OWASA - 12

■ Impacts to Jordan Lake's Water Quality

- *15A NCAC 02G.0504(h) To protect the yield of Jordan Lake for water supply and water quality purposes, the Commission will limit water supply allocations that will result in diversions out of the lake's watershed to 50 percent of the total water supply yield. The Commission may review and revise this limit based on experience in managing the lake and on the effects of changes in the lake's watershed that will affect its yield. For applicants whose discharge or intake represents a diversion pursuant to G.S. 153A-285 or 162A-7, the Commission will coordinate the review of the diversion with the review of the allocation request.*
- *In Round 2 the EMC had a buffer requirement added in the contracts to protect Jordan water quality.*

Additional Questions

Tom Fransen

jordan-water-supply@lists.ncmail.net

(919)715-0381

[http://www.ncwater.org/Permits and Registration/Jordan Lake Water Supply Allocation/](http://www.ncwater.org/Permits_and_Registration/Jordan_Lake_Water_Supply_Allocation/)

SUBCHAPTER 2G - WATER RESOURCES PROGRAMS

SECTION .0500 - ALLOCATION OF JORDAN LAKE WATER SUPPLY STORAGE

15A NCAC 02G .0501 INTRODUCTION

To increase the availability of municipal and industrial water supplies, the State of North Carolina requested the U.S. Army Corps of Engineers to designate 32.62 percent of the Jordan Lake conservation storage, between the elevations 202 mean sea level (msl) and 216 msl, as water supply storage.

The State, acting through the Environmental Management Commission, will assign to local governments having a need for water supply capacity any interest held by the State in such storage, with proportional payment by the user to the State for the state's associated capital, interest, administrative and operating costs.

Upon signing the water supply storage contract with the U.S. Army Corps of Engineers, the Commission will apply the following procedures in allocating Jordan Lake water supply storage.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.38 through 143-215.43; 143-354(a)(11); 143B-282;

Eff. March 1, 1988.

15A NCAC 02G .0502 DEFINITIONS

As used throughout this Subchapter:

- (1) "Capital costs" means initial costs of the project;
- (2) "Commission" means Environmental Management Commission;
- (3) "Department" means the North Carolina Department of Natural Resources and Community Development;
- (4) "Division" means the Division of Water Resources;
- (5) "Effective date of allocation" means the date the Commission approves the allocation;
- (6) "Interest costs" means interest accrued on the unpaid balance;
- (7) "Local government" means any city, county, authority, sanitary district, metropolitan water district, or other local unit;
- (8) "Operating costs" means Jordan Lake's state and federal operating, maintenance, replacement, and administrative costs associated with water supply storage;
- (9) "State" means the state of North Carolina; and
- (10) "Water supply storage" means storage of water for municipal or industrial use.

History Note: Authority G.S. 143-354(a)(11);

Eff. March 1, 1988.

15A NCAC 02G .0503**FORMAL APPLICATION**

(a) The Commission may receive initial allocation requests from local governments beginning on this Section's effective date. In order to be reviewed, applications must contain the following information:

- (1) Projected population and water use, including a detailed map of the existing and projected water service areas;
- (2) A listing of water sources presently available, including estimated yields of these sources;
- (3) An analysis of the yield, quality, and cost of alternative sources of water supply other than Jordan Lake that could meet or partially meet projected needs, including regionalization of systems;
- (4) A description of conservation and demand-management practices to be used;
- (5) An outline of plans to use water from Jordan Lake, including proposed location of intake and water treatment plant(s), location of wastewater treatment plant(s), any proposed sharing of facilities or other cooperative arrangements with other local governments, and a proposed schedule of development;
- (6) A plan for monitoring the quality of the raw and finished water in accordance with the requirements of North Carolina's Department of Human Resources and the U.S. Environmental Protection Agency;
- (7) The estimated cost of developing water supply facilities at Jordan Lake, also costs of alternative sources of supply; and
- (8) A letter of intent to enter into a financial commitment for Jordan Lake water storage.

(b) The Commission or the department may request such additional information as may be reasonably necessary for a complete understanding of the allocation request.

(c) Local governments may apply for two levels of allocation: Level I allocations are for applicants which have demonstrated an immediate need and will commence withdrawals within five years of the effective date of allocation; Level II allocations are for applicants with documented longer range needs for water.

(d) The applicant should include in the application the assumptions and the methodology used to develop projections. The Commission will assist applicants by providing a copy of departmental procedures for projecting water supply demands and determining yields.

(e) Using departmental procedures for projecting water supply demands and determining yields, the department will provide the Commission an independent assessment of the applicant's water supply needs.

History Note: Authority G.S. 143-215.3(a)(1); 143-354(a)(11); 143B-282;

Eff. March 1, 1988.

15A NCAC 02G .0504 ALLOCATION OF WATER SUPPLY STORAGE

- (a) The segment of Jordan Lake proposed for a water supply withdrawal must be classified by the Commission as a drinking water source prior to any allocation of Jordan Lake water supply storage. Prior to the first allocation of water supply storage at Jordan Lake, the Commission shall hold one or more public meetings on the amount(s) requested by each applicant, the suitability of Jordan Lake water for public water supply use, the availability of alternative water sources, and the best utilization of the water resources of the region. For future allocation decisions, additional public meetings may be held as determined by the Commission.
- (b) The Commission will assign Level I allocations of Jordan Lake water supply storage based on an intent to begin withdrawing water within five years of the effective date of allocation, on consideration of projected water supply needs for a period not to exceed 20 years, and on the design capacity of the associated withdrawal and treatment facilities.
- (c) The Commission will make Level II allocations of Jordan Lake water supply to applicants based on projected water supply needs for a period not to exceed 30 years.
- (d) The Commission will initially keep 50 percent of the water supply storage unallocated to meet future water supply needs as they develop.
- (e) If additional storage is requested by holders of Level II allocations, these parties must submit an application addendum to the Commission for review.
- (f) When holders of Level II allocations have documented an immediate need and wish to commence withdrawals within five years, their Level II allocations will be changed to Level I upon review and approval by the Commission.
- (g) The department will issue a notice that it has received applications for Level I and Level II allocations and requests for increases in allocations, with a 30-day period for comment. If there is significant public interest, the department may hold a public meeting to obtain comments and information, with appropriate notice.
- (h) To protect the yield of Jordan Lake for water supply and water quality purposes, the Commission will limit water supply allocations that will result in diversions out of the lake's watershed to 50 percent of the total water supply yield. The Commission may review and revise this limit based on experience in managing the lake and on the effects of changes in the lake's watershed that will affect its yield. For applicants whose discharge or intake represents a diversion pursuant to G.S. 153A-285 or 162A-7, the Commission will coordinate the review of the diversion with the review of the allocation request.
- (i) Where applications for allocations exceed storage capacity, the Commission will assign, reassign, or transfer allocations based on the applicants' or holders' need(s) and alternative water sources available (as defined in the application requirements), the existing or proposed average degree of utilization of the resource (relative to the total allocation application), the level of financial commitment (relative to the applicant's or holder's total costs in developing Jordan Lake as a water supply source), the effects on the lake's yield, and the level of sharing facilities or other cooperative arrangements with other local governments.

History Note: Authority G.S. 143-54(a)(11); 143-215.3(a)(1); 143B-282; 153A-285; 162A-7;

Eff. March 1, 1988.

15A NCAC 02G .0505 NOTIFICATION AND PAYMENT

(a) The Commission will notify applicants of the decisions made regarding their allocation requests.

(b) Recipients of Level I allocations are required to pay a proportional share of the state's total water supply storage capital and interest costs over a term suitable to the recipient and the Commission, but by 2012.

Interest rates will vary with the payback term, and will be based on the state recovering the total federal capital and interest costs associated with water supply storage by 2012. After 2012, the Commission may review and adjust repayment requirements to assure equitable and efficient allocation of the resource. Level I recipients are also required to pay annually a proportional share of operating costs.

(c) Holders of Level II allocations are required to pay a proportional share of the project's water supply storage interest and operating costs.

History Note: Authority G.S. 143-215.3(a)(1); 143-354(a)(11); 143B-282;

Eff. March 1, 1988.

15A NCAC 02G .0506 RECIPIENTS' REQUIREMENTS

(a) Holders of Level I allocations must provide documentation meeting the requirements of the North Carolina Environmental Policy Act, G.S. 113A-1 thru 113A-10, at the time the holders propose to build facilities to use water from Jordan Lake. Such documentation shall include the environmental impacts of the proposed withdrawal, treatment, distribution, and disposal of the holders' allocated water.

(b) Local governments must install and maintain suitable meters for the measurement of water withdrawn, report these withdrawals to the department on a monthly basis, and obtain the department's approval for the design, location, and installation of associated withdrawal facilities.

(c) Holders of Level I and Level II allocations must pay the required capital, interest, and operating costs when due.

History Note: Authority G.S. 113A-1 through 113A-10; 143-215.3(a)(1); 143-354(a)(11); 143B-282;

Eff. March 1, 1988.

15A NCAC 02G .0507 LOSS OF ALLOCATION

(a) The Commission will review the Level I and Level II allocations at five year intervals, beginning on the effective date of the first allocation.

(b) Level I allocations will be reviewed for possible reassignment if the recipient does not begin to withdraw water within five years of the effective date of allocation or is not using and withdrawing the water as proposed in the application.

(c) Level I and Level II allocations will be rescinded upon failure by the local government to meet the regulation requirements in .0506 (a), (b), and (c).

(d) The Commission may adjust, reassign, or transfer interests in water supply storage held by local governments, if indicated by an investigation of needs or changes in the project's water supply storage capacity. Capital, interest, and operating costs will be equitably adjusted to reflect the allocation recipients' proportion of total capacity.

Holders of Level I and Level II allocations will receive appropriate refunds for any payments made if their allocations are adjusted, reassigned, or otherwise amended with the approval of the Commission. Rescinded allocations will not be refunded.

(e) The Commission shall hold a public meeting to obtain comments and information regarding the proposed loss of allocation.

History Note: Authority G.S. 143-215.3(a)(1); 143-354(a)(11); 143B-282;

Eff. March 1, 1988.

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Transcript of OWASA proceedings

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December 8, 2011.

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1 Thursday, December 9, 2011

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3 MR. MERKLEIN: We'll now move on to our
4 regularly scheduled agenda. Our first item for
5 discussion is with Tom Fransen, Deputy Director of the
6 North Carolina Division of Water Resources and Water
7 Resource Management Section Chief, and I'd like to call
8 on Mason, who will provide us an introduction.

9 MR. CRUM: Thank you very much. It's
10 my pleasure tonight to introduce Mr. Fransen. I sent
11 you by e-mail his full bio. I'll just hit a few
12 highlights. Tom has a bachelor's and master's degree in
13 engineering from North Carolina State. He also has a
14 bachelor's degree in biology and natural sciences from
15 Carthage College.

16 Tom began working for the State of North
17 Carolina in 1984, where he has served as an environmental
18 engineer, River Basin Management Section Chief, and since
19 2008, as the Deputy Director of the Division of Water
20 Resources. This past July, as y'all know, the state's
21 been doing a lot of reorganizing, and when they did that
22 Tom also assumed the title of Water Resources Management
23 Section Chief.

24 Tom's got his trusty assistant, Don Rayno, here
25 tonight, and we very, very much appreciate y'all taking

1 your evenings to come here and educate us on the Round
2 Four Jordan Lake allocation process. Thank you, Tom.

3 MR. FRANSEN: It's a pleasure to be here
4 tonight. I've been getting a lot of questions from the
5 Board, so I'm glad to see that you're getting engaged in
6 the process. It's important that everybody's comfortable
7 with it.

8 What I'd like to do tonight is just give a
9 little background--a short background on the allocation
10 process and then move right into the questions that you
11 supplied to me, and we'll see if we can't get some of
12 your questions answered.

13 I think we all know where this group is, where
14 Jordan Lake is; at the confluence down just on the Haw
15 and the New Hope Creek over in Chatham County is where
16 the dam is.

17 As far as regulations go relating to why the
18 state's involved and how--what our involvement is with
19 Jordan Lake, since it is a federal project, North
20 Carolina did enter into a contract when it was built with
21 the federal government for the water supply storage in
22 Jordan Lake. It's unique. It's the only project in the
23 state that the state owns the water supply storage in,
24 or has a contract for it. So Jordan's unique that way.

25 The regulations that we follow to allocate that

1 water out to the municipalities, then, is--you've got the
2 citation there, and it says we can only allocate water
3 to units of local government. Organizations like OWASA,
4 under North Carolina statutes, qualify as a unit of local
5 government. We cannot allocate water to industries.
6 We've had requests from nurseries and other folks to use
7 that water. We cannot use that for allocat--we cannot
8 allocate them water.

9 There's not much in the statute except the fact
10 that the Commission does the allocations. There are some
11 rules that have got some age on them now that kind of
12 outline the process. I think the important thing to note
13 here, too, is with--Don and myself, our division acts as
14 staff for the Environmental Management Commission. We
15 do not make the decision. That's actually up to the
16 Commission.

17 What we're talking about--we've actually showed
18 the storage in Jordan Lake in two different ways. One
19 down here is a pie chart to kind of show you the
20 percentage, and then it's also broken up by elevations.
21 And so we're really talking about, between Elevation 202
22 and 216, this percentage--this smaller percent here, the
23 water supply.

24 When I talk to groups--people downstream of
25 Jordan, they're concerned that the water supply is going

1 to impact low flow releases. They're still--the bulk of
2 that water is still sitting there for low flow
3 augmentation for water quality purposes, and we're not
4 touching that from an allocation viewpoint.

5 As far as the allocation history goes, the first
6 time we did it was in 1982, about the time the lake
7 became full. It took us six years the first time. We
8 came back again in '96 for a second round, and that was
9 actually broken up into two rounds, an A and a B, because
10 we had some with allo--that had an IBT and some that did
11 not, so actually we ended up with two decisions out of
12 this Round Two.

13 Then Round Three was in 2000, and now we've got
14 the fourth round started here at--towards the end of
15 2009. And what--

16 MR. YOUNG: Excuse me.

17 MR. FRANSEN: Yes.

18 MR. YOUNG: Tom, could you clarify IBT?

19 MR. FRANSEN: I'm sorry.

20 MR. YOUNG: I think I--

21 MR. FRANSEN: IBT is Inter-basin Transfer.

22 MR. YOUNG: Yes, thank you.

23 MR. FRANSEN: But for this group, that's
24 not a big issue except how it might impact the schedule.
25 For some of the partners in the Jordan Lake Water

1 Partnership, like Cary, that could become an issue.
2 Possibly Durham. You'll have to excuse me if I use too
3 many acronyms. I do this too much. Bad habit here.

4 The approach that the Commission has wanted us
5 to take is a very reasonable approach, that when somebody
6 comes in with a request, they don't want to deal with
7 them kind of like first come, first served. They want
8 to make sure that the allocations are done in such a way
9 that it's meeting the regional needs, and we're kind of
10 balancing immediate need versus long term need.

11 And when we talk region, they've got a big
12 defined region here. You know, we're taking basically
13 a 50 mile buffer around Jordan Lake and anything
14 downstream of Jordan Lake in the Cape Fear watershed,
15 because one of the ways you can get water from Jordan
16 Lake for your allocation is to ask the Corps to release
17 it and you pick it up downstream.

18 So you can see we're taking a pretty big swath
19 of the state here when we're dealing with this allocation
20 process. This is the same thing that we've done for
21 Rounds Two, Three, and now Four.

22 Part of the reason the allocation takes--or
23 seems to take long--and it does take long--the
24 Commission, in Round--I can't remember if it was Two--
25 Round Two, they asked us to start doing a planning

1 process associated with it. They want to make sure that
2 people are not going to be--that when we get done with
3 an allocation, that five years down the road, somebody
4 else is going to run out of--need water or they're going
5 to run out type of thing, and so we do a pretty detailed
6 planning process that then supports the applications.

7 And so in our planning process, we also develop
8 a hydrologic model. That's taken us a little longer to
9 get it updated this time, partly because we're actually
10 updating the Cape Fear and combining it with the Neuse
11 model. With the regional issues in this region, to
12 really understand how to optimize the resources that's
13 going on and the interactions between the Cape Fear, the
14 Neuse, and Falls versus Jordan and all the other
15 reservoirs and stuff, we thought we really needed to have
16 a model that could put those two pieces--those two basins
17 together.

18 So the process, from the real high level, we do
19 a basin plan that's a 50 year planning horizon, because
20 we talk about allocations. They can be a Level 1 or 2,
21 Level 1 being those that need it immediately. Those are
22 based on kind of an immediate need, with a planning
23 horizon out to 20 years. Level 2 is something longer,
24 you don't need it immediately, with about a 30 year
25 planning horizon.

1 You can see the Commission's being careful,
2 because they didn't tell us to plan for a 30 year. They
3 actually planned for 50 so that we're not going to
4 potentially miss a problem by cutting that planning
5 horizon too short, which adds for some fun, because as
6 you know, the further out you go, the less reliable your
7 projections and the harder it is to do it, but we make
8 our best shot at it.

9 As I said, the process kind of started back at
10 the end of 2009, kind of more formally started in
11 February of 2010. Because it's taken us a little longer
12 to do the modeling, our best estimate right now is
13 probably the end of 2013 would be when the Commission
14 would actually be making a decision.

15 And you'll get a--as I understand it, the--my
16 PowerPoint will become available for you so you
17 don't--you can study that in more detail or if you've got
18 a specific question, I can try to answer it.

19 So we're probably--some of the differences from
20 the last round is, we're putting more emphasis on the
21 long range planning right now, so that we really would
22 like the appli--we're trying to work with the applicants
23 and others in the basin so that when the applications
24 come in, they kind of match the planning and everything
25 kind of falls together so we make--so that it gives a

1 good solid presentation to the Commission to help make
2 their decision easier.

3 There may or may not be any Inter-basin
4 Transfer. That's what the IBT is. The Commission
5 reserved the right to determine how we would handle that
6 process after they found out if there would be any IBT
7 or not.

8 And there is a provision in the current rules
9 that says we cannot allocate more than 50 percent outside
10 of the Jordan Lake watershed. That has now been
11 revisited since the original rule, and we're going to,
12 as part of the planning process, look to see--make a
13 recommendation to the Commission whether that 50 percent
14 should remain or be modified at some point later.

15 Quick history. We talked about the three
16 rounds. OWASA's been involved in all three rounds. You
17 can see your initial allocation in 1988 was 10 million
18 gallons a day--or actually, let me clarify that. Your
19 allocation really is a percent of the storage, which
20 is--and you've got 10 percent. Our current estimate of
21 the safe yield is 100 million gallons a day, so we have
22 a tendency to get a little sloppy and interchange percent
23 and MGD. You really should be--to be really correct, we
24 need to be talking in terms of percent of the storage.
25 So you had 10 percent.

1 As we moved through Round Three, they did take
2 a hard look at existing allocations, and it was
3 determined that--and I think with a consensus of the
4 OWASA staff and folks, when nobody really challenged it,
5 we reduced that from 10 down to 5.

6 If you want a little bit more background on this
7 one, it's--remember, we're staff that recommend--make
8 recommendation to the Commission, and if you actually go
9 back and read the record in Round One, staff only
10 recommended 5 MGD for OWASA in Round One. OWASA pleaded
11 their case convincingly enough that the Commission
12 decided that OWASA should get 10, and override the staff
13 recommendations.

14 So they listen to us, but they are a very
15 independent body and they will make their decisions based
16 on the evidence that they see in front of them. So from
17 our viewpoint, Three just corrected a mistake from One,
18 but--

19 This kind of goes back to the storage a little
20 bit here again, just to kind of highlight how the storage
21 is broken out. You've got flood control, sediment pool,
22 water supply, and the low flow, so we're really talking
23 about allocating this small piece of the pie, and that's
24 currently how it's allocated, and you can see how much
25 is unallocated versus allocated to the various allocation

1 holders.

2 I've had some questions about cost. The state
3 entered a contract with the federal government and we are
4 responsible for paying that back. The main difference
5 between a Level 1 and Level 2 is what you have to pay.
6 That's what the original purpose of it was for.

7 Level 1 is if you're--since you're using the
8 water, you're paying back on the--you're paying your
9 interest and capital, just like paying off your home
10 mortgage. And the Corps does charge us an operation and
11 maintenance fee every year, so you're paying your share
12 of the O & M costs.

13 Level 2, since you're not really using it, we
14 were trying to give municipalities a break and saying,
15 "Okay, you know, we still have to maintain the lake so
16 you need to pay your share of the O & M. We still have
17 to pay the interest, but we'll let you defer paying on
18 the capital."

19 So really, the Level 1, Level 2 discussion
20 that's kind of gone on through some of the e-mails and
21 things has kind of taken a different twist than what it
22 was originally intended for. It really was--really dealt
23 more with the payment issue than how do you lock up and
24 prioritization and some of the things that have been
25 discussed.

1 Capital costs for one percent is roughly
2 \$48,880. The interest rate that we have with the Corps
3 is 3.225 percent. So on an annual basis, that would be
4 roughly the \$1,400. O & M costs, as you can imagine,
5 varies each--it can vary year to year. It's been roughly
6 in the \$300 to \$800 range.

7 The thing to note here is--well, that's actually
8 on the next slide. This is the citation for the payment
9 requirement, and I'm not sure why we did it. I was
10 working for the Division at the time but not on the
11 project. It basically said by 2012, your capital had to
12 be paid off. So since with these new rounds, we won't
13 be doing the allocation until after 2012, people will
14 have to be paying the full capital cost up front.

15 I guess what that means is actually you pay a
16 big lump sum, but then, you know, you only have to pay
17 O & M after that, because there wouldn't be any interest
18 to pay. So if you go back--so that means for every one
19 percent storage, roughly \$49,000 would be the up front
20 cost.

21 I guess before I get into your specific
22 questions, are there any general questions? Or
23 otherwise, I'll kind of start stepping my way through the
24 questions that y'all sent.

25 MR. RIMER: I've got a geeky question

1 on your modeling.

2 MR. FRANSEN: Sure.

3 MR. RIMER: What are you all doing to
4 accommodate for the potential for climate change in
5 hydrologic modeling, if you know?

6 MR. FRANSEN: Yeah, I do know. Actually,
7 we just had a meeting on that yesterday. We had the
8 state climatologist and some other experts come in to
9 talk to us. We've got an approach that we hope that will
10 work, that we're kind of going through a testing phase
11 on it. The RTI has a model called Waterfall.

12 Our goal is whenever we can get the climate
13 models to a point that we're comfortable with them, that
14 we'll work with the Climate Office to get them downscaled
15 so we can use that as an input into Waterfall. Waterfall
16 will create a flow set for us that we can then run
17 through our existing model.

18 So that way we would be modeling--our models
19 currently are based on historical stream flows, so that
20 with Waterfall, we'll have an alternate data set to run.
21 We can do either the historical or a--something based on
22 a climate model.

23 The state climatologist basically said at this
24 point, we'd be having to run probably 20 or 30 scenarios,
25 and he doesn't really feel that the climate models for

1 North Carolina are in good enough shape to justify that
2 level of effort. So we feel with Waterfall we'll have
3 the tool, once we feel the--once the experts tell me they
4 feel that the models are worth running.

5 MR. RIMER: Thanks, Tom.

6 MR. RAYMOND: Tom, just to clarify a note
7 that I wrote, the--you said the Level 1 and Level 2
8 allocations were just a method for determining a payment,
9 and I guess you're going to address this with some of the
10 questions, whether that thinking has changed or not, or
11 do you still see it as just a--still how it originally
12 was proposed, as just a matter of figuring out who pays
13 what when?

14 MR. FRANSEN: I really think it comes down
15 to a payment--I mean, to me it really is a payment
16 question. I know there's some been some other emphasis
17 tried to put on it. Now, how the current Board--how the
18 current Commission would view it would be--we'd have to
19 ask them. You know, every time we have a new Commission
20 or a new group, they kind of get their own personality
21 and then it's--from a staff viewpoint, I still view that
22 as a payment issue.

23 I guess what started all this discussion was
24 actually a comment that I did make at one of the Jordan
25 Lake Partnership meetings about the potent--that there

1 was a potential that OWASA had the risk of maybe losing
2 their allocation.

3 But the context of that was it was a very early
4 meeting with the Partnership. They were providing some
5 very early demand and supply numbers, and the context of
6 that was, they were asking the state staff, what did we
7 think of their planning process, what did we think of
8 those numbers, did we see any potential issues.

9 Based on the numbers I saw and the history that
10 I knew, you know, I wasn't saying OWASA was going to lose
11 their allocation, I just said with--they were at a risk
12 of potentially losing it without a very strong
13 justification to keep it.

14 And as you saw from the Round One versus Round
15 Three, this is--this was very unofficial. This was just
16 a staff reaction to some early data, and we know the
17 Commission makes the decision and they don't always
18 follow our recommendation, not that this was a
19 recommendation to the Commission.

20 Yes?

21 MS. BUCKNER: Can we step back one minute
22 to your intro? I just want to make sure that I
23 understand the process here.

24 MR. FRANSEN: Uh-huh (affirmative).

25 MS. BUCKNER: So as I understood what you

1 presented, that you are doing a hydrologic model that is
2 basically assessing how much water is going to be
3 available and all of those details right now, and then
4 there will be applications by everybody that was in that
5 red circle who is interested in getting water, and then
6 you will review those applications and make the
7 determinations by balancing what you find in the
8 hydrologic versus the applications. Is that the big
9 picture?

10 MR. FRANSEN: Roughly. We're--maybe I
11 need to step back to the schedule a little bit.

12 The model, remember, is a tool for us for
13 planning, so once we get the tool built, we try to
14 include all the withdrawals and discharges of 100,000 or
15 more per day. Now that we've got drought plans that
16 include hard triggers, we're going to be including the
17 water shortage response plans in the model, operational
18 details and all those types of things for the reservoirs.

19 So we'll have a model that we put together, and
20 then as part of the planning process, we'll be asking the
21 applicants and others to provide us some draft
22 information on what they see their current--what are
23 their current demands and what do they think their
24 projections are. We'll do kind of a draft with the model
25 to run through and say, "Okay, with that, do we see any

1 problems?"

2 If we see problems, we'll sit back down and have
3 a discussion with folks. "Here are problems. How would
4 you--you know, do you want to adjust your"--you know,
5 "What kind of adjustments can we make to get a better
6 scenario? What kind of adjustments do you want to maybe
7 do in your thought process about water?"

8 So that we'll try to do an iterative process
9 with the applicants and the folks in the basin, so that
10 when we get done with the second and final--then the
11 final draft of the Water Supply Plan--hopefully, the
12 applicants at that point, because we've been working with
13 them, their applications will match what we ended up
14 putting in the plan.

15 And that--in an ideal world--and I'm an optimist
16 on this, because I think there's enough water out there
17 to do this, everything will kind of fall in place and
18 we'll--there won't be haves and have nots, and your
19 preferred option may not come out to be the most balanced
20 one, and there may be some adjusting that needs to be
21 done.

22 But it'll be an iterative process. It's not
23 going to be--we're not going to go off and do a model in
24 the dark by ourselves.

25 MS. BUCKNER: So when you say that you're

1 going to work with the applicants, does that mean that
2 you're going to review their drought response plans and
3 say, "You can do a better job," and help them be more
4 conservative, have a plan that is more conservation-
5 minded, or is it all going to be technically on quantity?

6 MR. FRANSEN: It'll be--it could
7 potentially cover a number of different things, I mean,
8 until we actually run it to see. We have never done this
9 before, in terms of taking drought plans for a whole
10 basin and trying to run them.

11 We don't know what--we have some ideas about
12 what we're expecting to see. It may not just be--and you
13 have to remember, conser--to me, conservation and drought
14 can be two different things. You've got your everyday
15 management of the system and how you do respond to
16 conservation that's different than when you institute
17 measures during drought to reduce your risk of running
18 out of water. So there's kind of an ongoing--we kind of
19 look at the per capita efficiency versus kind of what you
20 can do in drought to save water.

21 So there's--there's multiple sides to this, and
22 we understand it's a tough one for folks like you to deal
23 with, because every time you conserve water, that's less
24 revenue coming in and you've got fixed costs you have to
25 deal with, too. So it's a--there's a lot of things that

1 have to be balanced here, and we understand that.

2 MR. STOTT: So maybe I didn't hear what
3 you said completely, but--so you will get drought
4 response plans from all of the municipalities.

5 MR. FRANSEN: We already have them.

6 MR. STOTT: Okay, great. Right. Now,
7 those plans are different than the operating plans that
8 we have, at least in OWASA, right, because those
9 represent reductions. Do you also factor in, as another
10 one of the variables in the model, what our normal
11 operating use is?

12 MR. FRANSEN: Yes.

13 MR. STOTT: Okay. And as--I thought so,
14 but I just wanted to be sure.

15 MR. FRANSEN: That we have always done.
16 The problem in--historically has been, a lot of times the
17 drought plan would be, "Well, it gets dry; we'll call the
18 town board together to see if we want to do something."
19 I can't model that.

20 The new plans are required to have hard
21 triggers; that when the lakes get to 30 percent--or 70
22 percent full, we're going to do this action. That I can
23 model.

24 MR. STOTT: Right.

25 MR. FRANSEN: I think we kind of went over

1 this one. Less is more there. Did make it, and the
2 context was just kind of early reactions. It's not--
3 nothing official. We understand that. Actually, my
4 comment probably elicited a better response than I'd even
5 hoped for. The hope was it would cause OWASA to stop and
6 think, "What--how do we really want to use Jordan Lake?"
7 You're doing that, so I applaud you for it.

8 Process to--there's discussion of how you
9 convert from a Level 2 to a Level 1. According to the
10 rules, you know, based on documented need, you know, you
11 just send a letter in to the EMC and--for a review and
12 approval. It's been a very--in the past when we've done
13 it, it's been a very painless process, you know. You
14 send it in.

15 There's always been documentation. Like for
16 example, when Cary brought on an expansion on their water
17 plan. You know, we could say, "Okay, they now needed to
18 convert Level--this amount of Level 2 to Level 1 because
19 they've got the new plant coming on line."

20 It could be, in your case, maybe, that you've
21 formalized the agreements with Durham and Cary so that
22 you could get a certain amount of water on a regular
23 basis. So that, to me, would constitute, you're ready,
24 and you've documented that you're ready to start using
25 the water and ready to move from a Level 2 to a Level 1.

1 MR. YOUNG: And does that process occur
2 out of cycle, or can it occur out of cycle, in between
3 the allocations? Does my question make sense?

4 MR. FRANSEN: Right. Converting--
5 converting your 2 to a 1, we look at that an
6 administrative detail, because you're not asking for a
7 change in your total allocation amount. It's only when
8 we're talking about changing the total allocation amount
9 that we go through this more elaborate process.

10 I got a question--I think we've kind of used
11 "use"--it's come up, you know, when you're going to use
12 the water. If you really look at the way the rules are
13 written, that they don't use the term "use." They talk
14 about withdrawing water.

15 So I guess in the context of Level 1 and 2,
16 you're really talking about a withdrawal of water. And
17 as far as the staff is concerned, that can either be
18 direct or indirect, indirect being the example of Cary
19 withdrawing and pushing it through Durham to OWASA.
20 That, to me, is the same as if Cary having their own,
21 Apex having their own intake in the water--in the pipe.

22 Harnett County has wanted potentially to
23 withdraw where the Corps would release it and they'd pick
24 it up in an intake out of the Cape Fear, so that's a--
25 that's what it's coming--that's kind of how we're

1 interpreting it.

2 MR. RAYMON: So to be clear, when we've
3 been talking about "use," the real meaning is withdraw
4 water in five years?

5 MR. FRANSEN: Uh-huh (affirmative).

6 This question, I'll tell you, to be honest with
7 you, it kind of threw me for a loop, but I'm--a temporary
8 emergency Level 2 to Level 1. We don't have any
9 provisions for kind of a temporary allocation. This
10 whole process was kind of designed around long term needs
11 and short term needs and the fact that you would need
12 the water on an ongoing basis. I don't really think
13 we're structured to handle something that--that question
14 of like, "Well, I only temporarily want to convert to a
15 Level 1."

16 Remember, we've got a contract with the Corps.
17 If you start using it, the Corps is going to charge us
18 as if you're using that water, not on a temporary basis,
19 but on a permanent basis. So it kind of goes back to
20 that payment question again.

21 Would it require a resolution from your--from
22 this Board? No. In the past, it only required a letter
23 from, like, a Board chairman or even the Director of
24 OWASA to either my boss or to the chairman of the EMC,
25 and that's all it's taken in the past. If you want to

1 do a Board resolution to support it, that would be fine,
2 but it's not required.

3 MR. YOUNG: Tom, and just--thank you.
4 Just a question about the use again. I mean, for--in our
5 circumstances, we've got water except if there's a
6 drought, right, and so that's when we'd want to use it.
7 And so it--maybe a little--we'd want to use it in the
8 next five years if there's a drought, let's say.

9 So at what point--if that's the condition, at
10 what point should an entity like OWASA convert to Level
11 1? You know, can you do it at the last minute during
12 the middle of the drought, or do you need to have that
13 in place as a resource that you might use if there is a
14 drought?

15 MR. FRANSEN: You know, having talked to
16 staff and looking at your questions, I've been giving
17 that a lot of thought. It's kind of jumping ahead in the
18 questions a little bit, but that's okay.

19 MR. YOUNG: Oh, that's fine. I'll save
20 it for later, then.

21 MR. RAYMONG: Maybe you're going to answer
22 this question ahead of time, too, as a kind of a
23 corollary. Does the EMC or DWR even care about this--
24 our inter-local water transfer agreement, which we call
25 WSMPBA, which is the Water, Sewer, and Boundary

1 Agreement? They don't care about that when it comes to
2 Level 1 to Level 2, these conversions, do they? Is it
3 on your radar, even, or--

4 MR. FRANSEN: Well, I guess it is and it
5 isn't. Some of those inter-governmental agreements and
6 boundary issues, those help define your service area,
7 which help define your need. So from that perspective,
8 they're on the radar because if--because what we don't
9 want is the same ent--two entities claiming the same--
10 that they're going to serve the same population. So
11 those types of agreements help us understand where those
12 boundaries are.

13 MR. RAYMOND: And with the five million
14 gallons, or five percent--I'm going to be very careful,
15 because the yield code could be less than five million.
16 At the five percent level, if we send--Gordon could send
17 a letter to you guys and say, "Hey, we're ready for a
18 Level 1 allocation." You're not going to--since we have
19 that already, you're not going to factor in this boundary
20 agreement thing, are you, or--

21 MR. FRANSEN: Yeah, since it's--since
22 we're already talking about using an existing allocation,
23 and if you can--if you basically write in and say, "You
24 know, we've now modified our agreements with Cary, that
25 they're now going to be able to supply us through

1 existing connections or upgrading facilities or whatever
2 the situation is, that we're ready to start withdrawing
3 water," then yeah, we would--that's what it would take.

4 MR. RAYMOND: Excellent.

5 MR. MERKLEIN: Just to clarify. I think
6 Will's asking a little bit different question than
7 what's--

8 MR. FRANSEN: Than John, yeah.

9 MR. MERKLEIN: --in, you know, terms of,
10 I guess, that WSMPBA is a--is not a--well, it's inter-
11 agency but it's not inter-agency from a water
12 perspective. It's an agreement between the local
13 governments within the service area.

14 MR. FRANSEN: Okay.

15 MR. MERKLEIN: --and it's a--and that does
16 define our--sort of our perimeters for our use. There
17 is a famous phrase in it that talks about the emergency
18 use of water, and part of one of our questions is, you
19 know, we as a Board have been looking at changing that
20 because--out of a potential concern, if not overriding,
21 but one of the concerns of how that may be interpreted,
22 that--you know, that utilization of water is not as, say,
23 perhaps, as necessary as someone who has a daily need.

24 And so I think the way I'm interpreting Will's
25 question on the--because if you say "WSMPBA," I'm

1 thinking about in terms of that, not necessarily an
2 inter-agency agreement between Durham and Cary, which we
3 understand is the technical and mechanical mechanism for
4 pulling the water from one area to the other, but it's
5 more if we have an agreement with our parties within our
6 jurisdiction that we would only utilize water within, you
7 know, say, a defined emergency, would that be looked at
8 differently than an entity who says, "We want to use the
9 water all the time"?

10 MR. FRANSEN: It could be. I think what
11 I would probably make the suggestion of is, rather than
12 thinking about it in terms of a--if it's really just an
13 emergency, we're probably not talking about a Jordan
14 allocation. If you're talking about it in terms of how
15 you manage drought, how you mitigate your supplies to
16 minimize your risk of running out of water and it's part
17 of that strategy, then I think there's a role for an
18 allocation. Does that distinction make sense?

19 MR. MERKLEIN: Well, I think that's a
20 very--I appreciate the way you stated that, because I
21 think that is sort of one of the definitions that, as a
22 Board, we have to discuss, is that, how is it--you know,
23 what is drought mitigation versus an emergency use, and
24 I think that's a Board policy decision to make, but I
25 appreciate your--

1 MR. RAYMOND: Well, just so that we're--
2 I'll just restate my own question just to make sure. We
3 have an agreement, a local agreement among our partners,
4 that says that water from Lake Jordan will be accessible
5 in emergency conditions, and the emergency conditions
6 were defined, actually, a little looser than our Stage
7 1, Stage 2 water--which is--alerts, which are codified
8 in ordinance, right, and by OWASA policy, the Board is
9 looking at tightening it up.

10 But it is clearly for emergency purposes, and
11 it was part of a broader plan to backstop our supply in
12 case of severe--very, very severe drought, like back to
13 back 2001 type droughts, so that we had coverage, right,
14 just in case.

15 And then--so the discussion, like Gordon said,
16 was, what constitutes emergency? If we don't draw water
17 from Lake Jordan except in this extraordinary emergency
18 kind of scenario, would the EMC and DWR look at us, our
19 allocation, and say, "Well, they're using an insurance
20 policy. The insurance--we might never need that--they
21 might never need it, so they don't deserve it," right,
22 something like that. That's the scenario that we keep
23 hearing.

24 MR. EPTING: Let me be sure about one
25 thing. The water and sewer management planning and

1 boundary agreement, whichever mentions the Jordan
2 Reservoir, does not mention--

3 MR. RAYMOND: That's right.

4 MR. EPTING: --Jordan water. So it would
5 be incorrect to say that the agreement prevents the
6 transfer or specifically addresses the transfer of Jordan
7 water or specifically prohibits the use of Jordan water.
8 It never mentions Jordan water.

9 What it says is, "Water may not be transferred
10 across the county line." So we need to be very clear,
11 because in the negotiation and drafting of that
12 agreement, the parties were careful with the words they
13 used. In fact, the negotiation of that agreement took
14 more than five years' of time, so, you know, it's very
15 important--

16 MR. RAYMOND: I apologize.

17 MR. EPTING: It's very important not to
18 make the mistake--

19 MR. RAYMOND: Well, since Tom was here for
20 Jordan--

21 MR. EPTING: --that the Jordan Reservoir
22 is mentioned in the WSMPBA. It is not. Nor is Jordan
23 water mentioned.

24 MR. FRANSEN: All these things, you know,
25 you ask me how they're going to be factored in. Until

1 I actually get an application in, it's kind of--remember,
2 this is all kind of speculation.

3 MR. RAYMOND: Right.

4 MR. FRANSEN: It depends who's sitting on
5 the Board and how they view it--on the Commission at the
6 time.

7 From my perspective, I was looking at it
8 from--I've done a lot of work with the Corps, power
9 companies, and others on developing these drought
10 protocols. So, from my perspective, one way to lay it
11 out here, and it really--it's really going to be your
12 policy decision on how you see Jordan Lake fitting in.
13 Are there--is it just a drought measure or is it going
14 to be part of your ongoing or everyday supply?

15 If it's just a drought measure, one way--one
16 way--and this is something we're going to have to work
17 on staff with since we've never done it before--this is
18 still thinking out loud--would be to compare how often
19 you would be instituting your various levels in your
20 drought protocol with and without Jordan, and then
21 comparing that to other systems in the region and other
22 systems of similar size in the state.

23 So without Jordan, if you had to have mandatory
24 conservation every--once every three years and your
25 neighbors only have to do it once every 15 or 20, then

1 I'd say you probably have a valid need for Jordan water.

2 Now, if it was flipped, that you only have to
3 have a--even without Jordan, you only have to have it,
4 you know, once every 15 or 20 years like your neighbors,
5 and now that I have Jordan, I never have to do mandatory,
6 I would say you would have a weaker case to keep your
7 Jordan allocation there.

8 MR. RAYMOND: What if, in our specific
9 example is, there's a gap between 2030 and 2035, which,
10 you know, I hope I'm around to see this gap, but the--
11 essentially, this is where we're going to most critically
12 need the Lake Jordan--or Jordan Lake as a backstop, and
13 our staff has put together some pretty good charts of the
14 potential risk that we're facing.

15 MR. FRANSEN: I think that's--to say that
16 you need it for just a short period while you put another
17 source--until another source is available, I don't think
18 that keeps you from getting an allocation. It may mean
19 that you might lose it after that other source comes on
20 line if somebody else needs the allocation.

21 One of the concerns, especially for the people
22 downstream of Jordan Lake is, "The Triangle's growing so
23 fast, they're going to take all of Jordan, and then when
24 our growth occurs there won't be any water left." If we
25 could demonstrate that there's a group that's going to

1 then free up something for future use, that might make
2 an easier sell, less controversy downstream. That's pure
3 speculation on my part. You just never know how--you
4 have to kind of see how all the numbers come together.

5 MS. STIDHAM: Can you just clarify that;
6 I think you said that the current WSMPBA language could
7 factor into the decision?

8 MR. FRANSEN: Well, I'm going to retract
9 that after I understand WSMPBA better now. I thought
10 that dealt--when I think about inter-governmental
11 agreements, I usually think about OWASA and Cary, OWASA
12 and Durham. I wasn't thinking about the governments
13 within OWASA.

14 MR. RIMER: Duly noted.

15 MR. RAYMOND: Chapel Hill, once again, is
16 topping.

17 MR. RIMER: Yes.

18 MS. BUCKNER: I just want to ask a
19 question about how you're going through these. Are you
20 taking the questions that we gave you in order and just
21 paraphrasing them?

22 MR. FRANSEN: For the most part. I've
23 kept--

24 MS. BUCKNER: Then I have a backup. I
25 have a question on one that has already come back, back

1 on the use issue.

2 MR. FRANSEN: Okay.

3 MS. BUCKNER: What is the intent of having
4 that use requirement for the withdrawal? What is the
5 intent of the policy?

6 MR. FRANSEN: So you're talking about
7 the--

8 MS. BUCKNER: Just to make sure nobody's
9 hoarding water?

10 MR. FRANSEN: Correct. That's the whole
11 issue why we've got the 30 year planning horizon and
12 everything that--they were wanting to make sure--it was
13 my understanding when they wrote the rules and
14 everything, and the way the Commission's been treating
15 it, from my perspective, is the water's cheap compared
16 to going out and building new reservoirs. It's difficult
17 and timely to build a new reservoir.

18 I can see some of the faster growing communities
19 saying, "You know, it's a good insurance policy. We'll
20 just buy up as much as the state'll let us have, even
21 though we may or may not need it all."

22 So this was kind of a way to try to keep things
23 fair for everybody, to really give the water to those
24 that really need it when they need it.

25 MR. RIMER: I think, too, what you

1 talked about early on, in the modeling you all are trying
2 to do, gives you a grounding in what's going to be there,
3 so that ultimately you know hydrologically what you're
4 going to be able to supply. Then you can do this
5 rational kind of parsing out to the various communities.

6 So I think the--in my mind, the modeling is
7 critically important, to get an understanding of what's
8 there and what you're really going to be able to deal
9 with, and it might not be 100 million gallons. It might
10 be 96 or whatever it turns out.

11 MR. FRANSEN: Well, I think actually,
12 those of us that run the numbers, we really think the
13 yield's a little higher than 100.

14 MR. RIMER: Really?

15 MR. FRANSEN: Yeah.

16 MR. RIMER: Anyway, I think what you
17 explained about the modeling is really important.

18 MR. FRANSEN: There was kind of a group
19 of questions here on granting and retaining allocations.
20 I'd kind of like for you to listen. I'm going to try to
21 answer them in a group at the end, but there's--there is
22 this question about process of Level 1 to Level 2, public
23 hearings, kind of what is your risk here of losing an
24 allocation, the appeals process.

25 You're going to see me with the responses here,

1 go back to the rule, the 504(i) a lot. That really is
2 the main thing that we have in writing, that the
3 Commission has in writing, to help them determine how to
4 allocate the water or how to adjust existing allocations.
5 You'll see it says, "Assign," "Reassign," or "Transfer."

6 They're looking at, do applicants or holders
7 have alternate water sources available to them? So if
8 you have an existing--if you have good alternatives,
9 somebody else may not have a good alternative, so they're
10 going to probably give the water--if it comes down to a
11 party having an alternative and one not having one,
12 they're going to allocate--the intent was to allocate--
13 to give the allocation to the holder that doesn't have
14 an alternative.

15 MR. RAYMOND: So does that capacity--are
16 you going to factor in the capacity of, like, our
17 community to conserve? Is that going to go against us,
18 if the EMC and DWR says, "You know, OWASA--the OWASA
19 customer base has been very good at conserving, so we're
20 going to take a little bit of their allocation away
21 because they've shown that they can conserve their way
22 out of problems," or is this going to even be part of
23 your model for making a decision?

24 MR. FRANSEN: I think the next part where
25 it talks about the average degree of utilization of the

1 resource, we've kind of--you know, that conservation
2 question is not directly involved in here, but it does
3 kind of--in some ways, you talk about utilization, how
4 often are you going to utilize it and how efficiently are
5 you going to utilize it.

6 I do know that the Commission, when they have
7 looked at these in the past, the way that conservation
8 piece has come in is, they look at--they ask--they've
9 asked us to show a summary of your per capita demand,
10 current per capita, compared to what your projected
11 demand is and what the per capita would be for your
12 projected.

13 I know, in the case of one of the applicants
14 last time, their per capita demand went way up in their
15 projections. Most of the others stayed the same or maybe
16 a little bit (sic) or maybe went down, and so we adjusted
17 their request--their demand request as if their per
18 capita hadn't gone up.

19 So that's kind of how we're dealing with that
20 question. We do look at how efficient the various
21 systems are, and are you going to remain that efficient
22 or are you going to--or is it going to get worse, so.

23 MR. RAYMOND: Just so I understand kind
24 of what you're saying, I'm going to rephrase it. When
25 you say, "you have in the past," or you know, the process

1 in the past, the Commission in the past has looked at
2 projections in where the per capita usage was going to
3 go up, the water utility was awarded a higher allocation?
4 Is that--

5 MR. FRANSEN: No.

6 MR. RIMER: No. He said exactly the
7 opposite.

8 MR. RAYMOND: Okay, good. That's what I
9 wanted to make sure, because I was like, that doesn't
10 make sense.

11 MR. FRANSEN: Well, he said that they
12 looked at that per capita, said, "Okay, we're going to
13 use a lower per capita and apply it to that population."

14 MR. RAYMOND: Excellent.

15 MR. FRANSEN: And their alloc--their
16 application was adjusted accordingly.

17 MR. RAYMOND: And since you have the
18 504(i) up, I noticed one of the things I thought was
19 interesting, that was the level of financial commitment
20 was one of the deciding factors. I mean, in 2012, since
21 we have to pay a capital appreciation, does that give us
22 a bigger chip in the game, since we would have put
23 out--I can't recall the exact figures--\$287,000 or
24 something. Is that part of the financial commitment?

25 MR. FRANSEN: I guess it's--that's kind

1 of loose. I think really what was originally thought of
2 was the--somebody that got an allocation and didn't start
3 paying on it, of which we've had that happen, and so they
4 lost their allocation.

5 So I mean--like I said, until now we've been
6 out--every round of allocations that we've had, we've had
7 more requested. We've had more than 100 MGD requested,
8 but the Commission has found a way, by working through
9 this limited set of criteria, to find a way to do a fair
10 allocation and reserve water for future use.

11 We realize the closer we get to having 100
12 percent allocation, these questions are going to become
13 more difficult for that Commission, but those are written
14 loose enough, they've got quite a bit of lateral,
15 actually, so it's--it's going to get more interesting
16 each round.

17 MR. YOUNG: To follow up on that, then,
18 is it fair to look at a Level 2 allocation as an
19 allocation for years five to ten, because you're going
20 to have another round of allocations at some point, and
21 as you've described, utilities have to come back and re-
22 justify their allocation, you're going to re-run all the
23 models and kind of look at where the hot spots are and
24 allocate at that point. So is there any value to a Level
25 2 allocation beyond, say, ten years?

1 MR. FRANSEN: That's kind of a hard one
2 to answer. I'm not really sure how to answer that one,
3 to be quite honest. It's--I guess in theory, you only
4 have to pay your--paying interest, and you wouldn't be
5 paying the capital until you converted to a 1, but it's
6 kind of a tough balance here between planning and all
7 this. It's--I just have a hard time prioritizing that
8 question. I know what you're trying to get at, but I
9 don't really think--

10 MR. YOUNG: It's kind of getting to
11 the--how easy is it to lose your Level 2 allocation. It
12 sounds like every time you go through the cycle again,
13 it's like a, you know, what is it called, a ground zero
14 kind of planning model for you.

15 MR. FRANSEN: Not quite, but it's close.
16 I mean, basically, what we're doing--what we're looking
17 at and what--the way the Commission's kind of handled it
18 in the past, from my perspective, is you take a look at
19 all the needs, and you look at who's wanting water and
20 kind of trying to reach a reasonable balance in there
21 for immediate need versus some long term need.

22 And so I think a Level 2 does have some value,
23 that it kind of helps you do better planning, that you
24 could--this is a good increment, but if it always just
25 remains that, "We're not going to need it for 20 years,"

1 then that starts to get back to that question of hoarding
2 water. It starts to take on that appearance of hoarding
3 water; that, well, maybe you really have some
4 alternatives that you didn't share with us.

5 MR. YOUNG: Gotcha. Thank you.

6 MR. FRANSEN: It may be as simple as the
7 growth didn't occur that you anticipated--

8 MR. YOUNG: Right.

9 MR. FRANSEN: --but that--with this
10 economic downturn, but--

11 MS. BUCKNER: So can I ask a follow-on to
12 John's question?

13 MR. FRANSEN: Sure.

14 MS. BUCKNER: He asked it about Level 2,
15 but isn't it the same for Level 1?

16 MR. FRANSEN: Yes.

17 MS. BUCKNER: I mean, because--well, what
18 it sounds to me like what you're saying is, regardless
19 of which allocation model you have, it's all going to be
20 re-evaluated in the next round.

21 MR. FRANSEN: I would say that there's
22 probably less risk for Level 1 because to get--Level 1
23 means you're already withdrawing the water, so you've
24 already made some type of capital investment. You've got
25 some type of infrastructure in place to utilize it

1 already.

2 Now, it may mean--in your scenario, where you're
3 talking about having a gap and then a new source coming
4 on line, that may be a slightly different scenario. Most
5 of the folks we have dealt with up to now, this is a part
6 of their incremental mix of sources for them, not
7 something--they haven't looked at it as a stopgap until
8 they get something else on.

9 So it's a--we're getting--you know, the rules
10 were written a number of years ago and things--the whole
11 water issue is getting more complex, and unfortunately,
12 with the way the General Assembly views rules right now,
13 it's not really practical to go back and try to re-write
14 it. So unless they're really broke, we try to live
15 within them.

16 MR. RAYMOND: Well, we have seen, though,
17 that the--when OWASA argued for a ten percent and got a
18 ten percent, and then relinquished that other five
19 percent, in a sense, OWASA acted as an important
20 placeholder for water that wasn't just given out right
21 away, and that, you know, maybe that's going to be the
22 case going forward.

23 But you know, I think we have a fairly well
24 defined risk analysis for that 2030 to 2035. I'm hoping
25 that's something that is seriously investigated when

1 it's--you know, this comes back up again.

2 MR. FRANSEN: We will--we do do a very
3 serious and thorough review of all the applications.
4 Like I said, because this is a little unique, we are
5 going to be working closely with your--I think we've had
6 a good working relationship over the years with the
7 staff. I feel like we have, and I don't see that
8 changing. So we're going to be working with them to help
9 them figure out what's going to be the best way for them
10 to present their case and for us to be able to share that
11 information with the Commission.

12 MR. RAYMOND: It's like John, though, had
13 pointed out, that this is 19 years from now, and we could
14 go through maybe two more rounds of allocations, still
15 talking about a thing that hasn't happened yet, you know,
16 though I would hope, you know, OWASA has been a
17 pretty--tried to shepherd its water supplies in a very
18 wise fashion over time, and that would count for
19 something, but anyway.

20 MR. FRANSEN: But I think if you go back
21 to the discussion we had earlier about the drought plan,
22 if it actually is part of your--if that's in your
23 approved drought--your water shortage response plan, your
24 drought plan as part of that mitigation; you are using
25 it, then.

1 MR. RAYMOND: Yes.

2 MR. FRANSEN: I think in a lot of ways,
3 we probably discussed most of this.

4 Unless somebody wants to talk about this one anymore, I
5 think we've kind of beat this one a little bit already.

6 Water conservation, we've kind of gone--we've
7 gone over that one.

8 We've kind of talked about the precedents here.
9 This goes back--like I said, when you have these
10 questions, if you go back to the rules, and probably one
11 of the key ones is 504(i). Got to think of it in terms
12 of if you were sitting on the EMC, and I'm sure Bob can
13 help you work through that one, how they would kind of
14 potentially--he probably has more insight than I do on
15 that one, so.

16 The impact of a severe drought. This one--we'll
17 help Alan here with a good--more of a technical question
18 again. The way the Corps and the state manage these
19 allocations, you can almost think of your allocation in
20 Jordan Lake as your own mini-reservoir, that the inflow
21 coming into the reservoir, they break up into the various
22 pools.

23 So your allocation, your storage amount is
24 really independent of, say, Cary's or Durham's or Chatham
25 County's. They're looking at that percentage of the

1 inflow and how much they're pulling out and what their
2 storage account is, so they're not looking at,
3 necessarily--they're not looking at the whole storage in
4 the lake.

5 The only time they look at the whole storage in
6 the lake would be in two cases, one, if you're full, they
7 assume everybody's account's full and they don't bother
8 doing the accounting. I guess if we depleted the
9 conservation pool, your account would go to zero then,
10 but--even if you hadn't used it, because we'd be out of
11 water. But as long as we've got water in that
12 conservation pool, in the water supply account, they're
13 running things independent.

14 MR. EPTING: And Tom, an important
15 question. Has the water supply pool ever been less than
16 full in the entire history of the Jordan
17 Lake?

18 MR. FRANSEN: Yes.

19 MR. EPTING: It has? The water supply
20 was less than full.

21 MR. FRANSEN: Yeah.

22 MR. EPTING: To what extent has it been
23 diminished?

24 MR. FRANSEN: I'd have to go back and look
25 at the records. But you remember, Cary and Apex and

1 Chatham County are using water out of there, so when you
2 get into the dry periods like 2007, they had pulled it
3 down. So--but because we had a large amount unallocated
4 and a large amount of Level 2, it's not pulled down as
5 severe as it is if everybody was using it. So--but it
6 has been down, yes.

7 MR. EPTING: The reason I ask it is that
8 we've said several times, our own records show that at
9 the time that OWASA's supply was lowest in its recent
10 history, the water supply pool at the Jordan Reservoir
11 was still 100 percent.

12 MR. HOLLAND: That's true in '08.

13 MR. EPTING: In '08, yes.

14 MR. FRANSEN: That probably is it for '08.
15 I'm not sure that's true for some of the other years.

16 MR. RAYMOND: So, Tom, along those lines,
17 how--if we wanted that information to line it up to see
18 our levels versus Jordan, would this high--first of all,
19 historical, I assume we can go back in the record and
20 just look.

21 But going forward, I had asked about the yield
22 in that one of the--I guess you could call it selling
23 points for making some of these modifications is a
24 scenario where we had two back to back droughts that were
25 the severest droughts in recent history. And I'm just

1 wondering if the hydraulic--hydrologic model that you're
2 developing, if we plug those numbers in, would we be able
3 to get a kind of a baseline on what that--the pool, our
4 potentially yield would be?

5 MR. FRANSEN: Yes. One of the things that
6 we've built into the model is an output. Well, actually,
7 too, the input of how much your pattern of withdrawal is,
8 along with what your storage account would be. So the
9 model does give me an output for all of the storage
10 accounts that currently have allocations. Or we've got
11 dummy ones created so we can add new users, or basically,
12 for the unallocated amount, treat it as if it's allocated
13 and see what happens if you're fully utilized, so.

14 MR. RAYMOND: So if Ed Holland wanted to
15 plug these numbers in to the model right now, we could
16 get some kind of answer out.

17 MR. FRANSEN: I would wait until we get
18 the model updated.

19 MR. RAYMOND: Okay. That's fine.

20 MR. FRANSEN: And if that's okay. We've
21 got an old model that could give you numbers if you want
22 to do it, but I'd really--think we're going to get better
23 results if you'd wait.

24 MR. RAYMOND: Well, it looks from our
25 schedule, we have time.

1 MR. MERKLEIN: Can I also just go back and
2 ask one clarifying question, something I know the answer
3 to, but--

4 MR. YOUNG: 20 years.

5 MR. RAYMOND: Yeah.

6 MR. KERIN: Gordon, could you talk in
7 the mike?

8 MR. MERKLEIN: Yes, sorry. Because we have
9 a Level 2 now, technically speaking, tomorrow could we
10 submit a letter to change that Level 2 to a Level 1?

11 MR. FRANSEN: Technically, yes.

12 MR. MERKLEIN: Right. Okay.

13 MR. FRANSEN: The one thing I did want to
14 make note of in this equation for the accounting, that
15 inflow that we're using to keep track of your account is
16 a net inflow. We adjust it for evaporation. And we have
17 had, during severe droughts, inflow be negative, that the
18 evaporation is higher than the inflow coming into the
19 lake.

20 So even if you're not using your storage
21 account, your storage account could be going down. So
22 it's a--just because you haven't pulled from it, don't
23 assume, in a severe drought, that you have 100 percent
24 available.

25 MR. YOUNG: Well, I appreciate the

1 answers here because this one--this was actually my
2 question--because what this says to me is that, yes, you
3 can utilize Jordan Lake as a drought response resource
4 and not have to have it as sort of your general operating
5 plan if you--you know, because you're not going to lose
6 your storage--

7 MR. FRANSEN: Correct.

8 MR. YOUNG: --to someone else who's
9 using it as part of their operation during a drought.
10 Yeah.

11 MR. FRANSEN: Right. Because basically,
12 like you said, you're getting a percent of this pool, and
13 we're keeping track of, you know--

14 MR. RAYMOND: Who got what.

15 MR. FRANSEN: --who's using what and how
16 much they've got left, so that somebody doesn't start
17 dipping into somebody else's pool.

18 MR. RIMER: Your analogy of, like it's
19 our own little mini reservoir--

20 MR. YOUNG: That's right.

21 MR. RIMER: --is really good. I mean,
22 that just puts it right on the spot. And you would be
23 a steward of that just like we're the steward of Cane
24 Creek and University Lake. Now, little Jordan Lake for
25 OWASA.

1 MR. FRANSEN: Right.

2 MR. RIMER: Or Cary or whomever.

3 MR. FRANSEN: Yeah. And the way I would
4 describe--I mean, that's just the basic water balance
5 equation I have up there, and the way I've described it
6 to non-technical folks is, think of inflow as your
7 paycheck. Outflow, which is your withdrawals, are your
8 bills, and storage is your bank account.

9 And so we know during drought, our paycheck
10 isn't as big as our bills, and you're having to hopefully
11 have a bank account big enough to get you through until
12 the paychecks and stuff balance back out again.

13 So that's the analogy that's worked well for-my
14 old boss, John Morris, and one of the Corps of Engineers
15 engineers argues over who came up with that analogy, but
16 since they're both retired, I'm--I'll share its credit
17 for them. I'll give credit to both of them.

18 MR. RAYMOND: Just as a clarification.
19 When do the hydraulic--hydrologic model, some time summer
20 or something next year, or--

21 MR. FRANSEN: Some time this summer.
22 Probably late spring.

23 MS. BUCKNER: So Tom, is there a drought
24 response plan for all of Jordan?

25 MR. FRANSEN: Yes. The Corps has one.

1 Actually, we were--our office was very instrumental in
2 working with the Corps to develop that, along with a lot
3 of the other stakeholders. We actually did the modeling
4 for the Corps with our older version of the Cape Fear
5 model for their EA, for their drought response plan.

6 MS. BUCKNER: At any time, could--is there
7 a potential for getting to where people would have--the
8 different entities would take less than their allocation
9 because of drought?

10 MR. FRANSEN: I guess that's always
11 theoretically possible. I mean, one of the theories
12 there--one of the issues would be where you all have a
13 reservoir and manage it.

14 You know, sometimes the lake--you may have water
15 out there, but it's below the intake that you can pull
16 from. Plus, when it gets really bad and that water gets
17 hot, you may--somebody will pull it out, but it may be
18 of such poor quality that you don't want it, if you don't
19 actually have--you know. There may be some treatability
20 issues there, too, so.

21 Based on our modeling, that answer would be,
22 unlikely, based on the historical record, but we know
23 Mother Nature throws us curve balls that are outside the
24 historical record, so I'm not going to say it's not
25 possible.

1 MR. RAYMOND: Does that mean the
2 hydrologic--I'm going to have to learn how to say that
3 word. It's been a long day. Before the end of when that
4 model--will it take into account modeling the quality or
5 anticipated quality of the water, or is that outside
6 that?

7 MR. FRANSEN: That's outside.

8 MR. RAYMOND: It just--it's purely how
9 much is available. Water is water.

10 MR. FRANSEN: It's a water quantity model.

11 MR. RAYMOND: Right.

12 MR. FRANSEN: It's a water balance type
13 model. It's very good at helping us understand how water
14 moves around and where it's going to be at and its
15 availability. We do not try to water--model water
16 quality. That's a different type of modeling. We do not
17 try to model flood control. That's a different type of
18 water quality--that's a different type of modeling, too.

19 MR. RAYMOND: I've been around long enough
20 to recall when Jordan Lake was being filled, and at that
21 point it was bathtub warm, and there would be algae
22 blooms, just massive. It was amazing. And I don't see
23 it ever getting down that low again, but you did
24 reference, too, I think in 2007 you could see some of the
25 stumps coming out of the shoreline where it--you know,

1 where the--

2 MS. BUCKNER: Came out from the middle.

3 MR. RAYMOND: Yeah. So anyway.

4 MR. FRANSEN: It never got as bad as
5 Falls, though.

6 MR. RAYMOND: Yeah, well, that's true.

7 MR. RAYMOND: No Indian villages or--

8 MS. BUCKNER: So when--

9 MR. FRANSEN: That's Fontana.

10 MS. BUCKNER: --when you say it might get
11 down to the point where the water quality is so bad,
12 you're talking about getting down to the sediment level,
13 right?

14 MR. FRANSEN: I mean, it's--that would--
15 these are all the hypothetical. I mean, we've not seen
16 it.

17 MS. BUCKNER: Yeah. I'm just ask--I just
18 want to know. So I mean, you've got--you had the--I was
19 going to ask you to show your graph here--your
20 illustration again, but that's not required. But you
21 have layers in there.

22 MR. FRANSEN: Uh-huh (affirmative).

23 MS. BUCKNER: So you had the layers, the
24 surface water, then you had the area--

25 MR. FRANSEN: You had the flood control,

1 then we had the conservation pool that's kind of combined
2 with water quality and water supply, and then a sediment
3 pool.

4 MS. BUCKNER: And so in your--
5 theoretically, you take--you can take from the top to the
6 bottom of that water supply.

7 MR. FRANSEN: Right.

8 MS. BUCKNER: And when you get to the top
9 of the bottom of the water supply and the top of the
10 sediment, that's where the water quality gets
11 particularly bad.

12 MR. FRANSEN: Probably not. It depends
13 where your withdrawal is and everything else. It
14 probably wouldn't be. The only problem that you'd have
15 from an institutional viewpoint is the Corps gets all
16 uptight if you try to take water out of their sediment
17 pool. Yes.

18 MR. RAYNO: You could potentially face
19 water quality changes if--

20 MR. KERWIN: Ask him to come to the mike.

21 MR. FRANSEN: Don, you want to come up to
22 the mike?

23 MR. RAYNO: Yeah.

24 MR. KERWIN: Thank you. You can
25 introduce yourself.

1 MR. RAYNO: Sure. Hi. My name's Don
2 Rayno, with the Division of Water Resources. In response
3 to your question about water quality and the level of
4 water where you'd face water quality, you could face
5 changes in water quality that would force you to change
6 your treatment train before you got to the bottom of--to
7 the top of the sediment pool because your water in that
8 lower--the lower levels of the conservation pool has been
9 starved of oxygen for a long time, and there's a
10 different chemical mix in that water. And I mean, if
11 you're mixing--if you're drawing--at this point, you'd
12 be getting finished water from somebody else, so that
13 would be somebody else's treatment problem, but they
14 would have to make that adjustments, and they do that.
15 I mean, that's one of the choices they make.

16 So you're--the level at which you can withdraw
17 water has to--is also a function of where the intakes
18 are, how you can pull water into your intake structure.

19 MR. YOUNG: I think, you know, this
20 topic of water quality has come up in the community's
21 discussion of the Jordan Lake allocation, and so we--
22 that's, I think, why there are some follow up questions
23 around this. We want to--can you characterize the
24 scenario where, you know, first, that there would have
25 to be some differences in the kind of treatment that

1 would be required to reach standard water quality, and
2 secondly, the level that would be where you couldn't
3 treat the water to get satisfactory quality, or standard
4 quality?

5 MR. FRANSEN: At this point, I will say
6 that both Don and myself's areas of expertise lie more
7 in the quantity and not the quality. Our other section
8 in our new division, that's what they do, is help you
9 deal with that.

10 I don't know if Mason or somebody on the OWASA
11 staff, since you already manage reservoir--it's really
12 the same issues you have on, like, Cane Creek, on any of
13 your existing reservoirs. It's just a little bit
14 different scale because it's a larger reservoir sitting
15 out there, so I'm sure one of your staff probably can
16 answer that question better than I can, if you really
17 need it elaborated on right now.

18 MR. YOUNG: Should we try that now, Ed,
19 or--

20 MR. KERWIN: Sure, Ed Holland.

21 MR. YOUNG: I just think it's essential.

22 MR. HOLLAND: My quick answer was going
23 to be that the answer to Terri's and John's question is
24 basically the same way--they're the same issues we deal
25 with day to day in operating Cane Creek and University

1 Lake. At certain times of the year, the lake's
2 stratified. Water quality varies vertically. We have
3 the discretion of where we pull water out of Cane Creek,
4 so we can use the best water.

5 Cary is dealing with this in Jordan Lake with
6 a new project that is in the process of being permitted,
7 to make sure that they can get water out of Jordan Lake,
8 that the water where they--that the water at which the
9 intake is located in Jordan Lake is of appropriate
10 quality.

11 And it's--it's oxygen issues, taste and odor
12 issues, iron and manganese issues. They're not exotic
13 pollutant issues. As I said at the beginning, it's
14 really just part of the day to day challenge of operating
15 any reservoir water supply.

16 So Tom points out, it's a matter of scale in
17 Jordan Lake, but the issues--the water quality issues are
18 the same ones we're dealing with all the time.

19 MR. RAYMOND: Well, Tom, to follow up on
20 John's question, and I--and maybe we--and I think we
21 should refer this to the--I guess this new--is this new
22 under DWQ or is this--what's this new group?

23 MR. FRANSEN: It's an old group. The
24 water supply section used to be in the Division of
25 Environmental Health.

1 MR. RAYMOND: Right.

2 MR. FRANSEN: They've now been moved to
3 us. And so they've been around for a long time. You
4 know, they're the ones you deal with with your water
5 plant for your inspections and getting the permits to
6 expand and everything, so it's--they're just residing in
7 a new division, so it's just a new function for us. It
8 was the minnow swallowing the whale. We went from 37
9 people to 160.

10 MR. RAYMOND: I think part of the--the
11 context for this question is, unlike our reservoirs which
12 are 90 percent in Orange County, 10 percent in Alamance,
13 they have watersheds that are undeveloped, essentially,
14 versus--somebody told me, and I think one of the
15 questions here there was 47 governmental entities that
16 control the Lake Jordan watershed. There's, you know,
17 a high level of development. There's boats. Even when
18 the water's down, there going to be boats and people and
19 all sorts of other factors that we don't deal with on our
20 own reservoirs.

21 I think that's adding to some of the reason for
22 some of these questions, because it's a--it's not quite
23 an apples to apples--I think, in some people's minds, not
24 an apples to apples comparison. Anyway, just a little
25 context.

1 MR. RIMER: Well, to--just to let me
2 just make one response to that. I think that what the
3 dichotomy in the issue here--and Ed didn't mention this
4 because there's no need to--there are really two kinds
5 of supply that a utility can take from. One is run of
6 the river, where it's just pumped out of a river and they
7 treat it and it goes on, and that's a highly variable
8 water supply, because it--you know, it rains really hard
9 and it's cloudy water or whatever.

10 The experience that, at least I've had, is that
11 I think the issues that Ed addressed are the same in
12 either the Jordan or in Cane Creek or in University Lake.
13 Ed Kerwin, at one meeting, made a statement which I think
14 is accurate, and that is that while we think Orange--our
15 Orange water supplies are pristine, they're not. We have
16 air deposition of all sorts of junk into those
17 reservoirs. No, we don't have the tires and the
18 refrigerators, and we don't have the motorboats, and we
19 don't have--

20 MR. RAYMOND: or Highway 64 over it.

21 MR. RIMER: And we don't have direct
22 wastewater discharge. We have failing septic tanks, but
23 not--so I don't know that DWQ is in a position to model
24 the exotics, the pharmaceuticals for example, Terri, that
25 we get concerned about, because nobody's able to model

1 those right now, nowhere in the country.

2 So I'm wondering what value, other than to get
3 DWQ to say maybe that, there is in their trying to model
4 it, because what we're trying to do, I think, is to link-
5 -and it's done all the time--is to link water quality and
6 a mass of water, which he gets out of the--Tom gets out
7 of the hydrologic model. And that's done all the time,
8 you know, where the linkage is built between the two.

9 And--but when the rubber hits the road, guys
10 right next door have got to modify their treatment, and
11 they've been doing it for so long--each utility has its
12 own cycles and they've been doing it for so long, they
13 know when they're going to have to change.

14 And many years ago--I've been working in Cary
15 now for 18 years--Cary's water was awful for a while.
16 I mean, you'd drink it and you would think--I hope
17 there's nobody from Cary here, but you'd think you were
18 drinking a sewer because it had a lot of--they didn't
19 have any carbon treatment whatsoever. They've changed
20 all of that in their new processes. We've been doing the
21 same thing for I don't know how long at our plant.

22 So I think there might be some value in checking
23 with them, but I don't think DWQ is going to add
24 significantly to the knowledge base in terms of modeling,
25 based on my own experience, for what it's worth. Maybe

1 not much, but an inquiry is probably not--you know,
2 that's probably a reasonable thing to do, but I don't
3 think they're going to be able to reveal much in
4 modeling, because I just don't think they can model some
5 of what we're talking about, except for the refrigerators
6 and trash.

7 MR. RAYMOND: Well, they maybe can, you
8 know, do like gap analysis. Essentially ident--help us
9 identify what we can know, what we can't know, and just
10 to--yeah. They're going to start quoting Donald
11 Rumsfeld, so--

12 MS. BUCKNER: So Alan, would it be safe
13 to say that you are saying that there is a technical
14 definition of quality, and then there is a perceptual
15 quality--definition of quality, and they're not always
16 the same?

17 MR. RIMER: Oh, absolutely. I mean,
18 that's what the whole argument about PCP--PPCPs are.
19 You know, people, we can now detect these personal care
20 product things at parts per trillion, parts per billion.
21 We couldn't do that even ten years ago because the
22 technology wasn't there.

23 MS. BUCKNER: We couldn't do that five
24 years ago.

25 MR. RIMER: Now we can, but the

1 perception of risk associated with any of those is in the
2 eyes of the beholder. For some, it's an incredible risk
3 and we shouldn't be doing it. For others we say--and I
4 do this in talks--I'll say, "I grew up in Pittsburgh and
5 flushed my toilet and people in Cincinnati drank the
6 water," and they've been doing it for, you know, however
7 many years, with the same level of potential pollutants
8 in it. It's just that we know a little bit more about
9 it.

10 But what we haven't been able to do is to model
11 it yet. Our water quality models are just not
12 sophisticated enough yet to look at the fate and
13 transport of that stuff in the environment. We just
14 don't know the answers yet. We're working on it, but we
15 don't know the answers.

16 So--and our DWQ, just like you guys, are some
17 of the best in the nation. Our basin plans are the best
18 in the nation, period. They set the standard. So I
19 think the work that this--our state--we're fortunate to
20 have you guys, is what it boils down to. Completely off
21 topic. Sorry.

22 MR. FRANSEN: Let's see. If we're moving
23 on, the next--I think we looked at--I've already talked
24 about these inter-governmental agreements, but the only
25 thing I'll highlight is 504(i). That is one of the

1 factors that the Commission considers, is the level of
2 sharing of facilities between agencies, as well as the
3 types of inter--the cooperative agreements between local
4 governments, so that is a factor.

5 MR. RAYMOND: So--I'm sorry. Since you're
6 highlighting that particular issue--I was going to ask
7 this a little later, but what role does a permanent
8 access play in making these decisions? If OWASA decided
9 to always tap its allocation through Cary and Durham and
10 had agreements to that effect, is that any weaker than
11 if we built our own tap into Lake Jordan? How does that
12 work, since you kind of highlighted it there? I mean,
13 it's always--

14 MR. FRANSEN: On the surface, you know,
15 I would say it probably doesn't matter, but on the other
16 hand, OWASA owns the land adjacent to the best site on
17 the--for the western intake, so there might be a little
18 bit different role here.

19 Yeah, Round Two, to be honest, there was some
20 friction between Cary and Apex and with Chatham County,
21 and that was a--some discussions that went on was to make
22 sure Chatham County's interest was protected using that
23 eastern intake that Cary and Apex built, so.

24 MR. RAYMOND: Well, it's interesting you
25 mentioned that because it's our own land that we own.

1 Of all the people who really want to tap into the lake,
2 we're the ones who are working kind of hard not to have
3 to do that. We want it as an emergency backup, so
4 there's that question of participation, right, because
5 there is a cost associated with it, a very steep cost.

6 The other thing is that--I mean, this is what
7 I keep saying and you could comment on this if you feel
8 like it or not, but just looking at Cary's plans going
9 forward, they're building a lot of capacity and they're
10 already selling water in a regional fashion. And I've
11 been characterizing this as that Cary is basically
12 building a capacity to sell water, because--at least in
13 the short term.

14 And so they seem like they would have an
15 economic incentive, you know, to sell water because
16 they've built all this capacity. But maybe I'm wrong on
17 that.

18 MR. FRANSEN: I'm not going to touch that
19 one.

20 MR. RAYMOND: Okay, yeah. Well, we
21 already have Alan talking about sewer--Cary's water
22 tasting like sewer, so.

23 MR. FRANSEN: Well, I mean, it's just--
24 actually, I lived in Cary for a long time. I'd say their
25 water doesn't taste like sewer, or hasn't for a long

1 time, but that's--it may depend where you're at in Cary.

2 But it's--I think as we're moving forward, when
3 you start talking about--as we get tighter, the
4 allocations get closer to 100 percent, how we get the
5 water, how people are sharing those facilities, the
6 master plan for Jordan Lake that the Corps and the state
7 put together really only called for two intakes, an
8 eastern and western.

9 Unless they've redone some of the engineering,
10 I think we're probably reaching the capacity of that
11 eastern one and we've got to be thinking hard of how
12 we're going to get that western one built some time soon.
13 And since OWASA owns that land adjacent to the best
14 western site, they're going to have--they're going to
15 need to be a player in that discussion.

16 MR. RAYMOND: I believe our difficult
17 decision is going to be, to secure five percent for
18 emergency or insurance purposes, can we justify a 40, 50,
19 60, 80 million dollar expenditure. You know, how much
20 is--are we willing to pay for that insurance, right?

21 MR. FRANSEN: That's the policy the Board
22 needs to come up with.

23 MR. RAYMOND: Yeah, exactly.

24 MR. STOTT: Where did you get the
25 numbers?

1 MR. RAYMOND: Well, the Hazen and Sawyer,
2 Appendix 7 (unintelligible)?

3 MR. STOTT: 80 million dollars?

4 MR. RAYMOND: Well, the 46 million was the
5 cheapest option.

6 MR. RIMER: Yeah, but we weren't going
7 to pay down the full--

8 MR. RAYMOND: No, no.

9 MR. RIMER: Getting off topic--

10 MR. RAYMOND: Yeah, never mind. That's
11 off topic. Yeah, it's off topic.

12 MR. FRANSEN: Yeah, I mean, regional would
13 be regionally financed. It wouldn't be you--one entity
14 doing it anyway.

15 Let's see. We kind of touched on yield--we've
16 mentioned yield a couple of times. Really, like we said,
17 your allocations of storage amount, this whole discussion
18 of yield, safe yield, the value of that is to kind of
19 estimate how much can you get out of that storage. It
20 kind of ties in to the modeling and the long range
21 planning.

22 We've just talked about the model. You know,
23 I know OWASA's had--got their own model. The state's got
24 this one that we're working on with OWASA and all the
25 other stakeholders in the basin.

1 So, having a modeling background, it doesn't
2 bother me that you have your own model. I like to see
3 two models run and see if they--how much in agreement
4 they are. If they're not in agreement, then we have to
5 take a look at what the assumptions are to find out why
6 they're not, so we'll work with the staff on that to work
7 through that, so.

8 MR. RAYMOND: Well, this was my question,
9 and actually this goes straight to, in two back to back
10 droughts, how much of our little Lake Jordan--the little
11 Lake Jordan that we have--how much of that yield can we
12 expect to pull?

13 MR. MERKLEIN: Maintain.

14 MR. RAYMOND: Maintain, exactly. So you
15 know, let's say it's a--it's a different question if it
16 drops to four million gallons a day versus it drops to,
17 say, two million gallons a day or something like that.

18 MR. FRANSEN: Well, actually, because we
19 couldn't come up with a good scenario for climate change,
20 what we decided to do for climate change is to actually
21 put--the state climatologist is looking at the historical
22 record right now, and we're going to kind of develop a
23 worst--the two worst cases back to back, kind of re-order
24 the historical record in kind of that fashion.

25 Kind of have a normal year coming into the two

1 worst years back to back. Got the scenarios. We're
2 breaking that out seasonally, both the worst--the two
3 worst winters as well as the two worst springs, the two
4 worst summers. So you'll give--you'll get exactly what
5 you're asking about here, the two back to back droughts.

6 So it's not necessarily like the--you may not
7 get the two winters back to back. They may be two
8 different winters out of the record, but that's--so
9 that's what we're going to be doing, is what you've
10 already done.

11 It's like I said, water quality isn't our job.
12 It's not really part of the--directly part of the
13 allocation, but the Commission, in Round Two, did decide
14 that if you're using Jordan Lake and you've got land in
15 the watershed, you should be helping protect the water
16 quality. And they did impose in the contract that until
17 the Jordan buffer rules got complete, people that were
18 using Jordan Lake had to follow the Neuse buffer rules.

19 So there is an understanding that if you're
20 using it, you should be helping to protect it. That's
21 about the closest I've got for tying those two together.
22 But this kind of ties back to the--talking about
23 diversions here. That's kind of like--that's a diversion
24 out of the watershed as well as the inter-basin transfer
25 diversion. So that's one of the factors they have to

1 review with that as to how that would impact quality from
2 a high level.

3 As to my contact information, the e-mail address
4 I put up there--I put it--if you send to that e-mail
5 address, you'll be getting both Don and myself and a
6 couple of other people working on it, so that way you'll
7 be more likely to get a quick response if one of us is
8 out of the office.

9 MR. MERKLEIN: Thank you, Tom. At this
10 time I want--are there any further questions from the
11 Board for Tom regarding questions that he's asked?

12 MR. FRANSEN: I got one from Pat if you
13 want, from the audience.

14 MR. YOUNG: I'd just like to express my
15 appreciation for helping remove a lot of fear,
16 uncertainty, and doubt. You know, it doesn't feel like
17 that process--it didn't feel that way at all through this
18 discussion, so thank you for your patience with us.

19 MR. FRANSEN: Well, I know it's a
20 complicated process and there's a lot of questions, and
21 so at any time going through this, if the Board feels it
22 would be helpful for either myself or Don or one of our
23 staff to come back, we'll be glad to come back.

24 MR. RAYNO: Sure.

25 MR. MERKLEIN: Well, as you know, this is

1 a significant community discussion, and I think your
2 coming here really provided the Board an opportunity to
3 hear direct from you, and I want to thank Terri for
4 initially making the motion to have you come.

5 And I also want to thank Will and Dana and John
6 and others who really took the time to develop the
7 questions and dig through the material and all that kind
8 of stuff to make this a very productive conversation.

9 So I want to commend the Board for what they've
10 done to get the questions and prepare to hopefully
11 answer, you know, issues so that we have that additional
12 information to consider, each of us, as we move forward
13 through the conversation. So thank all of y'all for
14 that.

15 MR. RAYMOND: Gordon, Tom, I would like
16 to personally thank you. You took my call. I was just
17 some guy. I called several weeks before we initiated,
18 you know, a formal thing, and you answered all my
19 questions, you were patient with me. If this is what
20 I've come to expect from our DENR, DWQ, and all our staff
21 up there, so I guess you've spoiled me somewhat, but
22 thank you very much anyway. And I'm sure this is not
23 going to be the last time we're going to be tapping your
24 expertise on this.

25 MR. FRANSEN: That's fine. We'd rather

1 answer--help you work through the process and answer your
2 questions now than get to the point when the Commission's
3 making a decision and you're sitting there struggling,
4 wondering why something's being done and wanting to
5 challenge it. We feel the community outreach actually
6 makes a better process for us.

7 MR. RAYMOND: It appears that we've turned
8 over some stones that maybe other people haven't, so
9 that--hopefully that will bring clarity to the whole
10 process, too.

11 MR. MERKLEIN: Tom, you said there was
12 another--was there another question you--

13 MR. KERWIN: No.

14 MR. MERKLEIN: Oh, okay.

15 MR. FRANSEN: Pat had--if you want to--

16 MR. KERWIN: We hadn't talked about
17 taking any more questions, so.

18 MR. MERKLEIN: That's okay. Are there
19 any--is there any other discussion from the Board on
20 this, or questions?

21 (No response from the Board.)

22 MR. MERKLEIN: Okay. So thank you, Tom.
23 We had two people sign up--yeah, we had two people sign
24 up to either comment or respond or ask a question. Mac
25 Clark, did you still want to speak?

1 MR. CLARK: Not at this time.

2 MR. MERKLEIN: You're fine. Okay, thank
3 you. Reid Palmer?

4 MR. PALMER: Yes.

5 MR. MERKLEIN: Thanks. If you could come
6 up to the microphone and just tell us your name.

7 MR. PALMER: Hi. My name is Reid Palmer,
8 and I'm a citizen of Carrboro, and I've got a question
9 for Tom based on what I heard. Will has been asking the
10 questions that I want to ask him, so I'm just going to
11 rephrase it a little bit.

12 After hearing what you presented, I still have
13 a little bit of concern about the allocation process and
14 the potential for a disincentive for long term
15 conservation measures as a part of this. You mentioned
16 a community that the per capita water use went up, and
17 you held them to an allocation that was more in line with
18 their prior use.

19 But I'm still concerned that communities that
20 do the minimum to conserve, and in this sort of race to
21 get an allocation, are going to get there first and be
22 using Jordan Lake water first, whereas this community is
23 a model community in the whole state and maybe the
24 country as well at conserving, at long term conservation.
25 This community uses less water than it did 15 years ago,

1 despite an increase in population.

2 And I think if OWASA were to lose its allocation
3 on Jordan Lake, based on the extraordinary effort that
4 we've made to conserve, that it would be a negative
5 message to all communities across the state to make the
6 effort that this community has made to conserve. And if
7 there's any way that you can take that into consideration
8 in the allocation method, to not--not provide a
9 disincentive for long term conservation measures, I would
10 encourage that. Thank you very much.

11 MR. MERKLEIN: Thank you, Reid. I think
12 that's very well spoken, and I think is something that
13 I think our whole community, and I know the OWASA Board
14 has long been concerned about, is the level of
15 conservation that we do, is there a potential that we get
16 dinged, you know, at some point for that, when in fact,
17 we hope that others will look at what we have done and
18 see that as a way to extend the broader water supply for
19 a longer period of time through conservation.

20 Is there anyone else from the public who wishes
21 to make a comment?

22 Yes, sir.

23 MR. MERKLEIN: Welcome, Jim.

24 MR. WARD: Thank you. Jim Ward from
25 the town of Chapel Hill. Thank you, Tom. In my notes

1 here, I have you saying something, and I just want to
2 make sure that you actually said it, and--

3 MR. FRANSEN: No, I didn't.

4 (Laughter)

5 MR. WARD: You said something to the
6 effect that if tapping into the Jordan Lake allocation
7 are--if tapping into our Jordan Lake allocation is an
8 integral part of our drought plan, then it is a use and
9 therefore would qualify for us using it.

10 And I wanted to, first, see whether that in fact
11 is close to what you said, and if you could help me
12 understand that better, because again, this is--we've
13 been seeing Jordan Lake as a--the last source of water
14 that we'd use rather than the first source of water, and
15 that we would only use it when other resources that we
16 have available aren't adequate.

17 And it seemed like the small amount of time that
18 that would be, would be in the matter of days or weeks,
19 and therefore wouldn't stand that test of being a true
20 use. But then you said that if it's part of our drought
21 plan, then it's a use and therefore it would be
22 justifiable. Would you clarify that for me and maybe
23 the Board?

24 MR. FRANSEN: Remember, since this isn't
25 in the rules directly, that was kind of the staff's

1 reaction to this. I would feel comfortable justifying
2 that to the Commission.

3 What I was trying to address with that is the
4 difference between part of your drought plan to minimize
5 your risk of your existing reservoirs and other sources
6 of being totally depleted, versus an emergency, you're
7 basically at the edge of depletion, so it--we're just
8 not--we're going to get right to the edge and then not
9 use Jordan Lake until it's a true dire emergency.

10 If it's really part of an overall risk
11 management, if it's part of your strategy to balance the
12 need not to have your citizens go into conservation every
13 year, you know, mandatory conservation every year, versus
14 something, you know, less frequent that's kind of in line
15 with other folks, that's where I was coming from.

16 Trying to draw a distinction between, how do you
17 really incorporated it into the overall balance of
18 everything versus we just--we want it as an insur--real
19 insurance policy and just use it as a measure of last
20 resort. Does that help?

21 MR. WARD: Well--

22 MR. FRANSEN: Not really.

23 MR. WARD: Well, it does. It's still
24 a gray area scenario, so I mean--

25 MR. MERKLEIN: Right.

1 MR. WARD: --help me figure this out
2 and it's not clear in my mind.

3 MR. FRANSEN: It's not 100 percent in
4 mine, either, since we haven't done it before this way,
5 so--it's something that we're going to be working
6 repeatedly with the staff and then come back to this
7 Board if they need us to, to kind of work our way through
8 it.

9 MR. MERKLEIN: Jim, actually, you've just
10 made the perfect transition into our next--into the next
11 part of this, because I think what Ed Holland's going to
12 present next is our proposed drought response operating
13 protocol. It's something that the Board and the staff
14 especially have been working on and reviewing, and this
15 is not adopted. This is proposed at this point, but it's
16 been part of the community question that people like
17 yourself have asked, what is that plan.

18 And I think, Tom, what you said today is--I feel
19 that what we are doing is putting forward a drought
20 mitigation plan. I mean, everything that we're doing,
21 as opposed to--even though we've--what we've--I think
22 even our definition of an emergency use in the past is
23 still part of a mitigation--is still part of a drought
24 mitigation plan, in terms of when we use it, and I know
25 there's various and series of nomenclature, but I hope

1 we're able to clarify that.

2 And so actually, I want to move forward into
3 that, unless there is someone else who has a question or
4 something for Tom. But if not, I really want to--

5 MR. SLADE: Just one quick--

6 MR. MERKLEIN: Sure, Sammy.

7 MR. SLADE: I guess it's related to the
8 question that you just asked. You know, the idea of
9 changing--we have changed the times at which we have the
10 conservation measures that kick in, and instead are
11 purchasing from neighboring jurisdictions.

12 And so the question to me is, to what degree
13 have those decisions been made as a means to justify our
14 continued access to Jordan Lake? And so, if what is
15 being called for is a true emergency, then are we
16 actually--are we actually undermining our claim to Jordan
17 Lake?

18 MR. MERKLEIN: Uh-huh (affirmative).

19 MR. SLADE: Do you understand that
20 question?

21 MR. RAYMOND: Sammy, maybe let me try.

22 MR. STOTT: I'd like to ask--say
23 something, too, after thinking about it.

24 MR. RAYMOND: The--under our current water
25 conservation standards, we have a Stage One water alert,

1 or water emergency. And actually, we don't ask that much
2 of the community within that Stage One, and we also
3 charge them more money, so that there's a disincentive
4 to--you know, there's a--let's say an incentive to
5 conserving water because it's costing you more.

6 And in our discussion, and in--even Stage Two
7 is really not that significant, but in our discussions,
8 and you're going to see this in a minute, we've set
9 the--this level to be somewhere in the Stage One area,
10 you know, where you can't water your lawn every day of
11 the week, right. You have to only water it a couple
12 times a week, right.

13 So I'm hoping that, when it comes to these--
14 what's considered a drought mitigation plan, that you're
15 allowed to be, you know, a little bit into the zone,
16 right, and that's okay, versus--I don't think any of us
17 have talked about being in dire need like there's, you
18 know, one 55 gallon drum left of water somewhere or we're
19 going to go down to Food Lion and buy, you know, water
20 or something? None of us have ever said that, but we
21 wanted to see, you know, this kind of feedback loop where
22 we get somewhere in the zone.

23 And again, I like this, how Gordon is putting
24 this, is that it's a part of a larger drought mitigation
25 plan. And I like what Reid said; basically this is-

1 should play into this conservation ethic should--we
2 should be rewarded, I personally think, for doing that.
3 And I think we will be. Twenty years from now, people
4 are going to look back, just like they do now at some of
5 OWASA's activities and say, "Wow, these guys were pretty
6 wise." But this is--this is my take. Like I say, I hope
7 I'm around 20 years from now when the--

8 MR. MERKLEIN: Will? William, sorry.

9 MR. STOTT: Appreciate it. Sammy, I
10 just--you've asked a question about going to purchased
11 water before going to other stages of restriction, and
12 I wanted to make sure I understood the question. You
13 were wondering about whether or not the motive behind
14 that was protecting the Jordan Lake allocation, or that's
15 part of justifying going to the Jordan Lake allocation?

16 MR. SLADE: It doesn't matter if it
17 was--what the motive was. It's the effect--

18 MR. STOTT: Okay. Well, I just wanted
19 to say one thing, though. In the discussions that I've
20 been part of in which we've discussed purchased water in
21 the context of restrictions, the primary motive has been
22 keeping the rates down because, as it turns out, going
23 to purchased water before going to some restrictions is
24 ultimately more beneficial to customers in terms of pay,
25 and so that has been the guiding reason, particularly in

1 my mind. So I just wanted to let you know that.

2 MR. SLADE: I'd like to hear about the
3 (unintelligible) reasons, the effect.

4 MR. STOTT: The effect, I'm not sure I understand.

5 MS. BUCKNER: You know, I didn't really
6 understand your question, either, Sammy, so I'd like for
7 you to repeat it.

8 MR. SLADE: Sure.

9 MS. BUCKNER: Yeah. Just rephrase it.

10 MR. SLADE: You just mentioned that--

11 MS. BUCKNER: And maybe you should
12 identify yourself because we are going to do a
13 transcript.

14 MR. SLADE: Yeah. I'm Sammy Slade. The
15 point was made that the degree to which there's an actual
16 emergency in our plan has an effect in how the Commission
17 will value, or how it's justified that we can claim
18 access to Jordan Lake. Inasmuch as we are not going to
19 that as degrees of emergency, but rather mitigating that
20 by purchasing from neighboring jurisdictions, to what
21 degree does that effect how the state agency understands
22 the degree to which we actually need that access?

23 MR. FRANSEN: The simple answer to that
24 is it's too early to know the answer to it, because until
25 we get everybody's application in, until we see

1 something--until we get to the point of being able to--
2 having to put something in the model on operations and
3 drought plans, it's really too early for me to be able
4 to answer that, because I don't know how it fits in with
5 the picture, and we just don't--we know there's a lot of
6 pieces still being worked on, so I can't--it's just too
7 early.

8 MR. MERKLEIN: Okay. I don't--I want to
9 go back to the mojo of Jim Ward's last question, and
10 invite Ed up to now have a discussion on the proposed
11 drought response operating protocol.

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15 (Whereupon, the proceedings
16 on the issue at hand concluded.)

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1 STATE OF NORTH CAROLINA

2 COUNTY OF ALAMANCE

3

4 C E R T I F I C A T E

5 I, G. Lynn Bodenheimer, Certified Verbatim
6 Reporter and Notary Public, do hereby certify that I was
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