# **Georgia Department of Natural Resources**

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To: Coosa-North Georgia Water Planning Council From: Becky Champion, Assistant Branch Chief, GA EPD

Rick Brownlow, CH2M HILL

Subject: Meeting Summary: Council Meeting 8 on November 17, 2010

#### **Welcome and Introductions**

Chairman John Bennett welcomed the group to the meeting and introduced Bill Simonds, Fannin County Commission Chairman, to welcome the group to the meeting. He discussed the importance of what we are doing with water planning. David Westmoreland also addressed the group and highlighted agri-tourism and other tourism as the future of the area.

# **Overview**

Rick Brownlow gave an overview of where the Council is in the schedule and highlighted that much of the meeting would be spent getting feedback regarding the draft plan that was distributed. He reviewed the agenda and noted that the Council has come a long way but still has a good bit of work to accomplish over the next six months to deliver the final plan. He note that the draft plan needed to be out for public comment in late January or early February.

## **Energy Water Use Forecasts**

Brian Skeens presented a summary of the recently completed energy forecasts. The methodology was developed by EPD and the power companies. Water use for power generation is dependent on the type of cooling process. This effects the withdrawal and consumption requirements for the facility. Cooling water use can be once through cooling that uses the least amount of water or recirculated cooling water that uses more water through evaporative losses. Trends are showing that re-circulation will be used more in the future to address potential impacts of higher temperatures on receiving streams. The largest facility in the Coosa North-Georgia is Plant Hammond which uses once through cooling.

Brian noted that the ad hoc group developing the forecasts could not put a specific location on where future facilities would be located. However, they have estimated the total amount of energy demand in the future and the associated water needed in the future on a statewide basis. A total of 170 mgd of additional water capacity will be needed in 2050 across the entire state.

Brian noted that the current draft of the plan does not include these results but the next draft will include this information. In addition, a supplemental document will be available to describe the methodology and results. The ad hoc group looked at a baseline and alternative condition which resulted in a range of 170 to 189 mgd of additional water needs state wide.

Brian noted that the future trends were for usage to go up initially due to changes in processes but then to level off and remain fairly constant through 2050 with the baseline scenario predicting withdrawal needs at 511 mgd and the alternative scenario predicting needs at 626 mgd.

Brian's recommendation was to include the alternative scenario into the total forecasts. Chairman Bennett asked what the energy producers were recommending. He noted that we need to incorporate something in our plan. Mike Berg said that this ties in to the interbasin transfer (IBT) issue as well. He noted that it was hard to believe that the power companies did not know where they were going to be generating power. Kelly Cornwell noted that all of north GA was in a non-attainment area, and this will likely limit future permitting of power plants in our region. Denise Wood suggested that TVA be included in discussions related to their hydro power capacity. Mark Marlowe suggested that the Council plan for some portion of the energy water demands in forecasts. Tim Mercier agreed that something related to energy water demands should be included in estimates. Mike Berg noted that power companies can buy off the grid, so the Council can't look at power like a water utility. Chairman Bennett noted that this was a good point since power can be more readily moved from area to area. He indicated that there is probably a good chance to change the Plant Hammond cooling process in the future, and that may increase water usage. Brian said that a scenario with plant Hammond shifting water use can be included. Jerry Jennings noted that a change in Georgia Power Company water use could increase their consumptive use as well. Joe Cook indicated that the existing 10 mgd of consumptive use could increase to 20 mgd. He noted that Plant Bowen would have 40 mgd of withdrawal and 20 mgd of consumptive use.

The group agreed that a scenario that assumes plant Hammond would completely shift from once through cooling to recirculated cooling in the future needs to be included.

#### **Water Quality Credit Trading Presentation**

Doug Baughman gave an overview presentation on Water Quality Credit Trading. The council asked how trading programs are funded. Doug mentioned that often they are locally funded, but sometimes, the State will provide some funding support. Council member asked if anyone else in the state is doing water quality trading. Doug noted that UGA and Georgia State have done some research papers, but no organized trading programs have been implemented. There has been some wasteload allocation capacity trading (Cherokee County), but not exactly the same as a watershed based trading program. Tom O'Bryant noted that development mitigation credits are

already being utilized. Chairman Bennett asked if anyone has done anything across state lines. Mr. Baughman noted that he was not aware of any currently, but the State of Louisiana is looking at it with the Mississippi River basin and loadings to the Gulf of Mexico. Chairman Bennett said that Lake Weiss would be a good opportunity to do some trading with Alabama. Mark Marlowe indicated that a feasibility study would be needed to make sure that the numbers would work out and to determine the potential for a successful program on both sides of the stateline. He noted that the Partnership (Northwest GA Regional Water Resources Partnership) is looking at this, and estimates are that it would cost up to \$200 million in capital improvements to meet the requirements for nutrient reductions. If the nutrient reduction requirements go lower, it would cost more. The Partnership has put together a proposal for a potential 319 grant to complete a feasibility study. It was noted that the cost of the credits is based on number of factors and is typically set by the participating entities in the trading program. A comment was made that you have to look at the region that has a cap, and the contributors come up with the lowest cost solution (especially for phosphorus). Irwin Bagwell inquired about the return per acre to the farmer. Mr. Baughman noted that it depends on the phosphorus contribution of the agricultural source and the cost of best management practice implementation. Typically, credit values are negotiated up front by the participants in the program.

# **Discuss GA EPD 319 Grant Opportunity**

Chairman Bennett introduced Michelle Vincent to discuss the 319 grant process and opportunities. He urged the group to decide if they want to spend the money on only one project or multiple projects and whether they do a study or implementation project. Michelle referred to the handout in the pre-meeting material as a reference. She reviewed what the funding is and is not. She reviewed what EPD is looking for and gave some example projects that have been successful. She mentioned that the 40% match that is required doesn't have to be cash. It can be volunteer hours or in-kind donations. Most successful projects have a lot of partners involved. These projects have a 2-year project life span and will start around the Fall of 2011. The council can submit an application for a specific project and/or other entities within the basin can submit applications for projects.

She identified the Council actions to be that they should identify the specific project(s) to fund, identify the funding recipient, and include the project in the WDCP. Then the proposed recipient would work with Council and EPD (Becky and Michelle) to draft a work plan to submit to EPD approval. She suggested the formation of a subcommittee to discuss project opportunities and opened the floor for discussion. There was discussion about when the projects/application need to be submitted, and this is by the end of January 2011 to make sure it gets included in the WDCP. It was requested that each Council Member go back today and identify ideas for potential projects and to bring back so the council committee can decide what to submit. The

next full council meeting is scheduled for January. Chairman Bennett proposed a committee to make decision about projects to recommend to EPD. A project could be work on Carter's Lake that would benefit multiple stakeholders. The Partnership is recommending that their development of framework for phosphorus trading project be considered. They also are looking for additional funding and competing under the normal 319 competitive program (non-WDCP). There was a comment about another project on Coosawattee that may be considered. It was recommended that the project that will do the most good, rather than do several smaller impact projects to gain even distribution. It was recommended that the issues be identified and that a list of projects that target those issues be developed. The results of the first set of projects can dovetail into follow-on projects. The Vice Chairman moved to create the committee, and the motion passed. Irwin Bagwell, David Ashburn, Tom O'Brien, Kelly Cornwell volunteered for the subcommittee.

Chairman Bennett called for subcommittee members to join together after the lunch break.

# <u>Basin Subcommittees and Full Council Discussion on Development of Water Development and Conservation Plan</u>

#### **Review of Sections 1-5**

Brian reviewed the revised sections 1-5 of the WDCP. Council members discussed the following additional recommendations and revisions:

- Chairman Bennett noted that the council had received a proposed resolution to include some additional environmental focus on the vision included in the summary. In Section 2, Chairman Bennett asked that the figure on 2-2 identify the adjoining counties. This needs to be applied to all figures. In Table 2, Chairman Bennett suggested that Ellijay and East Ellijay be described as two separate entities.
- In Section 3, Mark Marlowe suggested that a description of consumptive use be included rather than just withdrawals. Chairman Bennett suggested that the permitted withdrawals be described. Specifically, he suggested that the agricultural withdrawals be included. Mark agreed. Chairman Bennett noted that a table with permitted withdrawals by county could be included. It was agreed that a page would be included for this. Jerry noted that on figures 3-1 to 3-4 that it is actual use. Lee Mulkey asked if the council could get the supplemental documents on forecasts.
- Section 4, do not split the tables 4-1 and 4-2. Mark noted that under section 4.2.1, it is noted that for the carpet industry, the employment numbers were not a good indicator of water use. Mike Berg noted that this doesn't apply just to the carpet industry. Mark noted that permitted capacity should be added to Figure 4-1. Titles should be changed to read "wastewater flows" rather than "wastewater demand." Representatives from the

agricultural interests were concerned about the counties with "zeros" in the agricultural water use tables. David expressed his concern that we were continuing to have to use less than complete data. Irwin agreed and noted that they would prefer to have the county extension agents provide additional updates. Doug noted that option was discussed with EPD earlier, and it was determined that all the counties would have to use a similar approach for consistency and that there was not time or funding to complete this additional survey activity. The Council agreed to document in footnotes in the tables that zeros did not accurately reflect current agricultural use in some counties. The Council also agreed to add in the permitted agricultural use figures by county.

• Table 5-1 needs clarification on the shortfall for regulated nodes. The Council recommended that the table reference the period of time it refers to and what the low-flow period was. It was noted that this table needs further clarification. The figures on water quality DO need to be bigger so that they are legible. Chairman Bennett asked why the Coosa River reach near Rome was not modeled. Mark suggested that nitrogen figures like fig 5-5 be added. It was noted that the watershed modeling figures and tables need to be fixed to clarify results.

#### **Review of Section 6**

Brian reviewed the specific recommendations in Table 6-1. Brook Anderson suggested combining some of the practices to reduce the total number to a lower one. Michelle suggested that the Council may want to prioritize the MPs. Rick noted that the MPs are in order of scoring from the MPs process. Mike noted that we should address the costs and implementation responsibilities. Jerry noted that under the column on issues to be address it appears to the read that the MP should only be applied in the area with the gap. It was agreed that it will be noted that MPs are to be applied across the board.

The Council discussed the final review process. Mike asked whether EPD would provide another round of comments. Michelle said that they will comment on plan that goes out in February for public review, and then the Council will respond to their comments. EPD will not be commenting again after February. David asked if EPD would be providing additional comment if regional plans were in conflict. Michelle noted that EPD is doing this as the plans are developed and do not expect any major conflicts. Mike noted that the plan is pretty flexible and questioned whether it is sufficient or needs to be more precise. Michelle noted that EPD is willing to do additional reviews if the council prefers. Brook asked if the infrastructure gap analysis was going to be included in the document. Brian noted that it would be included as a supplemental document. Tables in section 5 summarized the water and wastewater treatment gaps by county.

Jerry noted that table 6-1 should be revised to divide the MPs into major categories with some description of the goals for each. Mark suggested that the Council focus the water supply

management practices on "augmentation" rather than conservation. He also noted that it would be helpful to have the MP scoring results.

Haynes noted that the public education (WC-1) can and should include material on the cost of specific measures.

Irwin asked about WC-13 and permit status comment. This needs to be clarified.

Jerry noted that WC-1 to WC-3 are general, and then WC-4 is very specific. He recommended the specific task be removed or put in another place in the document. Mark asked how the plans would be enforced as it may affect their decisions on MPs. Michelle discussed the state plan recommendations and how the plan described management practices and implementation requirements. Michelle indicated the review process for permitting is not well defined, however, we do know the following:

- 1. The plans will be a foundational element for permitting review.
- 2. The plans will not have a Metro District-style audit process.
- 3. The existing permit process and rules and regulations will not change. So, if it has to be done now, it will have to be done in the future.
- 4. If a project is in the plan, this does not mean it will automatically be permitted.
- 5. If a project is not in the plan, it does not preclude another project from getting a permit.

EPD will also look at whether any proposed project is generally in agreement with the council's vision and goals. Mark suggested that a discussion indicating that these are the primary MPs developed by the council but that this doesn't preclude local governments and utilities from implementing others that may be more cost effective be included upfront in the plan.

The Council agreed to change WC-4 to "encourage". Haynes suggested that residential be included. Waterless will be removed from the list. Jerry suggested that the following MPs be pulled into one measure; 4, 8, 11 14, 15, 16, 17.

Brian suggested rolling up the water stewardship act requirements into one MP. The council agreed.

Chairman Bennett noted that it is redundant to include the "issues to be addressed" for each MP. Rick suggested that we put a preamble in front of each section/category to describe what gaps will be addressed by that suite of MPs. The council agreed to this solution. Michelle indicated that EPD liked the geographic specificity.

For water quality, Haynes noted that WQ2 should include the word "best" management practices. Brook asked about WQ3 and suggested that most local governments already have S&E requirements. David noted that some counties and cities don't have programs in place. He noted

that EPD doesn't have the staff to do the site reviews and local governments. Joe noted that every local government has to have E&S requirements but not all have local issuing authority.

It was decided that a requirement for all local governments to become a Local Issuing Authority (LIA) be added to the recommendations for the State.

The wording related to post-development stormwater controls for WQ4 needs to be addressed. As written, this only addresses the runoff volume.

It was agreed that other comments on Section 6 by Council members are to be submitted by December 1, 2010.

Brian provided an overview of Section 7 was. Mike noted that water authorities should be included. It needs to be clear when a utility is required to implement something. This should be included on the 2.1.1 list 2.1.1.

Regarding the costs, Mike asked if there is cost-benefit information by MPs. Doug noted that this information is not available and that there will not be specific measures of cost benefit. He stated that the Council needs help in understanding where the best bang for the buck will be. It was requested that columns for year 1 and years 2-5 be merged into one column on short term actions. Table 7-4 should be 7-3. Mark suggested that water supply augmentation be considered. He mentioned that that the Tennessee River is a regional asset in the basin, and the Council needs to think about it as a future source. He suggested that recommendation for the State to look at the Tennessee River as a source be added. The State should look at additional coordination with Tennessee on developing the river for super-region water supply needs.

Chairman Bennett noted that the four counties in the Metro District in the Coosa Basin should be included in planning in the future. The Council noted that recommendations on development of new reservoirs need to be made. It was suggested that a recommendation that the state should look at "optimizing existing federal reservoirs" be included.

For future implementation and organization, the Council agreed to develop a new subcommittee including Mark Marlowe/Don Cope, Mike Berg, Jerry Jennings, Tom O'Bryan, and Chairman Bennett, Irwin Bagwell.

Lee recommended that a recommendation that the State implement a real-time monitoring network to help management flows in the region be included.

## **Elected Official and Public Comments**

Joe Cook – Saving energy should be included, as it will affect water withdrawal. Also, include plumbing retrofits. Sub-metering is in WSA. The Coosa plan doesn't include relying on IBTs,

but it should include some discussion on protecting our water resources. If our water transfers out, we should be sure to get it back. According to our water law, we only have a right to water in our state. If you want to start another water war, ask Tennessee about using 200 MGD of their water. If we want Tennessee River basin water, let's get it from the reservoirs in our state and use that, if we transfer it outside the basin, let's make sure we get it back. One observation about water conservation – we spent an hour talking about retrofitting a \$600 toilet, but it is much more cost effective than a multi-million dollar reservoir. So let's do the water conservation first, it's the most cost-effective, and makes the most sense, so let's do it.

## Wrap Up/Council Meeting Evaluation

The council discussed holding the next meeting in early January but did not set a specific date or location. Rick suggested that alternative dates with Chairman Bennett be reviewed and suggestions will be submitted to the council. The meeting was adjourned at 4:15 p.m.

# Coosa – North Georgia Water Planning Council, November 17, 2010 CM#8

#### Members Present

- 1. Curt Arulf (on behalf of Todd Pealock)
- 2. David Ashburn
- 3. Irwin Bagwell
- 4. Kenneth Beasley
- 5. John Bennett
- 6. Mike Berg
- 7. Tim Bowden
- 8. Kelly Cornwell
- 9. Katie Dempsey (ex officio)
- 10. Pat Gober
- 11. Jerry Jennings
- 12. Haynes Johnson (alternate)
- 13. Sherry Loudermilk
- 14. Mark Marlowe (on behalf of Don Cope)
- 15. Tim Mercier
- 16. Lee Mulkey (on behalf of Gerald

# **Elected Officials**

- 1. Bill Simonds, Fannin County
- 2. Randy Waskul, Whitfield County
- 3. Denise Wood, City of Dalton

#### Partnering & Other State Agencies

- 1. John Damer, GA DNR
- 2. Joe Krewer, Department of Community Affairs (http://www.dca.state.ga.us/)
- 3. John Loughridge, Georgia Soil and Water Conservation Commission

## **GA Environmental Protection Division**

- 1. Becky Champion, Assistant Chief for Coosa-Tallapoosa-Tennessee Basins
- 2. Michelle Vincent

#### CH2M HILL

- 1. Doug Baughman
- 2. Rick Brownlow
- 3. Brian Skeens

#### Dunham)

- 17. Tom O'Bryant
- 18. David Pennington
- 19. Jimmy Petty
- 20. Frank Riley
- 21. David Westmoreland

## Members Not Present:

- 1. Doug Anderton
- 2. Charlie Bethel
- 3. Stephen Gray
- 4. Anne Kaiser
- 5. Dick Martin6. Lamar Paris
- 7. Sam Payne
- 8. Chip Pearson (ex officio)