

Memorandum

To: Altamaha Regional Water Planning Council

From: Rick Brown and Katherine Zitsch, CDM

Date: 12/30/10

Subject: Council Meeting 9 - Summary

This memorandum provides the meeting summary of the Altamaha Regional Water Planning Council Meeting 9 (CM9), held on December 16, 2010 at the Economic Development Center, Southeastern Technical College, in Vidalia, Georgia.

1) Welcome and Introductions/Recap CM8/Approve Agenda/Approve CM8 Summary, Update on Water Resource Related Meetings, Public Comment

Chair Brinson Lanier called the meeting to order and welcomed the Council members and asked Mr. Jackson Posey, City of Vidalia Building Inspector if he had any comments for the Council. Mr. Posey welcomed the Council to Vidalia and thanked the Council members for the work on the water plan.

Chairman Lanier provided an overview of the agenda, kicked off the meeting, and asked for approval of the Agenda - motion by Ed Jeffords, second by Gene Tomberlin and the Agenda was approved unanimously.

The PC proposed moving the January meeting to February 17th and briefly mentioned that the water plan schedule has been extended and mentioned that this topic would be revisited later in the morning. The PC provided a recap of CM8 and asked for approval of the CM8 Summary - motion by Ed Jeffords, second by Gene Tomberlin and the Summary was approved unanimously.

The PC then outlined the following objectives for Council Meeting 9:

- Selection of Final Management Practices for Regional Water Resources
- Discuss final information considerations for Energy Forecasts
- Review status of Water Plan Drafting

- Discussion of Water Quality including TMDL listed streams and 319 grant program
- Review schedule for completing the Regional Water Plan

The PC summarized the significant major accomplishments made by Council over the last year and a half and highlighted the two major remaining tasks (management practices and plan drafting) that need to be completed to finish the Regional Water Plan. The PC then discussed the memorandum from Director Allen Barnes, Georgia Environmental Protection Division (EPD). The memorandum provides a revised schedule for completing the water plan and essentially allows Councils an additional 2-3 months to complete the regional plan. The PC recommended that we stay close to the original schedule and try to complete the draft plan by mid-February. This will allow Council some time for internal EPD review prior to formal public comment. The PC mentioned that this would be discussed in more detail later that morning.

The PC then updated the Council on two important activities that occurred since the last Council meeting.

First, there was a meeting of the Joint Committee on Water Supply on December 8 in Atlanta. The Joint Committee was created by Senate Bill 370 (also known as the Water Stewardship Act). The PC made the following observations:

- The Joint Committee on Water Supply is comprised of 5 members of Senate, 5 members of House
- Senate and House Natural Resources and the Environment Committee chairpersons to serve as co-chairpersons
- The Committee is required to study and analyze the state's reservoir system and strategic needs for additional water supply
- The full membership of the Committee is listed below:

Senate

Ross Tolleson (R - Perry), co-chair
John Bulloch (R - Ochlocknee)
George Hooks (D - Americus)
Butch Miller (R - Gainesville)
Jack Murphy (R - Cumming)

House

Lynn Smith (R – Newnan), co-chair
Rick Austin (R – Demorest)
Bob Hanner (D – Parrott)
Randy Nix (R – LaGrange)
Harry Geisinger (R – Roswell)

Several state agencies testified including EPD Director Barnes; Georgia Environmental Finance Authority; Georgia Soil and Water Conservation Commission, as well as the Georgia Chamber of Commerce, Georgia Water Planning and Policy Center, and Georgia Conservancy. A strong theme for the day was the need for funding and the need to continue to have ongoing discussions of water issues in a Committee format. The current Committee will sunset on December 31, 2010.

Council Member (CM): Have we heard any additional input from the Governor regarding water planning?

PC: We are not aware of anything specific.

CM: What discussion have there been regarding Interbasin Transfers? This region received about 66 Million Gallons/Day (MGD) of wastewater return flows from water users that return wastewater to the Ocmulgee. It seems that a lot of the discussion on upstream water use and development is going on outside of the regional councils.

PC: Yes there have been discussions of Interbasin Transfers both within and outside of the regional council setting.

CM: If water is properly treated I think it may be a benefit to our region to have these increased flows.

Next, the PC mentioned that an Instream Flow Ad Hoc meeting was held on December 7th in Macon and highlighted the following points:

The meeting was well attended with an estimated 50-80 people about three quarters of which were Council members.

EPD facilitated the meeting and provided background on the State Instream Flow Policy.

A guest presenter, Mary Freeman, Research Ecologist, United States Geological Survey and member of the Scientific Engineering Advisory Panel provided a PowerPoint presentation highlighting river ecology and flow related functions that occur during different flow regimes. Ms. Freeman mentioned that the 7 Q 10 flow metric is a metric

that addresses drought conditions but that other flow related benefits can be considered beyond those that address dry year flow conditions. Ms. Freeman's full presentation and additional information about the meeting can be found at:

http://www.gawaterplanning.org/pages/resource_assessments/instream_flow_ad_hoc_meeting.php

The meeting concluded with a discussion regarding whether the Council members in attendance had any specific flow related research language that might be appropriate to include as recommendations in the current draft plans to help prepare for and/or include in the next round of water planning. No specific recommendations were identified or discussed.

Council member John Roller attended the meeting and provided the Council with handouts of the summary of the Georgia Instream Flow Policy summary and a summary of what some of the neighboring states are doing in regard to instream flows. Council member Roller mentioned that he has always been concerned that if we only protect for low flow then upstream water use may negatively impact our area. Mr. Roller asked the Council to recommend considering other flow regimes and include these in our plan. Mr. Roller suggested the use of the South Carolina approach to setting instream flows levels.

CM: I am concerned with using a single approach for all of our rivers; maybe we need multiple approaches depending on the watershed. I am also concerned with how the facts and figures were derived.

CM: What's the difference between EPD's and the states instream flow policy and permitting requirements under Section 404 of the Clean Water Act?

PC: This is a complex topic, but briefly under the National Environmental Policy Act (NEPA), if there is a federal action such as impacts to jurisdictional waterways or wetlands then the applicant for the activity must undertake a detailed analysis (typically for large projects an Environmental Impact Statement process) and must evaluate a series of alternatives and select those actions that have the least environmental impacts and/or mitigate impacts. This process will allow future projects to be looked at very closely and will likely go beyond the use of the 7 Q 10. We've added the management practice to monitor river flows to see how they affect estuaries to send the message that we need to protect ecosystem.

Chair: In our subcommittee and Council meetings, we've tried to keep these recommendations in general especially where there is a lack of information. If we put figures in, whether from South Carolina or others, then we're making recommendations on these figures based on those folks study, I think our statement as we have it now

written gives us more leeway to respond to facts and figures and evaluate what is best for our region.

Council elected to keep the management practice general and did not want to adopt any specific flow related needs or research recommendations.

2) Public Comment

There was no initial public comment.

3) Selection of Proposed Final Management Practices

The PC began the discussion by outlining the Management Practice selection process that the Council has undertaken over the last 4 months which included starting with a broad universe of practices then developing a short list based on cost, effectiveness and implementability. The short list was then compared to relevant management practices from both local Comprehensive Plans and Watershed Protection Plans and additional practices were added if they were not already included. The PC then provided an overview of the Council recommended management practices using "Road Map" figures for water quantity and water quality developed from the detailed list of practices.

The overall approach to addressing resource gaps and future water supply needs is based on an incremental and adaptive process with those practices that are lower cost and more easily implemented emphasized in the short-term (1-10 years). If resource gaps and needs are not being fully addressed, then more costly and more complex practices will need to be considered for implementation in the mid (10-20 years) and long-term (20-40 years).

The PC noted that the most immediate needs in the region regarding water supply are addressing the surface water gap at Claxton node (Canoochee River) and the small portion of our region that drains to the Atkinson node (Satilla River).

The PC also noted that our management practices should address any gaps and needs in the region and be consistent with our regional Vision and Goals; our current vision statements is: *"The vision of the Altamaha Regional Water Planning Council is to wisely manage, develop, and protect the region's water resources for current and future generations by ensuring that the Altamaha basin's water resources are sustainably managed to enhance quality of life and public health, protect natural systems including fishing, wildlife and wildlife utilization activities, and support the basin's economy."*

CM: I think we need data collection to confirm frequency, duration, and severity of surface water gap.

CM: Addressing gaps – have we taken into account past history that the aquifer dropped and required extension of wells. Are the coastal issues similar to ours?

PC: There are similarities for surface water gaps but the groundwater issues are different.

CM: As we implement these over 5 years and we close the gap, we look and see if we have closed the gap. As we move forward then, if we haven't closed the gap, then we look at more costly/harder practices; that seems to be a good approach.

CM: In regard to George Smith reservoir – we know how difficult it is to build/manage reservoirs. If we can't close the gap, we might be looking at existing reservoir(s); we may need to look at use of George Smith reservoir.

CM: Everything that we've read, we've been fairly general in looking at things. In the end as we review, some of our suggestions may need to be more specific. We're only 2-3 years from all of this issue being out of our hands and being a political issue. The political clout will drop considerably with redistricting. We might want to be more specific than general to get in our final plan.

CM: In regard to Coastal Permitting and salt water intrusion what would happen if they move some of their current pumping out of yellow/red into green zones. This may directly/indirectly affect this (Altamaha) region.

PC: Yes but also keep in mind that the Coastal Council is looking at injection barrier(s), additional surface water supply, storage, aquifer storage and recovery, and, potential interbasin transfers.

CM: Are they looking at desalination? General conclusion is there are cheaper available supplies than going to desalination. Challenges are cost, energy intensive, management of brine; it is on the table as a longer term solution.

CM: In my opinion the problem in Chatham County is caused in Chatham County and needs to be fixed in Chatham County; there is a 160 foot deep cone of depression. If you back out into other checkered counties, the effect of using 1 gal in Chatham is 10 or 15 gallons in other areas. Same thing is true in Glynn – they have to fix the issue in Glynn which was technically a different challenge.

Chair: Does any member of the Council have any item they'd like to discuss.

CM: A couple of meetings ago, we all agreed the implementation of these practices would be done only if they would be economically feasible and reasonable.

PC – Yes, Council directed us to include this type of statement in the plan introductory section before the management practices are presented.

CM: I agree our recommendations need to be cost feasible/cost effective and be reasonable.

Vice Chairman Ed Jeffords: Mr. Chairman, I think we've discussed these at the last several meetings and went through them pretty thoroughly. These recommended practices reflect the direction and opinions of the Council. I think we have touched on what people were concerned with; not every topic was resolved to everyone's total satisfaction but we did get general agreement. I move that we approve these detailed lists of management practices. Council member Buddy Pittman seconded the motion. Chairman Lanier asked for a formal vote and the list of management practices was approved unanimously.

4) Selection of Proposed Final Management Practices Continued - Water Conservation

The PC then presented additional information regarding Water Conservation which is considered a preferred management practice. The PC reminded the Council that as part of the pre-meeting materials the Council was sent detail Water Conservation guidance and a worksheet that showed the various tiers of conservation practices. The Council was requested to consider action on the following topics:

- i. Does Council agree with the 25 Water Conservation Goals and/or are there some that should be added or deleted?
- ii. Are there any specific additional (other than those outlined in the detailed list of practices) Tier 1-4 water conservation practices that Council would like to include in the regional plan?
- iii. Are there any specific recommendations for water use data reporting that Council would like to include in the regional plan?

The PC reviewed the water conservation practices that were included in the 2006 Coastal Georgia Water and Wastewater Plan for Managing Water Intrusion.

Does the council have any concerns over the 25 water conservation goals? Are there any additional tiered practices that the council would like to identify other than what we have?

Department of Community Affairs (DCA) – I know several Councils have recommended improved water use data collection; to get data by use sector domestic, commercial and industrial.

CM: In regard to encourage the installation of submeters on existing non-submetered multifamily complexes and multiunit commercial and industrial complexes. Some of this just does not make sense for a 1 or two tenant complex and that is my concern with how this will be interpreted so I am uneasy with making recommendations.

PC: Specifically in regard to the general water conservation goals are any of these goals offensive/problematic and should we get rid of any of them?

CM: If we add language, maybe something like "as it makes economical and reasonable sense". Practices should be considered on an individual basis during rulemaking and not adversely affect vision or goals.

CM: That my help but I am still concerned how all this will be interpreted. I support the concepts as long as they are sensibly implemented.

CM: I think it is pretty clear we need a data reporting tool that allowed easier access to the data.

CM: I also think whatever time/money/effort is put into data collection it is vital that it be put into standardized platform.

CM: I support a positive statement that going forward we encourage standard method for collecting data use and water conservation efforts.

The Council was in general agreement with the 25 water conservation goals with the aforementioned caveats, did not have any specific conservation practices to add to the existing practices, and generally supported improved data collection but did not have any specific recommendations beyond this.

5) Water Quality

The PC then reminded the Council of the availability of funds to address water quality issues in the region through a new element of the 319(h) grant program. Up to \$100,000 in grant money is available for one or more qualifying projects in the region. In order to qualify a project must provide a water quality benefit, and the local jurisdiction sponsoring the project has to provide 40% in matching funds.

The PC noted that there are several TMDL listed segments that may benefit from funding and provided several examples of the types of programs that are eligible for funding and those that would not qualify. In the next couple weeks please identify any potential projects or issues you are aware of. EPD is also assisting by compiling a list of projects that

have applied for funds in the past but have not yet been funded and those projects may be good candidates for this program.

6) Energy Forecast

The PC addressed the Council regarding the last component of Council input that is needed to complete the forecast portion of the Altamaha Water Plan. The energy forecast has been completed at the regional level through 2020 and at a state wide level between 2020 and 2050. The Council has the option to plan for some of the 2020-2050 energy need being produced within the region.

Based on feedback from the Council management practices subcommittee the PC has developed 3 approaches:

- i. Use the percent of estimated 2020 statewide power generation by water using power generation combinations in the region and assume the region will produce that same relative percent in 2050;
- ii. Percent of forecasted statewide population growth in region from 2020 to 2050;
- iii. Do not plan for any additional energy being produced in the region.

The Council spent considerable time discussing how to best forecast energy needs from 2020-2050. Central to the discussion was strong support by Council to plan for future energy water needs in the region. Several Council members were not completely comfortable with projecting from either a percent of population or percent of energy production because neither approach takes into considerations the likely minimum power production threshold that would precipitate either, expansion of an existing facility, or development of a new facility. Overall the percent of population approach was viewed as somewhat more arbitrary and did not take into consideration the regions attractiveness regarding water resource availability for potential energy production. The values for 2050 energy water demand for 2050 using percent of energy result in an estimated 24 Million Gallons/Day (MGD) of withdrawal and 13 MGD (values rounded) of consumption.

CM: I think it is important that our plan both note that energy water use in the region is a likely scenario beyond 2020 and that we include some thoughts about How the process of developing energy should occur.

CM: In my opinion I think the energy companies will probably make their determinations based on their business model and economics.

CM: I think we should include several principles in regard to potential energy development. Future energy will likely consider 5 major factors: water, access to the

power grid, access to a fuel supply, demand and boundary/security issues. So with this in mind I would offer the follow things to consider for inclusion in our plan:

- A. Future energy production and water use should be located in areas of sufficient supply and within the capacity of surface water systems.
- B. Reuse and use of reuse water, where possible and feasible, should be part of the water budget for energy production.
- C. Energy development should be in cooperation with local government to make sure that energy water use does not impact other possible growth sectors and should promote "fairness" in water supply.

CM: Maybe we should just double the value using the percent of energy; that would be about 56 MGD.

CM: Our regions 2010 forecast is about 50 MGD and it seems reasonable that that could double by 2050.

CM: I think that a 2000 Megawatt plant/or expansion is the minimum that would occur given "economy of scale considerations" and that would likely require about 50 MGD.

Following the discussion the Chair asked for a motion to bring this topic to closure. Gerald DeWitt moved for approval of including 50 MGD withdrawal in the plan; seconded by Buddy Pittman. The motion was passed unanimously. Gerald DeWitt made a motion to include the principles (A-C) in the narrative of the regions forecasts for energy; seconded by Ed Jeffords. The motion passed unanimously.

7) Water Plan Schedule and Shared Resources

The PC updated Council on the next steps for drafting the water plan. Sections 1 -5 were submitted to EPD on Aug 15th and we have been addressing EPD comments. We're about 85 % in producing the revised draft – want to get back to plan drafting and mgt practices subcommittees and discuss the revised versions. The main comments were: (1) shorten some sections; (2) getting consistency between regions; (3) adding lessons learned and overall findings in a more concise manner. A preliminary rough draft of Sections 6-8 which we handed out today has been completed but needs more work. We purposefully left these Sections more to honor council process and we now have the detail after today's meeting and finalization of management practices.

As discussed earlier today we will stay close to the original schedule for plan completion but will move our next meeting to February to allow a little more time for shared resource discussions and polishing the plan.

Council should plan for a meeting following public comment probably June-July for CM 11.

Shared Resources – In regard to shared resources we primarily need to deal with surface water quality and quantity – we formed subcommittee(s) to work on that issue. CDM has taken first cut on analysis of how consumptive use looks at each node. We’ve submitted to other PCs to look at. Based on net consumption, this will help frame the role that region’s management practices needs to play in addressing the gap. For instance, there are four regions, including our region that uses water upstream of the Kings Ferry gap (though the Oconee regions use is small). What we’re trying to do – take our region for instance – our management practices portfolio needs to come up with enough “water yield” to close that gap at Claxton and then combine with Savannah Upper Ogeechee, Upper Oconee and Coastal to make sure the entire portfolio can close the surface water gap at Kings Ferry. We will need to go through a modeling effort to see how that works – in order to be as quantitative as possible. We’ve submitted the approach and are trying to meet with other PCs in early January and then shared resources Council subcommittee in mid-January.

CM: I am concerned that there are so many people involved in various aspects of planning that I am worried that we will not be coordinated as well as we might need to be.

PC: There certainly are many aspects and facets to water resource planning and the state water plan is a good “road map” to try to bring all these elements together in a more coordinated fashion while still respecting local authority and planning.

CM: I think the legislature has a fund for “environmental sensitive and important lands” perhaps there is a viable use of these funds to acquire public/private lands for helping augment surface water flow locations that have gaps/significant surface water forecasted needs.

8) Local Elected Official Comments

There were no local elected official comments.

9) Public Comments

There were no public comments.

10) Wrap-up and What to Expect Next Meeting

Ed Jeffords made a motion to have the next meeting on February 17th; seconded by Rex Bullock and approved unanimously by Council (note following the meeting it was learned that the Vidalia meeting facility is not available the 17th and the PC is evaluating other options).

Altamaha Regional Water Council – Council Members Attendance List

| Altamaha Council Members | | 12/16/2010 |
|--------------------------|---------------------|------------|
| 1 | Gary Bell | X |
| 2 | Randy Branch | |
| 3 | Guy Rex Bullock | X |
| 4 | James Mark Burns | X |
| 5 | Gerald A DeWitt | X |
| 6 | Will Donaldson Jr. | |
| 7 | Cleve Edenfield | |
| 8 | Jim Free | |
| 9 | Randy Giddens | |
| 10 | Len Hauss | |
| 11 | Edward S Jeffords | X |
| 12 | Phillip Jennings | |
| 13 | L. Brinson Lanier | X |
| 14 | Dan McCranie | |
| 15 | Steve Meeks | |
| 16 | Greg Morris | |
| 17 | Buddy Pittman | X |
| 18 | Michael A. Polsky | |
| 19 | John E. Roller | X |
| 20 | Sue B. Sammons | |
| 21 | Doug Sharp | X |
| 22 | Paul A. Stravriotis | X |
| 23 | Jim E. Strickland | X |
| 24 | Dent L. Temples | X |
| 25 | Lindsay Thomas | |
| 26 | William G Tomberlin | X |
| 27 | Michael Williams | |
| 28 | Tommie Williams | |
| 29 | Russ Yeomans | X |

Total **14**

Altamaha Regional Water Council
 Public Attendance List

| Public Attendee | | 12/16/2010 | Representing |
|-----------------|------------------|------------|-------------------------------|
| 1 | Deatre Denion | X | GA DCA |
| 2 | Bill Lindsey | X | Heart of Georgia Altamaha RDC |
| 3 | Rahn Milligan | X | GSWCC |
| 4 | Harold Mobley | X | Georgia Power |
| 5 | Jackson Posey | X | City of Vidalia |
| 6 | Ken Rosanski | X | Oglethorpe Power |
| 7 | Bryan Snow | X | Georgia Forestry Comm. |
| 8 | Jason Wisniewski | X | GA DNR WRD |

Total 8