Memorandum

To: Altamaha Regional Water Planning Council

From: Rick Brown and Katherine Zitsch

Date: December 2, 2009

Subject: Council Meeting 4 Summary

This memorandum documents the meeting summary of the Altamaha Regional Water Planning Council Meeting 4 (CM4), on November 19, 2009 at the Altamaha Technical College in Jesup.

1) Welcome and Introductions

Chairman Brinson Lanier welcomed everyone and called the meeting to order. He then turned the meeting over to Ed Jeffords. Mr. Jeffords thanked everyone for coming and noted that Wayne County and the Altamaha Technical College were pleased to host the Altamaha Regional Water Council meeting. Gerald DeWitt also welcomed everyone to City of Jesup and thanked everyone for coming. Ed Jeffords then introduced the Wayne County Administrator, Mike Deal.

Mr. Deal welcomed everyone to the City of Jesup. He noted it was good to see everyone volunteering their time and participating in these important issues. He further noted that probably one of the biggest issues will be with the legislature – we need to deal with important issues with our two neighboring states and deal with water issues in Atlanta.

Mr. Deal stated that there is an excellent water resource in the Floridan Aquifer and that Jesup, GA has one of the cheapest water rates in the state (his bill is \$22/month). He constantly hears from people, though, that think their water bill was too high, especially during the early spring when everyone wants to water their lawn.

Chairman Lanier added a comment about the Governor's water contingency task force. He noted that the judge's ruling about Lake Lanier is going to have adverse affects in 2012. The contingency tasks force has met and will meet again. There are many suggestions on the board such as more reservoirs (six at this point), maybe using some abandoned rock quarries, more and more water conservation, piping water, and desalinization. There is an urgency in this process because the judge's ruling takes affect at a certain date. He told the council members that if they have any ideas, to call their legislators or any chairman of any

water council. He welcomed any ideas – including that when any industry comes, they should send it a little further South.

The Planning Contractor (PC) then provided an overview of what was accomplished during Council Meeting 3, including identifying Region-specific water resources vision and goals to assist in future evaluation of water resources management practices, reviewing population status and discussing its use in water needs forecasts, reviewing draft complete agricultural water needs forecasts and discussing industrial water demands, discussing management practice concepts and planning resources, and an overview of Altamaha regional groundwater. The PC provided an overview of the survey results from CM3 and then stated the goals for CM4: build on resource assessment information presented at CM3, discuss the results of work and plan for Joint Meetings, review Municipal and Industrial Water and Wastewater Forecast Methodology and Status, continue Management Practices discussion with Region-specific examples of current and potential future practices, update and adopt the Region's Vision and Goals, and adopt the Region's Public Involvement Plan.

Chairman Lanier then noted that everyone should have received CM3's meeting summary. Lindsay Thomas motioned that the summary of that meeting be approved as is; the motion was seconded by Jim Free. Chairman Lanier asked if there was any further discussion and then the meeting summary was approved with no opposition.

Chairman Lanier then noted that the Council should have the proposed agenda. Ed Jeffords motioned that the agenda be approved as is, John Roller seconded. Chairman Lanier asked if there was any further discussion and then the agenda was approved with no opposition.

The PC noted that there was a welcome letter from the new EPD Director, Allen Barnes, at every Council member's seat as well as an overview of water law in Georgia. The PC also reviewed the status of the Governor's contingency planning task force. The Governor formed the Water Contingency Task Force as part of an overall response to Judge Magnuson's July ruling regarding Lake Lanier. The task force met for the first time on October 7th. They will hold two more meetings and present recommendations before the January 2010 legislative session.

2) <u>Update/Adopt Council Vision and Goals Statements</u>

The PC stated the vision was adopted at the last meeting and that the PC has worked with a subcommittee since then on goals. Ed Jeffords and the PC reported out on the work of the subgroup. Ed made several suggestions for grouping similar goals into categories. The PC noted that the goals should support the vision statement and will be used in selection of management practices and to help communicate to other Councils and policy makers what is important to the Altamaha regions in regard to water resources.

A discussion was held on whether it was the Council's job to manage and protect resources versus encouraging the management and protection of resources. In addition, the Council suggested that the goals could be narrowed down and combined. Chairman Lanier clarified that we provide direction to the State of Georgia, but they implement the plan – whether it is EPD or legislature or DNR – it will not be the council's responsibility to implement the plan.

The PC pointed out that the vision and goals for the region is a living document. Anything we approve today, we can change as we go through the planning process. If we are not satisfied with anything we put in our documents, we have power to change them at future meetings.

Kevin Farrell noted that EPD and the Council are in a long term partnership with open lines of communication are key going forward in terms of what we are doing and what we think the council is doing.

A Council member noted that while we are developing policy, we want to be specific enough that EPD manages it as we intended. EPD needs to manage things with each group in mind. That overall plan will be reflective in each region's vision.

Chairman Lanier noted that we could work on it through the day with the subcommittee to address the comments and re-present the goals this afternoon.

3) Water Plan Table of Contents

The PC presented information that in the upcoming month, they would like to work with the Council to develop a draft Table of Contents for the water plan report. Guidelines for this will be provided by EPD so that the plans are consistent across regions. The PC would also like to work with the Council to have members review initial draft sections of the report. Chairman Lanier asked for a subcommittee to help with this initiative. The following members volunteered: Paul Stravriotis, Will Donaldson, and Gerald Dewitt.

4) Begin Discussion of Energy/Thermoelectric Power Forecasts

The PC presented the general approach that will be used for the Energy/Thermoelectric power forecasts. The approach involves considering fuel types and potential locations for future power plants based on projected energy needs. A consultant and EPD will work with power producers to help with this effort.

A Council member noted that the plan should consider if power production will be placed in areas outside the state. A discussion was held on the amount of water withdrawn for power production and how that water is used/consumptive use. The PC noted that future

presentations can be given on the technical aspects of power production and water use. Kevin Farrell noted that Georgia Power indicates they return about 95% of their total withdrawals. He also confirmed that a power plant is going through the permitting process to be located in Washington City.

5) Municipal and Industrial Water and Wastewater Demand Forecasts

The Planning Contractor (PC) presented water use on the municipal and industrial side. They are being presented so that the Council can comment on where they do not look right so that the PC can do additional follow up. We are focusing mostly on water use and will discuss how population and employment tie in once the population projection are released by Office of Planning and Budget/Governors Office.

Municipal water demand includes residential, commercial and light industries. The goal is to develop preliminary county level per capita use rates (public and self supplied). EPD's goal is to have a county specific number, but they are flexible to allow regional adjustments. We could end up with a weighted average for the region rather than individual numbers.

A council member asked if there is a formula for self-supplied water use. The PC noted that right now, we are showing just municipal. There is limited date for Self-supplied use because it is not routinely measured. The source of data is not extensive; the USGS recommendation is to use 75 gallons per capita day (gpcd). There was discussion at the last meeting whether that was low.

A council member asked if municipal use includes commercial, light industrial, and household use? The PC noted that for an overall system, it does, but not for individual household wells.

A subcommittee was formed to discuss water demand. Gerald DeWitt, Ed Jeffords, John Roller, Jim Free and Brinson Lanier will participate.

Dent Temples noted that there was a significant leak that occurred in 2005 and that might affect the per capita water use. So maybe some of the higher numbers are that systems do not actively manage their leaks. It was further noted that Johnson County includes a prison.

A council member noted that Montgomery County data are flawed because Mt. Vernon has 40 percent of the population and our use is 160 gpcd. By this information, the other five cities would only use 24 gallons per capita per day. Montgomery County needs to be more like 160 gpd.

It was noted that the numbers show total water withdrawals/pumped per capita and generally 85 percent is a good figure for actual usage – there are 15 percent unmetered uses/losses.

A council member asked what the numbers will be used to produce. The PC responded that these will be used along with 2005 population to determine county water usage and wastewater generation. Then, we will take the population forward with these rates to forecast total future water need.

A council member noted that population served is the key component here, and it should be considered how percent population served will change moving forward.

A council member suggested to each county representative on the council – in relation to the region specific factors that will be fine tuning these projections – if you are aware of some new industrial demand or residential demand in your county, you need to bring that kind of information so that we can get it out and include in this process.

It was suggested that Metropolitan Atlanta should send industry southward. As we are planning this process, we may not be able to note which county industry will land in, but the Altamaha region will experience/should plan for 10-20 percent growth.

The PC asked if Appling County has land application? A council member said no, so the PC noted that we need to review this information in the database.

A council member noted that an infiltration and inflow (I&I) study for Wayne County is more than 40 percent. The representative said they have much higher I&I in the coastal plain and so we need to revisit this factor because of soil types and topography (high water table, old infrastructure, very flat slope).

EPD commented that 40 percent seems very high and that issue should be addressed rather than planning for high I&I. The County would not need additional treatment capacity if they fix I&I. The council member noted they are working on it.

A council member notes that flows also depend on where and how a system is metering outflow. When there are heavy rains for 3-4 days and they are using a retention pond system, the system is going to exceed its permit, but not necessarily with wastewater.

The PC noted that the next steps are to get together with the ad hoc group. They will be developing forecasts in January and February and preliminary forecasts will be presented at the next meeting.

A question was asked related to how this will change over next 40 years – are there large industries we know are coming? Absent of that, the limitation of this approach is that what

we see in the past is what we see in future. Do we need to be thoughtful qualitatively that there may be additional mix of industries that would come into region that would not come in today? Kevin Farrell responded that something like that in plan would not dictate how EPD permits future facilities. If an industry comes, just because it's not in the plan will not keep EPD from permitting it.

A council member noted that we want industries to come here. We have good water supplies and they would help this region economically. The Council could state in the plan that this is something we would like to see happen.

6) Guest Presentation - Rayonier Inc., Industrial Water User in the Region

A presentation was made by Rayonier staff regarding their plant, products, and water use. Rayonier is in the forest products industry. They have 1,800 employees in nine states and on five continents and have three core businesses: performance fibers, timber, and real estate. Jesup's mill is the world's largest dissolving kraft mill and a global leader in cellulose specialties.

Water is critical to achieving the purity Rayonier's customers require. They look at opportunities to improve environmentally. Between 1980 and 2009, they have decreased water use by 36 percent per ton of product. Every gallon of water that comes to the mill is used at least five times before it is treated and discharged.

A council member asked whether the Jesup mill withdraws water from the aquifer and discharges it into a river? Rayonier responded that it comes from the Floridan Aquifer and ultimately is discharged back to the Altamaha River.

A council member asked why not withdraw it from the river? The Rayonier representative asked Gerald DeWitt to respond since he was more familiar with the answer. Mr. DeWitt responded that the primary reason is that the river water quality varies over the year and treatment to achieve a pure water supply is very challenging. In 1953/1954, Rayonier found it more efficient to go to groundwater since water quality is such a major influence on their product and it is hard for the plant to deal with quality changes. When developing the third mill, the State encouraged Rayonier to use additional groundwater. There is a plan maintained and evaluated for moving to surface water supply, but disposing of the sludge from the highly turbid water would be a major challenge.

A council member asked what the long term outlook is for the paper industry in Georgia? The Rayonier representative responded that it is hard to speak for industry, but the paper industry is in a real struggle. International Paper just announced the closure of a number of mills in the US. There is a complete exit of the industry in the northwestern US and now they are beginning to see a lot more of that in other parts of the country. We have a

competitor in Brazil with 300,000 tons of capacity. They have a brand new mill with the most efficient technology. The Brazilian workforce is a cheaper workforce and Brazilians are good at growing eucalyptus trees which grow faster, so they have better supply. It is hard to predict where we will be 5-10 years from now. As they develop economically, the playing field will level out some.

Is demand for paper down due to electronic storage? This was a key issue for the International Paper mill in Franklin, VA that closed. They sold reams of paper. The electronic age is driving that down. Rayonier is fortunate because most of our business is in the flat to modest growth range because we do not create paper.

A council member noted that the wood fuels industry is one that a lot of people think provides real hope. He asked whether Rayonier sees that as ultimate competition or is there a way for companies to shift into it? The Rayonier representative responded that he just came back from three days of senior management meetings, and that was key topic of discussion. Yes, they do think there is a lot of opportunity, they do think it will create competition for resources. Rayonier has benefits and impacts on both ends of that spectrum because their wood production in the Southeast is almost equal to their wood consumption. We are trying to figure out how to maximize the benefit for Rayonier – we do expect bioenergy to increase and it will drive up the cost for trees. A lot of work is being done in Washington D.C. to incent biomass-to-energy infrastructure. There is concern about doing this really fast and the potential unintended consequences.

A council member asked "It is easy to see rebuilding of softwood forests, but what about hardwood?" Rayonier did a study and hardwoods in the Southeast require 50-60 years for regeneration. It takes a lot more land to support hardwood since softwood takes only 16 – 20 years. We depend on natural reforestation. There are some companies experimenting with eucalyptus, but it is not cold temperature tolerant. There are still genetic efforts to make this work. We could see it in the southeast in this lifetime, but not at a commercial level yet.

7) Regional Water Resources Overview - PC

The PC then provided a brief overview of the type of water resources information that will be provided to the Council and included in the plan. The presentation highlighted water withdrawal by type and purpose, water quality considerations including impaired waters and reason for impairment. A council member asked if low rainfall can impact dissolved oxygen and the PC responded that yes, it can result in lower DO.

8) <u>Dr. Jim Kennedy – "Resource Assessments – Current and Future Conditions Assessments and Modeling Tools for Groundwater"</u>

Dr. Jim Kennedy, the State Geologist of Georgia, presented an overview of the groundwater resource assessment and an initial overview of Georgia's Major groundwater aquifers, highlighting the Floridan aquifer. He noted that where aquifers outcrop, groundwater will go in and will move through the aquifers, getting recharge from above and below. Before man started pumping, the groundwater would ultimately discharge vertically upward through a confining unit into the ocean. There used to be freshwater springs off of the coast of Georgia; there are still freshwater springs off the coast of Florida.

In the counties in the Northwestern part of the region, the aquifer elevation is 200 feet above sea level (ASL), in the western portion the levels are 400 ft ASL. Everything is getting deeper as you go towards the ocean. The aquifer thickness is from 100 – 300 feet in the west and 1,000 feet in the west. The aquifer is at a much higher elevation in the west than the east and is fairly thin in west and much thicker in the eastern portion. Recharge occurs in areas of unconfined upper Floridan Aquifer (outcrop area). For most of region, though it is confined.

Recharge along river valleys is considered leakage through the confining unit. Recharge could be as high as 3 to 4 inches per year in some of the river valleys. Recharge through the confining unit is roughly half the recharge rate if it is in an outcrop area and getting rainfall directly into the system (6 inches per year). It would be like having 3 to 4 inches at a specific location and it would occur across the region.

Dr. Kennedy presented groundwater level graphs from the region. He noted that what is important is that the Upper Floridan Aquifer does not behave the same everywhere.

He noted that the presenter before was from Rayonier and he talked about pulling water from the aquifer and discharging it to river. A question could be raised, wouldn't that lower the aquifer? Actually, what it does – if you have seen the cone of depression that we have in some areas of the state – there is a cone of depression around the wells that Rayonier uses to withdraw groundwater. It is a localized cone of depression, but it is shown in figures. Once they put the water back into the Altamaha River, the Altamaha is not in direct hydraulic connection to the Upper Floridan. So basically, they are taking it out of aquifer and adding it back to the river. It looked like on graphs Wayne County had not dropped as much as other areas. The Wayne County well is not affected by the cone of depression.

A council member asked if by pumping out of the aquifer, are we short-circuiting the natural process? Well, the natural process is that the flow will discharge to the ocean. If it were not pumped, it would discharge to the ocean anyway. This is just taking it out of the aquifer and getting it into the river.

A council member noted that his farm is on the east side of Wayne County. His well is one of the oldest wells for irrigation – 1954. It is 900 feet deep. In 1989, it cavitated and they had

to go to the 950 foot level. What they found when it quit pumping was that they could wait 2-3 days and pump again, but it would stop again.

Dr. Kennedy noted that tracer studies are not performed in these areas. Tracers are commonly used for the rate of contamination movement, but there are other methods for determining aquifer characteristics.

The groundwater work is being conducted using MODFLOW because these models are user friendly. They are very large, multi layer models that included all of the aquifers that were prioritized. We simulated increasing pumping in both existing wells and simulated wells (added to model) to see how the aquifer responded to increased pumping throughout the aquifer.

Sustainable yield is defined as how much groundwater we can get out of an aquifer without creating an undesirable affect or impact. For these models, sustainable yield benchmarks were defined as:

- Drawdowns of groundwater levels between pumping wells in the pumped aquifer do not exceed 30 feet so as not to affect nearby wells
- Do not decrease stream flow below 60 percent of the mean annual discharge during April to September and 40 percent during October to March (Tennant method "outstanding" flow to maintain a health aquatic ecosystem)
- Over time the reduction in aquifer storage becomes asymptotic to a new base level
- Do not lower groundwater levels below the top of a confined aquifer (thereby making the aquifer unconfined)
- Do not exceed the ability of the aquifer to recover to baseline groundwater levels between periods or higher pumping during droughts

A council member asked how the Upper Floridan aquifer looks today versus 30 years ago? Depends on where you are. In some places it has gone down and in some places it has stayed the same. There are different conditions in different parts of aquifer.

A council member noted that as a young man, we used to have springs along the Ocmulgee River, but they are now gone. Dr. Kennedy noted that this is due to a drop in the water table in the surficial or cretaceous aquifers. The cretaceous aquifer at Jackson County has gone down.

The council member asked if that means we are not sustaining that aquifer? Dr. Kennedy answered that it means we have changed the interactions between the groundwater and

surface water aquifers. Springs are funny because it depends on site specific geology and hydrogeology.

About 8 percent of aquifer is exposed to direct rainfall recharge. We have not quantified the river portion of recharge.

A council member asked whether the saltwater intrusion problem was due to pumping or lack of recharge? Dr. Kennedy answered it was due to localized pumping.

Dr. Kennedy noted that we are looking at how we are affecting each other related to pumping aquifers. SC and FL have given us data to use as part of our models. The aquifer does cross state boundaries. Pumping in Fernandina Beach affects St. Mary's. Of course, the pumping in St. Mary's affects that more.

There are mathematical calculations that are built using specific information on the geometery of aquifers, with very specifically measured parameters. Then the models were calibrated until the model accurately predicts water levels actually measured in wells. We have very high confidence in the models. The model is very accurately predicting what is going on in the aquifer.

Where the Ocmulgee and Oconnee start in the Piedmont, they run across the Cretaceous and Floridan aquifers. If groundwater is not discharging to the river, then the river is recharging the aquifer in those locations.

The goal is to be able to use the model as needed without creating an adverse affect down the road. A council member asked if these benchmarks will do just that? Dr. Kennedy responded that they are what our project team has come up with as an initial set of sustainable yield benchmarks. If someone wanted to change the benchmarks, we could take a look at the outcome.

A council member asked if those benchmarks are not being met, what happens to the end user? Dr. Kennedy responded, "Let's say the aquifer is being pumped at 100 mgd and let's say this benchmark was not met. Then, you have to work backwards to see if it needs to be 90, 80, 70 mgd." A council member then asked what happens if that is due to agricultural use? Dr. Kennedy responded that is a policy issue and his job is to determine the sustainable yield.

Dr. Kennedy noted that the model addresses the seasonal variation of pumping due to agriculture.

Dr. Kennedy then presented on the Coastal Sound Science Initiative modeling project. For that project, the consultant simulated the extent of the plume at the northern end of Hilton

Head Island and then looked at management scenarios. As we change pumping rates in Savannah and Hilton Head Island, how will we change shape of plume?

Dr. Kennedy noted that as all water is headed to the ocean one way or another. As you go deeper into an aquifer, the hydraulic pressure higher, which forces water up through units to get to sea level. If you get a water level drop in one aquifer, there is not necessarily an equivalent water level drop in a different aquifer. If the hydraulic connection is poor, the aquifers could react differently. It depends on how they are connected and where they are connected.

A council member asked how far into the ocean does the aquifer go? Dr. Kennedy answered that the boundary goes 60-80 miles; geologic units extend far offshore.

Dr. Kennedy noted that if you put a well in and pump out 1,000 gallons per minute, confined aquifers restore the pressure and the water. They are not like the surficial aquifer, where you are drawing water out. As long as there is pressure in system, the system will repressurize quickly.

Because of the complexity of different aquifers and the way they are recharged, it is difficult to come up with recharge rates and sustainable yield. The model can put boundaries on it – we would find out that groundwater withdrawals were at sustainable yield, above the sustainable yield, or higher than what is being withdrawn. What the model are initially suggesting – and this is not for all aquifers – is that it appears that sustainable yield is higher than what is currently being withdrawn. If it is higher, it is going to be higher by different amounts for different aquifers.

As a planning process, we are trying to understand how much water we can take out of the aquifer system without causing adverse impacts. A council member asked if say the yield in our area for the Upper Floridan Aquifer is X – do you also address the inter-connectivities? Dr. Kennedy responded yes, one of the things that the consultant did was to run the regional model to see how the individual aquifers affect each other and lowered the sustainable yields of each accordingly based on pumping of others.

A council member asked whether we know whether we are pulling more water out of the Upper Floridan than is being recharged? Dr. Kennedy answer that it appears for some aquifers, the amount withdrawn is less than the sustainable yield. In those cases, no, you are withdrawing less than is being recharged. This is not true in some areas in the Coastal Region.

A council member asked whether any of the Hilton Head Island areas include recharge? The consultant is modeling reductions in withdrawals. Sea level has risen 0.8 feet since the late 1880's when withdrawals started. There was a question as to whether sea level rise could

have an impact on the aquifers; the USGS determined the rise is inconsequential in comparison to rates of withdrawal.

9) Finalize January Joint Meeting Preparation

The PC made a presentation on the joint meetings. The presentation included the schedule and a draft agenda for each meeting. It was noted that three of the meeting directly apply to the Altamaha Council, but council members can attend any of the six meetings. The PC handed out a signup list for the joint meetings to get a sense of who would be attending the meetings.

10) Finalize and Adopt Public Involvement Plan

PC noted that a subcommittee worked on the public involvement plan over the course of the period between CM3 and CM4. Sue Sammons presented the results of that plan. Ed Jeffords made a motion to adopt the public involvement plan as is. Rex Bullock seconded the motion. The motion carried without opposition.

11) Finalize goals

Ed Jeffords presented revised goals based on the work of the subcommittee during lunch to address the morning's council comments. John Roller moved to accept the goals as revised and Buddy Pittman seconded. All were in favor, with no opposition, so the motion passed.

12) Non-Permitted Agricultural Water Demand

The PC provided an update on non-permitted agricultural water demand. Cliff Lewis, EPD is working with several agricultural stakeholders to identify sub-100,000 gallons per day agricultural users to gather information on water use and that information will be presented at the next meeting. The key is that they are looking to document existing uses. They do not have a viable method for projecting forward.

13) Management Practices

The PC then provided a presentation on management practices. The role of the planning councils will be to plan for the region and coordinate with local governments and utilities. At the end of the day, the concept is that identify future needs and any gaps between current and future needs, review relevant existing water plans and studies, and then we will determine what types of management practices may be needed to address future needs. It is possible that we may identify the need for several types of practices so in the end we may have a portfolio or suite of water management practices.

Ultimately, the PC will assist the Council with writing a plan that can be approved by council. Once approved it goes to EPD for their review. If EPD has comments they will need to be addressed if not then it becomes the initial plan for the region. A council member stated that some areas of the state will not be on the sustainable level and some may. He asked whether we lose our identity on the state water plan or will it be region specific? The PC answered that as it stands now, the initial phase will be an Altamaha plan. The question EPD is thinking about is from those plans, as they draw out key findings, will there be a summary document for the whole state. The regional plans stay as a document, with the key findings going to the state level. Each basin will have key findings and recommendations that will be unique to us.

It was clarified the legislature adopted a state water plan which is a framework document that sets into motion the process to develop regional plans. It lays out regional water planning councils, the need to create vision and goals, the public involvement plan, etc. It is the blueprint to create our plan.

The PC noted that if there are specific plans or sources of documentation, Council members should notify the PC of these. PCs will look to EPD and Council and the Local Government Advisory Body, ACCG and GMA to notify them of near term projects in pipeline. From a project standpoint, a council member suggested that each community has Industrial Development Authority (IDA) and we ought to outreach to those authorities. Many times elected officials do not know all that is going on.

The PC noted that part of the role of the ad hoc group will be to help us do this outreach and to identify which water providers we absolutely need to do additional outreach and where additional data refinement is needed. A Council member reiterated that the regional IDAs and community IDAs is a good place to start.

A council member noted that the Governor's water contingency task force may have options that affect every region.

14) Local Elected Official Comments

There were no local elected official comments.

15) Public Comments

There were no public comments.

16) Wrap Up, What to Expect Next Meeting

The next steps include the resource assessment results being available in January 2010. We will start initial discussion, selection, and refinement of management practices in CM 5, 6, and 7. Selection should be finalized by December 2010.

January we will have the results of the resource assessments.

The next meeting will be held on March 23, 2010 at Plant Hatch if available. The plan will be to go to Little Ocmulgee State Park for the May meeting.

Altamaha Regional Water Council

Council Members Attendance List

Altamaha Council Members		11/19/2009
1	Gary Bell	Х
2	Randy Branch	
3	Guy Rex Bullock	X
4	James Mark Burns	
5	Gerald A DeWitt	X
6	Will Donaldson Jr.	X
7	Cleve Edenfield	X
8	Jim Free	X
9	Randy Giddens	
10	Len Hauss	X
11	Edward S Jeffords	X
12	Phillip Jennings	
13	L. Brinson Lanier	X
14	Dan McCranie	
15	Steve Meeks	X
16	Greg Morris	
17	Buddy Pittman X	
18	Michael A. Polsky	
19	John E. Roller	X
20	Sue B. Sammons	X
21	Doug Sharp	X
22	Paul A. Stravriotis	X
23	Jim E. Strickland	Χ
24	Dent L. Temples	Х
25	Lindsay Thomas	Х
26	William G Tomberlin	X
27	Michael Williams	X
28	Tommie Williams	
29	Russ Yeomans	X

Altamaha Regional Water Council

Public Attendance List

	Public Attendee	11/19/2009	Representing
1	Brian Baker	Х	EPD
2	Deatre Denion	Χ	GA DCA
6	Kimberly Edge	Χ	Treutlen County Commissioners
7	Ted Evans	Χ	Georgia Farm Bureau
8	Don Giles	Χ	Georgia Farm Bureau
9	Don Harrison	Χ	GA DNR - Fisheries Mgmt
11	Neill Herring	Χ	GA Water Coalition
12	Belinda Johnson	Χ	Oglethorpe Power
13	Jim Kennedy	Χ	Georgia EPD
15	Alison McGee	Χ	The Nature Conservancy
16	Rahn Milligan	Х	GSWCC
16	Lynn Nichols	Х	USDA-NRCS
17	Phil Odom	Χ	Coastal Georgia Water Council
18	Janet Price	Х	Rayonier
19	Shanda Thompson	Х	USDA/NRCS
18	Jason Wisniewski	Х	GA DNR WRD - Nongame

Totals 16