Memorandum

To: Coastal Georgia Regional Water Planning Council

From: Rick Brown and Katherine Zitsch

Date: December 4, 2009

Subject: Council Meeting 4 Summary

This memorandum summarizes the meeting of the Georgia Coastal Water Planning Council Meeting (CM) 4 that was held on November 17, 2009 at the Stevens Wetlands Education Center in Richmond Hill.

1) Welcome and Introductions

Vice Chairman Tom Ratcliffe brought the meeting to order and welcomed everyone. He then introduced Allen Burns, Executive Director of the Coastal Regional Commission (CRC), as well as Dan Coty, Chairman, and Tricia Reynolds, Planning and Goal Services. Allen Burns thanked the Coastal RWPC for the invitation and noted he believed there would be opportunities to move forward together. He introduced the Coastal Regional Commission region, which is a 10-county region that covers the area from Camden to Screven.

The CRC is completing two regional assessments – one for the coastal six counties and one for the inland four counties. They are collecting additional baseline information for water, sewer, and stormwater infrastructure. He also introduced the other issues the CRC addresses: transportation, economic development, natural, historic and cultural resources. The CRC developed performance standards for each of the issues addressed by the Coastal Georgia Comprehensive Plan. The updated Comprehensive Plan is scheduled to be adopted before June 30, 2010. The current Comprehensive Plan is available online at:

http://coastalgeorgiardc.ipower.com/docs/Coastal Comp Plan.pdf

Mr. Burns also highlighted the CRC's recently completed Regional, Water, Sewer, and Stormwater Inventory. This study is also available online at:

http://crc.ga.gov

Mr. Burns made the following recommendations on what studies should address: analysis on capacities and system by jurisdiction, estimates of aquifer withdrawal and groundwater supply needed to support growth, revised land use planning practices, assessment of the Lower Floridan Aquifer to provide supply, assessment of rivers' ability to support withdrawals, and, based on results, consider desalination.

The following questions were then asked by Council member and answered by Mr. Burns.

Council Member: Did you say you have projected water demand for the future? Allen Burns Response: No, we have not. We have the difference between what is being used and what is permitted.

Council Member: Did I understand that water and sewer infrastructure is mapped out on the website? Allen Burns Response: No, there is some on paper, some GIS, and some AutoCAD.

The executive summary can be made available to everyone – it is on the RC website (shown above). The first 74 pages show the summary and the rest is county by county information.

A Council member noted that he believes that this information should not be available to the general public due to security concerns.

Council Member: What procedure will you use to complete the inventory on septic tanks? Allen Burns Response: We are not doing that directly, but we have expressed an interest in it. It is an EPD funded project through coastal health. MAREX Consulting is undertaking onsite mapping and comparing to EPD permitting information.

Mr. Burns then thanked everyone again for having them and noted that he looks forward to working with the RWPC.

Vice Chairman Ratcliffe then summarized what he took away from the presentation. He took away that the idea of minimum standards and excellent standards with a point system. He asked members to keep that in their minds as we work towards management practices and how we incentivize that. Another significant message I got is that that there is a high level of technical work that is already done in our region in some form(s). Our big challenge will be to integrate their work into ours. We need to stay joined at the hip in order to come out with a completed product that is consistent across the board.

2) Summaries and Recap of Meeting 3

The Planning Contractor (PC) provided an overview of what was accomplished during Council Meeting 3. 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.

There were no corrections or objections to the agenda. Vice Chairman Ratcliffe noted as consensus that the agenda was approved. Meeting #3 summary was not received by all Council members and will be resent for approval at CM #5.

The PC suggested March 18th as the date for CM #5 and presented possible locations. Council agreed to revisit CM #5 date and location at the end of the meeting.

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.

The following discussion then proceeded regarding the Governor's Water Contingency Task Force.

A Council member noted that he has heard discussions about the water availability task force, and there is concern that the actions of the task force might impact other regions. There is concern that solutions to the Atlanta area may impact management and water resource issue in the coastal area.

Another Council member felt that the chair of the task force was suggesting that the task force will be the primary decision maker. There was some concern that the list of task force members did not include enough Council members.

Vice Chair Ratcliffe noted that the Coastal Council's chair is a member of the task force and the concerns voiced today were discussed. Unfortunately, the Governor is in a difficult situation from both a timing and urgency to identify options perspective. Clearly, if the appeal is unsuccessful, the preferred action is to authorize and reauthorize, but a plan B is needed. Ben Thompson and I will be in attendance at the task force meeting, so we will have representation. How much influence we will have remains to be seen.

A Council member asked "What is the long-term role of task force?" Vice Chair Ratcliffe responded that he believes the task force will have a short-term goal with recommendations

provided as a Plan B to reauthorize/appeal and identify if it will require any legislative action. We need to be both vigilant and realistic about the need for the task force to provide a set of recommendations. We will then make our voice in the Coastal Region heard.

A Council member noted that it is difficult because the Governor does not have a choice. At least we are fortunate that there is a statewide process; otherwise we might see a lot of fragmented local government actions. He is hopeful that water conservation will be an important component to future actions.

A Council member noted that there is considerable concern among many communities and it appears that many solutions like storage may be difficult to move forward. Engineered solutions often take more time than is available.

Another Council member noted that the situation with Lake Lanier might have a positive aspect because we as a Council will have the opportunity to discuss and evaluate options.

Vice Chair Ratcliffe reminded the Council that this is a reaction to a federal court decision and we must recognize that options and responses to the federal decision must be developed.

3) Preliminary Water Plan Table of Contents Template

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 planning 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. It was noted that a subcommittee would be formed to help with this initiative.

4) <u>Update/Adopt Council Vision and Goal 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. The draft goals were presented to the Council. It was noted that the purpose of goals is further define what is important to the Coastal Council in regard to how water resources are developed and managed in the region. The goals will be used to help the Council identify those management practices that meet/advance regional goals, and to communicate to other Council the priorities of the Coastal region.

A Council member noted that only two goals mentioned the needs of the region. He suggested that maybe we need to say the region and Georgia or eliminate the reference.

Another Council member pointed out that the goals seem to have two themes: identify opportunities and ensure the fulfillment of the goal. The PC noted that you can have goals that address both themes.

A Council member noted that the goals are fairly general and suggested they need to be more detailed. For example, in our region, we should seek to reduce water loss by a certain percentage.

A discussion proceeded about the number of goals and it was suggested that the current list includes too many goals. A Council member noted that the Council needs to be careful on specificity at this time. The broads should be kept broad and simple. Another Council member suggested that the goals list should be shortened and combined to about 5 – 6 goals. A Council member asked if the Council can add additional goals later and the PC responded yes.

The Council agreed to have Mark Smith, Phil Odom, and Bill Guthrie work with the PC to develop a revised, consolidated list of goals that can be considered during lunch.

5) Resource Assessments - Current and Future Conditions Assessments and Modeling Tools

Dr. Liz Booth with Georgia EPD addressed the resource assessment portion of the agenda focusing on surface water quantity and quality. She presented that there are three resource assessments ongoing: ground water availability, surface water availability, and surface water quality. She first concentrated on surface water availability. The purpose of that model is to determine how much water we are using, how much water we have, and how much water can be reliably used without compromising the in-stream flow needs. The model was developed by the Georgia Tech Water Resources Institute. The surface water availability models are being completed on a watershed basis over 14 river basins in Georgia. The following questions were asked by Council members:

Council Member: When describing average returns through a POTW is there a rule of thumb for municipality's percent returns? EPD Response: EPD looks at average returns – is there an average number for what returns should be from a wastewater treatment plant versus areas with a heavy percentage agriculture? EPD actually has numbers – we know the permitted withdrawals and discharge numbers. EPD is using those numbers in the actual model. The range depends on the facility.

Council Member: The excess capacity term is something that has always confused me and made me cautious because what is excess capacity? We know these rivers that flow to the coast have high and low flows, so how do you determine excess capacity? EPD Response: EPD will look at the seasonality of water records, which are about 70 years long, and then impose on that the current water usage and return rates. EPD will look at the minimum flow/desired flow regime that we want to maintain. Those values help use define what additional capacity if any can be utilized.

Council Member: Council Member: Has EPD adopted WRD's in-stream flow requirements? EPD Response: We are using monthly 7Q10 as baseline for this first round of planning and will also be working with a scientific and engineering subcommittee.

Council Member: Are other agencies information being used to truth check the model? EPD Response: We have a scientists and engineers advisory panel (SEAP) that is looking at desired flow regime, but they will be evaluating other flow regimes that will be used. With regard to the Corps of Engineers (Corps), we will work with them to look at how incorporate and adjust for Corps storage and releases.

Council Member: How is the return of groundwater handled in terms of surface water availability? EPD Response: For current conditions groundwater returns are reflected in the gauge record.

Council Member: If a WWTP shuts down, could that reduce surface water flow? EPD Response: Yes.

Dr. Booth presented that EPD is also preparing assimilative capacity of streams statewide. This will calculate the amount of contaminant load that a stream can receive without violating its water quality standards. In South Georgia, there is a naturally low dissolved oxygen (DO) in the systems. When EPD assesses the water quality standards on the books, in general the streams can meet standards in the wintertime, but not in summer. The streams often have low DO in summer because of low flows and gradient. In 2010, EPD will be reevaluating the DO standard and reestablishing it for South Georgia.

Fecal coliform just about doubles the number of impaired streams. Leaky septic tanks can increase fecal coliform, but a lot of birds and mammals also cause fecal coliform issues. We see this when it rains. The current standard process could be adjusted to account for this and the type of use, so as part of 2011's work we will be coming up with a new standard. The water quality models will model nutrients and oxygen demanding compounds.

Council Member: How will standards be revised? EPD Response: The DO standard will be revised to take into account naturally low DO. Streams that have low DO have very little assimilative capacity, and we need to account for organisms that live there. If DO goes to zero, fish will not be able to survive.

We will be developing watershed models that take into account topography and land use. There are wastewater facilities throughout the whole state. Any municipal facilities greater than 0.1 mgd will be included in the model if they have a nutrient or DO component. We used to model on a tributary basis, but now we are joining the tributaries together as part of the statewide water plan. We are building a watershed model for the Brunswick Harbor

Watershed that will take into account land use. This will be a valuable tool as we develop nutrient criteria and as we see the effect of nutrients downstream.

Council Member: Have there been any coordination with efforts at UGA that give insight into what is happening to Marshlands? EPD Response: Part of what we are using is an EFDC model. The reason why we are using EFDC is because it allows flooding of marshes. There are 7 foot tides in some marshes. That 7 foot tide is what causes these marshes to be there. Rain adds freshwater to the system. This model allows us to flood and drain marshes. There was a die off a couple of years ago, but nobody can explain it. A Council member noted it was due to the drought; it seems as if the marshes did not get enough freshwater to keep them living.

A lot of facilities have permits that are higher than what they are currently using. These will be one of the first considerations in developing management practices. Keep in mind that those permit limits that we have will be evaluated as part of future assimilative capacity.

We are also completing a Savannah Harbor Model and its new designation would be "coastal fishing" from Ft. Pulaski up to the railroad bridge. In 2006, EPD established a zero lbs/day TBODu (total ultimate biochemical oxygen demand) for the harbor and river stretch to Thurmond Dam. In 2007/2008, EPD, South Carolina DHEC, and EPA worked together to develop a new standard for the Savannah Harbor – a daily average of 5.0 mg/L and no less than 4.0 mg/L. However, if it is determined that the natural DO in the water body is less than that, the criteria would revert to the natural DO and the water quality standard would allow for up to a 0.1 mg/L deficit from "natural." Up to a 10 percent deficit will be allowed if it is demonstrated that resident aquatic species shall not be adversely affected. TMDL is currently being drafted by EPA in conjunction with EPD and South Carolina (SC) and it is to be finalized by the end of May 2010. We will need to work with SC on how to allocate between discharges.

Council Member: When you do your modeling, if you take out all the dams that come to rivers along coast, do you see the same low DOs? EPD Response: Yes – we asked ourselves "what is natural" and modeled the system using 1854 bathymetry from the Corps. We could determine how the channel had changed. We modeled that and compared it without harbor and dams. It ended up showing that the drop of DO in 1854 was the same as 1999.

Council Member: Do you think that applies at other coastal rivers? EPD Response: Yes, because dams have critical minimum flow release requirements. Without that, in drought years we would have no flow.

Council Member: Talking about assimilative capacity, we talk about all of the pollutants and we list rivers because of pollutants. Why not list rivers because of flow. What tool exists? EPD Response: We will be able to look at this, but these dams have to maintain minimum flow in order to

ensure that biology is okay. There has to be a linkage with water quality. During the last drought, sturgeon would have been in the ocean if not for the dams. Goals should identify if endangered species are important to the system and whether we will protect them at all costs.

Council Member: I have watched major springs disappear. Is that affecting in-stream flows and the quality of water? EPD Response: If we have less water, we will have less assimilative capacity. How you manage stormwater and other point sources really affects water quality.

USGS water resources information and data for Georgia are available under the Council website. The website provides a summary of water use data from the USGS 2005 water use report. It provides population and published water usage.

6) Begin Discussion of Energy/Thermoelectric Power Forecasts

The PC presented the 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 will work with power producers to help with this effort. The overview included a brief summary of the types of power production, the conceptual approach to estimating current and future needs, and several challenges were highlighted along with next steps.

7) Agricultural Demand Update -Non-Permitted Agricultural Use

The PC provided an update on non-permitted agricultural water demand. The presentation focused on the process to include several agricultural water use sectors that use less than 100,000 gallons/day (permitting threshold). The Georgia Farm Bureau, University of Georgia and other representatives from several agricultural sectors (i.e., some livestock, dairy, poultry, and nurseries etc.) have been collecting information to quantify existing use but do not have plans/methods to project future use.

A Council member asked whether sub-threshold water use would look at emerging technology. The PC responded that would be completed only if the Council feels it is a significant driver.

8) Follow up on Goals

During lunch, the PC worked with the goals subcommittee to refine the goals. The group then presented the revised list and it was adopted by consensus by the full Council.

9) Municipal & Industrial Water & Wastewater Demand Forecasts

The Planning Contractor (PC) presented on the municipal and industrial water use. It was emphasized that the information is still in draft form and is presented so that the Council can comment on where they numbers may need additional follow up. We are focusing mostly on water use and will eventually discuss how population and employment tie into water use for the purposes of making future projections.

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.

The following questions were asked by Council members:

Council Member: What is meant by a large wholesale water provider? PC Response: This is a provider that is selling water to an industrial park or other distributor of water.

Council Member: What is the methodology going forward? When you arrive at per capita water use per county, are you going to project to 2050 on that water use? PC Response: The thought is to take population growth numbers and combine them with water use to get overall water demand. So, for example Bulloch County would be projected forward based on 83 gpcd.

Council Member: How are these numbers arrived at (water pumped, water sold)? PC Response: Primarily withdrawals.

Council Member: Why not use standard number like what AWWA publishes? PC Response: We could discuss using standardized numbers but we would loss region specific information and we would like to represent the region as accurately as possible.

We are currently trying to keep commercial and light industry together because they are publicly supplied and hard to distinguish from domestic use (not always reported separately). This will work if the ratio of commercial/light industry to residential stays the same. We would like to work with a subgroup to evaluate the data. We would like to go county by county and work with a committee to address this.

A Council member suggested that the PC should look into the Thomas and Hutton report to see if the information is in there. Another Council member suggested the PC come up with a sound recommendation for per capita use (perhaps in the 100 – 150 range).

A discussion was held regarding the future industrial water demand projections and the fact that they are currently flat. The Council suggested this gets revisited and the PC further look into the reasons. A Council member suggested that someone needs to talk to economic

development staff in the region and understand what they are seeing. Do we see large industrial growth and large water using industrial growth?

A Council member noted that in 2014, the Panama Canal expansion will be completed. We do not know what is coming with that, but we do not think we are going to be relatively flat in industrial growth.

Another Council member suggested we should plan for industrial growth, plan for the best. To plan for no growth is not a good policy. We need to plan for some level of growth in this water use sector so we can make decisions about what road we will go down if that happens.

On this industrial issue – unless we predict with some level of accuracy we need to look at what ifs. What is the impact of those kinds of numbers on planning we are doing? It may not happen, but at least then we will know what items need to be decided in the bigger picture.

Council Member: With the Durango plant closing down, it was permitted for 35 MGD. Is that available? PC Response: Their permit went back to the State. Council Member: Would the state re-permit? PC Response: We do not know.

Council Member: The PC should double check whether Durango is included in the numbers.

10) Regional Water Resources Overview

The PC provided a follow up overview of regional water resources. The presentation highlighted in general terms: existing water withdrawals and discharges, information on impaired waters, ecoregions and fishery information.

11) Finalize January Joint Meeting Preparation

The PC made a presentation on the joint meetings. There are currently six joint meetings planned and the meetings will involve presentation of the resource assessment models for councils that share ground and/or surface water resources. The presentation included the schedule and a draft agenda for each meeting. It was noted that three of the meeting directly apply to the Coastal Council, but Council members can attend any of the six meetings.

12) Finalize and Adopt Public Involvement Plan

The PC presented that a subcommittee worked on the public involvement plan (PIP) over the course of the period between CM3 and CM4. The draft PIP was in the Planning guidance that was provided at the last meeting. The draft PIP was reviewed and the following suggested changes were made by the Council:

- We need to add the military to our key stakeholder group, and other large water users in the region.
- We need to add military and federal to our key stakeholder group
- We also need to add other large water users.
- We would like to see the list alphabetized.
- Under meeting announcements, we need to address media input. Requests for
 interviews regarding the business of the Council will be encouraged to talk to the Chair
 and/or EPD. Inquiries and/or reports out to the media will be encouraged to work
 through with EPD and/or the chair of the Council.

It was confirmed that the PC should make these changes and send the revised PIP via email for final approval.

13) Management Practices

The PC then provided a presentation on management practices. The role of the planning councils will be to both plan for the region and coordinate with local governments and utilities. At the end of the day, the concept is that we will 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 order to best meet future needs we may want to develop a "portfolio or suite" of multiple water management practices.

14) Local Elected Official Comments

There were no local elected official comments.

15) Public Comments

Jim McClain – I own a drilling company and I am also the director of Georgia Association of Groundwater Professionals. We have personal knowledge and experience and we are extending our desire to inform, attend, and illustrate any issues with groundwater in the State of Georgia. There is a wealth of groundwater supply and development knowledge that we would be glad to share with you. In listening to the group today set goals, there were five simple goals.

We need to assess population growth/industrial growth, and identify water sources – where can we get additional water, diversify those sources. There is plenty of water, but we

need to think outside the box. We need to develop, and protect the resource. I am really concerned about the growth of geothermal energy. They are not regulated, not permitted, and not identified. People are drilling holes for heating and cooling. We need to better protect these sources, and there will be more problems as technology develops.

Recently, I was hired to dewater an aquifer for the City of Savannah on Little Neck Road. We installed twenty wells in the size of this room. We ran them for three months non-stop. We pumped 200 million gallons. When we shut off the wells, they filled up in three days. There is water in the shallow water surficial aquifer that no one is looking at.

Skidaway Island does not buy water, they are on individual wells. They pump six billion gallons per year without an impact on the Floridan Aquifer.

Septic tanks recharge the system. Septic tanks are great. What you use at a house goes back where it came from. Water is not consumed – just transferred from one aquifer to another.

A Council member asked Jim how large is the organization? Jim McClain Response: Probably 350. We are made up of water well drilling professionals but also suppliers (pumps, tanks, pipe).

Ian Adelman – Southern Alliance for Clean Energy. Good Afternoon. Thank you for holding this meeting. We are a non-profit organization that works on energy policy in the Southeast with staff and members throughout Georgia who are concerned about water issues and global warming. As a resident of Savannah, I am concerned about the health of our coast.

We wanted to make the Council aware of the tremendous impacts power plants have on our water resources and acknowledge that our future energy choices will make a big difference on the future of the communities and businesses reliant on those water sources.

I've included a fact sheet we've prepared that talks about the water energy connection and highlights how Georgia's existing electricity system negatively impacts our water resources along with the impacts from other energy choices being pursued in the state. Southern Alliance for Clean Energy would be happy to provide you with information as needed. Sara Barcazak is the program director working closely on the water-energy connection and her contact information is on the back of this fact sheet.

In summary, we recommend that poorly conceived proposals that have excessive water impacts, such as the proposed building of more nuclear reactors at Plant Vogtle on the Savannah River or the building of more coal plants, should not be permitted based on the facts that there are better, less-water intensive energy alternatives: namely, energy efficiency and renewable such as wind, solar, and bioenergy. Further, we would like the Council to be mindful that incorporating sound energy planning policies into state water policy

guidelines will provide much needed, system wide benefits to both the energy and water resources in Georgia.

Just from the meeting today, there seems to be a gap to catch up on for energy – we are a resource for you to use on the water-energy connection. Thank you for holding these councils and opening them to the public for comment.

Deatre Denion - DCA. I'd like to make a clarification on per capita water use. The state has been working on this issue for a long time; it is part of the water conservation implementation plan process. I am the team leader for public sector side. The national average is 100 to 150. We determined that for the State of Georgia it is 72 gallons per person. We are trying to continue getting into those numbers because the biggest issue we are having is that if you are looking at light industry and light commercial in that number, it is not just a domestic water use number. We are looking at quantifying residential only but many areas do not report water use at this level of detail. When you start tweaking the numbers, make sure you are comparing apples to apples. Some communities billing systems can break water use into residential, commercial, and institutional. Cobb County now has seven categories so that we can pull out that per capita number. When you do start pulling from other communities, they may not be capable of doing that, so you need to keep that in mind. The numbers are also skewed whether population is served within the jurisdiction. At one of the studies a conservation home uses just 42.5 gallons per person. Is that realistic? Not everywhere. Over the planning timeframe, do you need to push-up the numbers? In reality, homes built now are energy efficient. They use 52 – 58 gallons per person per day.

A Council member asked why Georgia was so much lower that the national average? Deatre Denion Response: Rurally, we tend to use less water. We also need to take into account that the Savannah main system does not use water outside. They do not water grass, so that is why the number stays low. If you have people in your region that irrigate, that number will go higher. Dutch Island is off the charts because they have large homes with many bathrooms and huge irrigation systems. Need to look at indoor numbers versus home per capita numbers.

Merrill Varn – St Mary's River Management Committee. Our Committee is a four County intergovernmental group. I have comments specific to the discussion today:

- 1) Regarding MAREX/LiDAR work, we are actively pursuing 319 funding to do the impaired portions of St. Mary's.
- 2) We are stuck with septic tanks. We have septic think tank. Sewage lines also leak. Septic is not all bad. I encourage members here to look at viable alternatives between septic and community sewage. They are not good for small city areas, but quite good for rural areas.

- 3) Regarding the state water/Atlanta issue our comment is always that growth is a state and not just Atlanta issue. We should promote growth of low water using industries in the coastal region. State incentives need to come to this area of Georgia.
- 4) Finally, in regards to public involvement, please bring extra copies of handouts. There is a lot of stuff to print ahead of time.

Thank you.

A Council member asked "What is your website?" Merrill Varn Response: www.saintmarysriver.org

Merrill noted that one of the things they have agreed to do is provide technical data from the St Mary's River. They have it in boxes and are just waiting to see if anyone actually needs it. Roger Weaver volunteered to look through data.

Dennis Hutton – Chatham Savannah Metro Planning Commission – We have done a water study and it has 10 years of data. We notice the difference between portions of Chatham County that are employment centers vs. suburbs. We would expect you would see the same in counties that are employment centers vs. bedroom communities. When it comes to allocating water, we do not want to short the employment centers.

We also prepare transportation studies – we can say what type of jobs there are. Over the last 20-30 years, we have seen industrial jobs going down and service/retail jobs going up. It is obvious that is not sustainable. In our projections, we show the industrial decline bottoming out and then an increase in industrial jobs. I encourage you not to flat line industrial usage. We need to attract industry back into this country. We should add a generous amount of water for industrial usage.

16) Wrap Up, What to Expect Next Meeting

The PC noted that the next water planning steps include the resource assessment results being available in January 2010. We are expecting to have water use forecasts and then can start initial discussion, selection, and refinement of management practices in CM 5, 6, and 7. Selection of management practices should be finalized by December 2010.

A Council member brought up a concern about population forecasting – we are up against an issue in the State of Georgia with troops being deployed. Since the census is going to look at home state for Ft. Stewart, etc., we stand not to have those troops counted for that community. Ft. Stewart could be down 15,000. We're not sure how the Carl Vinson Institute will look at our number when the census is taken, because if they use the 2010 census, the

Hinesville count will be down. We do not want our number to be low because of how the census is looking at it because we know those troops will be coming back.

The Vice-Chairman noted that an important issue is that we will count that population for purposes of congressional determination, but not for local government.

The Council noted that having a meeting around March 17 (St Patrick' Day) may not be the best idea due to the large celebration in Savannah. The Council agreed to have the next meeting on March 11, 2010 at the Coastal EMC in Midway, GA.

Coastal Georgia Water Council

Council Members Attendance List

Coastal	11/17/2009		
1	Dennis G. Baxter	Х	
2	Fred G. Blitch		
3	Chris Blocker	Х	
4	Kay W. Cantrell		
5	Frank E. Field		
6	Rick Gardner	Х	
7	John F. Godbee	Х	
8	William K. Guthrie	Х	
9	Duane Harris X		
10	Bill Hatcher	Х	
11	Cecily Hill		
12	Don Hogan		
13	Eric Johnson		
14	Michelle L. Liotta	Х	
15	Reginald S Loper	Х	
16	John D. McIver	Χ	
17	Michael J. Melton	Х	
18	Randall Morris		
19	Phil Odom	Х	
20	Keith F. Post	Χ	
21	Tom Ratcliffe	Χ	
22	Tony Sammons	Χ	
23	Mark V. Smith	Х	
24	Larry M. Stuber	Х	
25	James Thomas X		
26	Benjamin Thompson		
27	Bryan Thompson		
28	Horace Waller		
29	Marky Waters		
30	Roger A Weaver	Х	

Totals 19

Coastal Georgia Water Council

Public Attendance List

Public Attendee		11/17/2009	Representing
1	Ian Adelman	Χ	Southern Alliance for Clean Energy
2	Tim Barrett	X	GA DNR Fisheries Region VII
3	Liz Booth	X	GA EPD
4	Danny Collins	X	Haskell Co.
5	Van H. Collins	X	City of Statesboro
6	Dan Cory	X	CGRC
7	Deatre Denion	X	DCA
8	Charles Draeger	X	Garden City
9	Dennis Huther	X	MPC
10	Jason Mallard	X	GSWCC
11	Jim McClain	X	GA Drillers Association
12	Gene Millard	X	Interstate Paper
13	Janet Price	X	Rayonier
14	Tricia Reynolds	X	Coastal Regional Commission
15	Curtes H. Roberts	X	City of Midway
16	John Sawyer	X	City of Savannah
17	Tas Smith	X	GA Farm Bureau
18	Merrill Varn	X	St. Mary's River Management Commission
19	Laura Walker	X	City of Savannah
20	Clementine F. Washington	Х	City of Midway

Totals 20