Memorandum

To: *Coastal Georgia Regional Water Planning Council*

From: *Susan Morea, Denise Funk and Rick Brown*

Date: *April19, 2010*

Subject: *Council Meeting 5 Summary*

This memorandum summarizes the meeting of the Georgia Coastal Water Planning Council Meeting (CM) 5 that was held on April 6, 2010 at the Coastal Electric Cooperative (EMC) in Midway.

1) Welcome and Introductions

Chairman Ben Thompson called the meeting to order and mentioned that he was pleased to see that the planning process continuing even in the face of difficult budget times. Chairman Thompson introduced Mayor Washington, from the City of Midway. The Mayor welcomed the Council to Midway and mentioned the City has been through a lot of changes in the past and is enjoying vibrant times. The Mayor's remarks focused on the importance of team work and that collectively we can accomplish more than we can as individuals.

Chairman Thompson asked the Council to introduce themselves, and then had the public introduce themselves. The Planning Contractor (PC) provided an overview of the agenda and meeting dates and location for the next Council meeting.

The PC then provided a brief summary of the last Council Meeting (CM 4). CM4 built on the resource assessment information presented at CM3. Council members and the PC reviewed municipal and industrial water and wastewater forecast methodology and status, continued the discussion of management practices, and discussed the Joint Meetings. The Council updated and adopted its Vision and Goals and adopted the Council's Public Involvement Plan. The PC then reviewed Council feedback from the meeting and the overall status of water plan effort and schedule.

Following this discussion the goals and objective of Council meeting 5 were outlined:

- Review baseline municipal and industrial water and wastewater forecast results;
- Review methodology and preliminary results of energy forecast;

- Discuss results of current conditions Resource Assessment modeling as presented at Joint Meetings;
- Discuss regional portfolio of management practices and management practice selection process; and
- Understand how management practice selection ties back into demand forecasts and resource assessments.

Council Member (CM): Mentioned that Metro North Georgia will be joining us today including Brad Curry, and there will be a presentation and discussion at lunch.

The Agenda and Meeting Summaries for both CM3 and CM4 were then approved by Council by consensus.

Next the PC handed out a draft table of contents (TOC) for use in developing the regional water plan document. The PC thanked John F. Goodbee, Tom Ratcliffe, Mark Smith, and Ben Thompson for their efforts on the subcommittee to develop the draft TOC.

The Chair and PC asked for subcommittee volunteers to work with the PC in developing preliminary plan sections. The Council asked to think about the request and revisit the topic later in the day.

The PC mentioned the importance of conducting additional outreach to key stakeholders as we move into the next phases of the planning effort. The PC showed the major Cities in the region and asked Council to think about other key people that we may need to contact/obtain input from.

A Council member suggested coordinating with the Regional Commission and another Council member mentioned Chambers of Commerce. Chairman Thompson noted that there are 5 utilities and/or cities represented in the audience today.

The PC mentioned that we need to conduct an election of Council leadership and indicated that Chairman Thompson and Vice Chair Ratcliffe have offered to serve but would also like other Council members to consider volunteering to serve. Council member Larry Stuber moved to reelect Chairman Thompson and Vice Chair Ratcliffe and William Guthrie seconded the motion and the Council voted unanimously to reappoint Ben Thompson and Tom Ratcliffe.

A summary was provided by the PC of the Governor's Water Contingency Planning Task Force and Chairman Thompson also offered his views. The Task Force completed their work in December 2009 and the final report is available online by going to www.georgia.gov and searching "Water Contingency Planning Task Force." A brief summary of the Task Forces

finding was provided. It was emphasized that the preferred solutions to the Lake Lanier ruling are appeal and authorization/reauthorization and that the Task Forces focus was to identify contingencies to these preferred solutions. If the preferred solutions are unsuccessful, then the estimated water shortfall for Atlanta metro area by 2012 is 250 million gallons per day (mgd). Two portfolios were developed to address the shortfall: one for 2015 and one for 2020. Neither includes utilizing groundwater from south of the fall line. The 2015 Portfolio includes conservation, indirect potable reuse (252 MGD), and small groundwater supply systems (26 MGD). The 2020 Portfolio includes: conservation, reservoirs – expansion and new (236 MGD), and small groundwater supply systems (26 MGD).

CM: Did Metro Atlanta people talk about the need to perhaps control some of their growth?

Chairman Thompson: That would be good question to ask the representatives from the Metro North Georgia Water Planning District; they are scheduled for a presentation today before lunch.

CM: With the upcoming Census we need to be careful and understand that the state "balance of power" may shift even more toward the metro areas, especially the metro Atlanta area.

The PC then highlighted a couple key pieces of legislation including:

House Bill 895 – Concerning Interbasin Transfers and Senate Bill 442 concerning water system interconnection and Senate Bill 370 also known as the Georgia Water Stewardship Act of 2010 which established several key water efficiency requirements.

CM: Is Senate Bill 370 redundant of other water efficiency measures? Answer: No, the act established the need to look at and implement even greater conservation savings.

CM: In regard to interbasin transfers, there may be a reservoir proposed on Hardship Creek in Walton County that could transfer water between basins to the Metro Atlanta area.

2) <u>Revised Municipal Water Use (GPCD)</u>

The PC mentioned that each Council member should have received a technical memo describing the municipal and industrial water and wastewater forecasting methods. Work was completed with a Council subcommittee on setting preliminary County level per capita water use rates in gallons per capita per day (GPCD) for the region. These water use rates were developed for public and self-supplied users. It was pointed out that this is the foundation to complete the water use forecasting. Once the Council agrees on a GPCD then

the Council can move forward with forecasts and determine the amount of water needed and begin choosing management practices to fill future water needs/gaps.

The self-supplied gallons per capita per day (GPCD) rate was determined to be 75 GPCD from the USGS Report: Water Use in Georgia for 2005; however, the PC mentioned that the Ad Hoc Committee felt this number may be low and indicated that several of the municipalities in the area use 100 GPCD for planning when issuing taps and the Ad Hoc Committee is recommending the use of the 100 GPCD.

For public systems, the PC first completed a comparison between USGS GPCD data (by County) and weighted County GPCD derived from EPD water use data. The PC then conducted outreach to collect data from select individual municipal suppliers and EPD District Offices and compared this data with the values originally reported by USGS and EPD. If large industries were supplied water by a municipality, then that industry's water use was removed from the municipal water use calculations and accounted for in the industrial water use calculations. Smaller water using industries were included in the municipal GPCD.

CM: For the Coastal region, if we use an average per capita rather than a County specific number this may be a more "equitable" approach to forecasting.

CM: What method was used to establish the percentile of publically provided? In Liberty County there is a lot of self supplied water users. Answer: The percent self supplied was obtained from the USGS report. *Following the meeting the PC conducted additional follow up on the question and adds the following details: In the USGS report, self-supplied population was calculated by subtracting the estimate of population served by public-supply systems from total county population obtained from US Census Data for 2005.*

Vice Chair Ratcliffe mentioned that in Liberty County the Metropolitan Statistical Areas (MSA) represent the concentration of people served by municipal systems and he feels that the population number for Liberty County is accurate.

CM: According to his discussions with the Health Department, McIntosh County has several thousand septic systems. (Note - added after Council meeting – the percent septic is high in McIntosh County. 87% of publicly supplied and 100% of self supplied population is on septic systems and the 2005 population of the county was 11,068).

The PC continued summarizing the forecasts and noted that the preliminary results from this work was summarized in a technical memo and provided to the Council Ad Hoc Committee that participated in the refinement of GPCD (committee members included Tony Sammons, Bill Edwards, Mike Melton, Tony Sammons, Bob Scanlon, Mark Smith, Ben Thompson and Tom Ratcliffe). Refinement and outreach resulted in more credible GPCD

values and adjustments to the GPCD for six counties in the Coastal region. The committee recommended to the Council to use the self-supplied water use rate of 100 GPCD and the individual GPCD for each County as refined by the PC. The range of GPCD for the Coastal Region was presented and ranged from 108 – 157 GPCD.

It was pointed out that no demand altering management practices were included in the baseline water demand GPCD other than passive/natural conservation resulting from the 1992 Energy Policy Act. Moving forward, the Council should keep in mind that there will be natural/passive conservation as houses are remodeled and plumbing fixtures are replaced with lower flow water fixtures that were mandated by the Act.

It was emphasized that forecasts are to be used in regional planning only and they will not be used for individual permitting decisions or water allocations. This is an important consideration in the Ad Hoc Committee's discussion on "unintended consequences."

The PC then presented the Governor's Office of Planning and Budget's (OPB) population projections provided through 2050. The projections show the Coastal region growing from 632,813 in 2010 to 1,265,982 in 2050. The next step in forecasting municipal water demand is to combine population and per capita water use to forecast future needs.

The PC noted that water use rates are generally from 2005 and noted that 2005 was considered a average year in terms of annual precipitation.

The PC noted that based on the population projections, OPB estimates that Georgia will almost double in population from 2010 (just over 10 million) to 2050 (just under 20 million). Growth is based on population, birth over deaths estimate (age, sex) and the amount of net migration into and out of region.

3) Completed Baseline Municipal Forecasts

The PC mentioned that the approach to forecasts is predicated on the premise that there will not be a major change in how water is generally used in the region and that past trends are likely to continue in the future. The PC presented information on percent self supplied versus publicly supplied in the region. It was noted that more urban counties have a higher percent of publicly supplied water.

A discussion was then held on the gallon per capita day usages. The main data source for GPCD information is the USGS report previously presented. This report has statewide coverage, so it helps provide a common platform across the state. This data was collected from a large number of local water providers but is not intended to take the place of or be as detailed as some of the data that is collected/produced by local water utilities. The PC mentioned that Council should strive to strike a balance between regional and local water

planning. The regional plan will look at water use at a more regional level than what would be required for local water planning.

The PC then highlighted a couple points that were raised by the subcommittee. It was mentioned that the Council could adopt one single GPCD for the entire region. The strength of this is that it takes away some concern that the data might be used for an allocation in the future. The downside is that some of the Counties may have a reason for a higher GPCD – such as more commercial or light industrial – and they expect that to continue moving forward. Or they may have a high rate of water loss and may need to implement a leak detection program. The subcommittee ultimately agreed and are recommending the use of a County specific GPCD rather that a single value.

Several Council members offered differing views on the best approach to forecasting water use. There was a general concern among several Council members that the lower GPCD Counties may not be projecting high enough water use to meet future needs and that this might be short sighted. The PC highlighted that the data that has been collected is the best available data and is reflective of the unique water use by publically supplied water users in the Counties and that the planning process is dynamic and subject to revision if new data becomes available. A lively debate continued with strong concerns by some Council members that a lower GPCD may restrict future growth opportunity.

The PC mentioned that the subcommittee had a similar debate and reviewed options including using the highest level water use in the region or a weighted average single value and/or the current GPCD for Chatham County.

The Council continued their discussion, on the differences in water use between counties and cities. The PC indicated that there are often very good reasons for differences in water use and that although we have not identified them all at this point in the planning they typically can be a result of high tourism and transient population such as Jekyll Island, older housing stock with fewer low water use fixtures, system leakage, or higher commercial and light industrial water users in comparison to domestic water users. The PC mentioned that this is the strength of having unique County level values. There might be good reasons why the numbers are different between counties.

The PC discussed the municipal wastewater forecasts highlighting how the wastewater is allocated to point source, land application, and septic.

4) Completed Baseline Industrial Forecasts

The PC stated that the purpose of the industrial water needs forecast is to capture heavy water using industries. There is typically not a good relationship between production data and the water use. There is a closer correlation between employment and water use. Forecasts don't take into account changes in technology, however. In working with industrial groups, employment was generally determined to be the best indicator of future growth. Specific adjustments can be made on a case by case basis if there's a reason to do so. One thing to note is that if employment projections decrease, it was determined that we would hold the water use at the same level.

The primary water use in this region is in the paper industry. Other larger uses include chemical, food manufacturing primary metals, stone/clay, and petroleum. The source of water in this region is both surface water and the Upper Floridan aquifer. The subcommittee discussed whether we need to account for industry that might come but that is not currently anticipated. The subcommittee was comfortable with the baseline industrial forecasts but did think it might be prudent to consider possible future growth in industrial water use and wanted this topic to be discussed by the full Council.

Given time constraints the topic was tabled to allow a guest presentation and Council indicated they would take the topic up again after lunch.

5) Guest Presentation, Matt Harper, Metro North Georgia Water Planning District (District)

Mr. Harper described the basic organization of the District and information from the Water Supply and Water Conservation Management Plan highlighting:

- They planned water needs to 2035
- The District's Updated Water Conservation Program – including an increasing block rate structure; replacement of older plumbing fixtures; rain sensor shutoffs; submetering of new multi-family building; water leak detection and repair; residential audits; low-flow residential retrofits for public and governmental buildings; regional toilet rebate program (36,000 toilets have been replaced as part of the program).
- Mr. Harper then showed the projected water use reduction anticipated based on the above conservation practices.
- Mr. Harper highlighted the requirements that are passed down to local planning efforts and emphasized the importance of public education.

- Wastewater treatment issues including: challenges of cost, septic system management and the percentage of homes that are being built that will be served by septic and septic management challenges for planning and local health department coordination; ratio of point source to septic (about 10% of total wastewater flow in the District's boundaries goes to septic; the District plans to build 19 new wastewater facilities and expand 49 facilities; local wastewater master planning and how those systems may need interconnection in the future.)
- Implementation timelines need to be considered in planning.
- Stormwater (including flood plain delineation and management) and watershed management in light of legal authority.
- Land development considerations and infrastructure asset management.
- Pollution prevention.
- Water quality monitoring.

Mr. Harper then highlighted the District's relationship to the state water plan. He expects that the District's plans will be compatible with the overall state planning process and emphasize that the District is not exempt from the state planning process.

Mr. Harper highlighted lessons learned highlighting local coordination and the importance to build on existing information and not reinvent the wheel.

Following Mr. Harpers presentation, Chairman Thompson asked the remaining guests from the Metro Board (District) to join the Council for lunch for an informal panel discussion.

Katie Kirkpatrick, Vice President, Environmental Affairs, Metro Atlanta Chamber; Sam Olens, former Cobb County Commission Chair and ARC chair – now running for Attorney General, and Brad Curry, Retired Businessman, joined Mr. Harper.

CM: – Is Atlanta considering anything besides conservation such as restricting growth in terms of slowing development?

Mr. Olens: First, metro Atlanta is not trying to take water from elsewhere in the state. Conservation measures are a key emphasis and some reservoir expansions. It is a tough issue and there is no legal basis for restricting development except some sort of reverse condemnation. Local government does not have that kind of cash available. Frankly this is not an issue now due to slow down in residential/commercial development.

CM: Please tell me about the backlog of permitted development not currently constructed. He had heard that is about 5 years in the metro area. Mr. Olens: Recession, fuel, and drought have driven down development in rim counties. Their backlog may be much greater than 5 years. In Cobb County, Olens estimates it is about 8 months.

CM: How do we get jobs and people coming to the state? Mr. Olens: 1) We need aggressive conservation, 2) We need to make friends within the state, and 3) We need to end the tri-state water wars and its associated 20 years in litigation.

CM: It seems when you begin to plan regionally you end up with more mega-project concepts.

District: Yes, that is partially true but site specific issues also tend to become important.

CM: Could you please comment on the Metro area population projections.

District: Yes, we are looking at about a doubling of population.

CM: If these population numbers are correct, then how will the area meet its water needs without impacting other neighboring areas?

District: We are seeking to solve the problem without relying on others, but that does not mean there won't be a need for more actions and coordination. Funding will be a key challenge and rates will be a driver, but a necessary reality to meet future needs. Lake Lanier will be part of the long-term solution it is just unclear how much will be available. Return credit is a key issue that is part of the legislation. The Corps of Engineers currently does not provide any accounting credit for returns. A key thing to remember is that Georgia does have good overall water supply we just need to manage the supplies better.

CM: Are there any efforts to encourage folks to relocate to other regions of the state?

District: Yes, we do consider that on a case-by-case basis and have made recommendations to that effect recently in discussions with businesses relocating to Georgia.

CM: In the Coastal area we do have some groundwater restrictions, what are some of the most critical challenges in creating your plans?

District: The biggest issue is financing and incentives. There was also a problem with over-exaggerated needs and demands from local governments. From an operational perspective, the emphasis on local government official participation has waned and they are sending designees instead. There is a tension between including and balancing technical expertise and key decision makers.

6) Energy Forecasting Methodology and Preliminary Results

The PC stated that each energy type (coal, nuclear, etc.) has unique water needs. Energy water projections are expected in summer 2010. The PC noted that withdrawal amounts for energy are larger than what is consumed. The PC is working towards determining consumptive use by energy source.

The PC presented the water use in the Coastal Georgia Region. The PC noted that this energy water use is 99% surface water and only 1% groundwater. The PC noted that going forward the Council may need to talk to other Councils upstream and downstream. The PC anticipates subcommittee and joint meetings with other Councils to learn about what they're doing and their management practices.

The energy forecasting work includes a power stakeholder group to provide input into the forecasts. This allows the power industry to provide representation into these forecasts. Power industry only projects 10 years into the future. The energy forecasts may be more statewide forecasts than regional forecasts. The forecasts may not distribute those needs into a County watershed level, but we will have to wait and see the final outcome.

7) Update on Agricultural Forecast

The PC noted that based on previous agricultural forecasting work, some water users did not feel their water uses were adequately captured. Therefore, EPD has been working with sub-threshold water use sectors (less than 100,000 gallons/day) including livestock, dairy, poultry and nurseries. Some water use adjustments were made, especially water used associated with the nursery sector. These adjustments rippled through other agricultural forecasting, so this forecast is a few weeks away from being completed.

Some of this information is at a smaller detail than what Dr. Hook presented earlier. Councils will decide whether sub-threshold agricultural water-use will be included in their plan. Green industry is being consulted to determine if trends need to be incorporated into golf course water use as well as nursery water use.

The PC presented the next steps for the all water use forecasts. Demands will be distributed to the aquifer and surface water planning node. The agricultural water demands and forecasts will be completed, as well as the energy water use and consumption forecasts. The PC will utilize the water and wastewater forecasts and work with Councils to begin the management practices and resource assessment analysis.

CM: Are we considering reuse water for golf courses and other uses – municipal landscaping and irrigation?

PC: Reuse is an important component of meeting future water demand and the council should definitely include reuse in the plan – particularly in terms of management practices.

EPD(Jeff Larson) – Reuse is an important consideration in permitting in the Coastal region.

8) Next Steps

The Council then returned to the key decision points for municipal and industrial forecast.

CM: Expressed concern about using 2005 base year. Are we going to use the 2010 census data when that information becomes available? Since Fort Stewart troops deployed elsewhere will not be counted, will the water demand be underestimated?

PC: For Liberty County, we are capturing the transient troop population because the municipal water rate is higher because it is based upon the permanent base strength. We need to see if the census is counting the deployed troops state of residence correctly, but that is not a direct Council/Water Plan issue.

CM: I recommend a single number regional between 135 - 140 GPCD

CM: Chatham County has a high retail component which increases the GPCD rate.

CM: Perhaps we can consider using a modified by county GPCD which incorporates the mean 129 GPCD.

CM: What do we lose by going with a single regional municipal water use rate?

PC: 1) Less scientific method may be viewed negatively by surrounding planning regions; 2) Since wastewater is calculated from water, then increased water demand could be driving assimilative capacity issues for wastewater; 3) Could under estimate water use in regions with higher GPCD; and 4) could prematurely drive resource management challenges and/or infrastructure investment.

CM: Since this is regional planning, we need to go with a regional water use rate to give the chance for counties with lower rates to grow and the counties with higher rates to conserve.

PC: The intention of the plan is to have geographically specific information. Some counties might need conservation efforts; others may need help in financing infrastructure improvements to meet water needs.

CM: I am concerned that Liberty County is going to be limited to 108 GPCD water use rate. Are we going to be limited to that rate in the future even if growth patterns change in terms of residential and commercial growth? How do we compensate for additional troops being stationed here within the next 3 years?

PC: Director Barnes emphasizes that this is a living document and new information needs to be incorporated into the plan when it becomes available.

Chairman Thompson: The GPCD doesn't limit growth, but only assumes that new population (troops) will use water at that same rate.

CM: Be careful not to pad GPCD number because it can drive water demand to the point where growth has to be limited.

CM: Remember we are creating a baseline here, but it can be modified and adapted in the future as new information becomes available.

CM: For those counties with lower GPCD, we are concerned that they will be limited to those low rates.

PC: Forecast captures the mix of residential and commercial water use. This is our best estimate today, but it can be adjusted in the future.

CM: Our planning contractor has gone beyond the call of duty trying to get accurate information on a by-county basis.

Chairman Thompson moved toward a decision point and identified that there are 16 Council members which include 2 alternates. He also reviewed the options on the table and conducted initial votes:

1) By County GPCD – 4 votes

2) Chatham County 136 GPCD applied regionally – 5 votes

3) Regional 140 GPCD vote – 3 votes

Additional discussion followed the vote with similar points raised. Chairman Thompson then asked for a second vote based on combining and modifying the 2nd and 3rd option:

1) By County GPCD– 2 votes
2) Regional single value 138 GPCD - 11 votes

It was noted that the basis for use of the single value is the belief that as the region grows the Council feels that the mix of commercial/residential will be similar to Chatham County.

The Industrial Forecast was then discussed.

Vice Chair Ratcliffe: Major industrial sites can be identified now that will be developed in the future. These projects are accelerated for quality growth. We could define and assign

capacity to those identified sites. This approach would help recruit industries because they would have water demand already captured in the regional water plan. We could put a placeholder in very specific terms in location and estimate water demand.

CM: Does the 148 mgd ground water use value include the Durango number?

PC: No it does not.

CM: Question to EPD – For large industrial water users, is there a sense that these permits will be reduced in the future to allow other industries to use more water?

EPD: Too early to say if that's the case. Take this up with your Council if you'd like to address that issue in the regional plan.

CM: Any reductions in industrial water permitting would reduce that industry's ability to expand.

CM: We could distribute the excess surface water capacity at Savannah I&D to the future industrial sites to determine how much we should add as future industrial water use placeholder.

CM: Each County's development authority needs to review the list and give input on industry that foresee coming to their county.

Mark Smith made a motion to accept 220 mgd for the industrial water forecast for most likely scenario for planning horizon. Any further adjustments will be made at the next Council meeting including a reasonably high scenario.

John McIver seconded motion and there was additional Council discussion.

CM: If we accept these forecasted numbers, are we sending a message that we do not want additional water-using industries in Coastal Georgia?

CM: I am concerned over no growth in industrial water demand. If we use the same philosophy as the Suwannee-Satilla Council, then we would need to add 20% growth.

Mark Smith – withdrew his first motion and made an alternative motion - We do not accept industrial forecast as presented today. By next meeting, Council Members need to go back and gather county specific information.

Council voted 11 in favor, motion passed.

It was noted that it would be good to get permitted numbers by County for surface water and groundwater.

CM: Permitted numbers are quite a bit higher than actual withdrawal.

CM: Please recap the Ad Hoc committee recommendations.

PC: 1)Baseline industrial forecast should be accepted as presented; 2) Additional consideration should be given to including an alternate forecast scenario and this scenario would include additional future industrial growth; and 3) Since Durango operated just prior to the forecast period, consider using that number (~35 mgd) as a starting point.

CM: We need conversations at County level to see if there are potential industrial water users. Consider adding 35 mgd and distributing it around the region throughout the planning horizon.

The PC will work with the Council to develop a final approach to include an additional industrial growth factor in the forecasts.

9) Resource Assessment Results

The PC presented an overview of the Resource Assessments (RA) and mentioned that the joint meetings that were held around that state over the last month provided a detailed summary of the RA. The PC noted that today's presentation will be more general and that summary information from the joint meetings and from the resource assessment synopsis documents are additional resources that Council members can review.

The PC then described the groundwater RA showing the following:

- Aquifer layers
- Modeled aquifer boundaries

- Results of the groundwater model showing
  - Existing pumping
  - Low end of sustainable yield
  - High end of sustainable yield

The PC then highlighted the RA for surface water quantity. The PC described the river basin delineations and the key inputs for the resource assessments. Points discussed included:

- Delineation of planning and basin nodes including description of fully-regulated, semi-regulated and un-regulated nodes
- Location of USGS gauges

- Definition of unimpaired flows and 7Q10 (the lowest 7 day flow that occurs 10 percent of the time) that are used to determine the "flow regime"

- Current gaps under current withdrawals at the following nodes: Claxton, Eden, and Kings Ferry. Average and maximum shortfalls not very large, however, the shortfall matches the flow regime during drought periods making the problem very difficult to solve.

- Upstream reservoirs seem to have additional storage capacity, but we need to understand that this additional capacity is not all available to meet water supply needs because there are other significant stakeholders.

The Council offered the following comments/questions.

CM: What are alternatives for addressing gaps? PC: Through demand management, surface and groundwater management or re-regulation of surface water.

The PC presented the water quality RA outlining the following points.

- Locations of dissolved oxygen (DO) and nutrient modeling in streams and harbors—smaller streams and tributaries were not modeled.

- Critical low DO time periods every summer.

- Savannah River assimilative capacity rapidly decreases beginning near the location where Highway 170 crosses the Savannah River near Port Wentworth.

- The "naturally low" DO policy which assumes low flow and high temperatures as worst case.

- TMDL listed segments for the region will need to be considered during management practices development.

EPD (Jeff Larson) – Noted that the Draft TMDL for the Savannah Harbor is getting ready to go to public notice, probably within the next 30 days. It is proposed right now that the TMDL will be implemented via a strategy developed by the two discharger groups which are comprised of facilities from both SC and GA. EPD will send notice by email blast when public comment period begins.

The PC wrapped up the discussion describing the development of the synopsis documents which document the development of the RA tools and highlighted the comment period for the documents.

10) Management Practices

The PC defined a management practice as anything that helps us meet our regional goals and vision and can be used to address future water resource needs.

This is a holistic planning process – there are interactions between stormwater, water supply and wastewater. Reuse has an impact on water supply and wastewater returns – what is positive for some areas may be negative for other areas. We are looking at both point sources and non-point sources.

Management practices development starts with existing demand, then permitted capacity, planned projects and conceptual projects. We must strike a delicate balance to keep from impacting local plans when management practices involve conceptual projects.

For TMDL areas, at a minimum Council will need to be familiar with the TMDL plans and their implementation status. Council is encouraged to do more if possible to help promote the implementation of some or all aspects of the plans; focusing on partnerships and collaboration.

Management practices need to be meaningful and be capable of being used as inputs to the resource assessment tools. For instance, the surface water availability management practices should be related to local drainage areas so that we can determine what the influence is at that node.

The plan is to do surface water quantity management practices first and then surface water quality management practices.

Water quality modeling is reach driven rather than water planning node driven. We will need to evaluate how this moves forward. Point source management practices could be reuse, centralized wastewater treatment systems, direct discharges, or land application systems.

The next challenge that Council will have is "how do we select these management practices?" As part of that process we don't want to lose sight of the Coastal Georgia Region's Vision and Goals.

We need to be open minded to list management practices and then be level headed when evaluating management practices. In addition, we need a decision making process to evaluate management practices. Options for decision making could include simple qualitative modeling, more complex records that utilize criteria, performance measures, and scoring of management practices. Another alternative would be simple voting. Another alternative would be to employ a multi-variable decision making process, but the type of

decision making process is up to Council. This process needs to be determined by mid summer 2010.

Options for moving forward: whole group, subcommittee, or other?

As a Council, we don't actually implement water projects, but we hope to provide information on what's important to the region, working with local governments and utilities. We may need help from the Council to do some outreach and talk to providers about the planning process. Meeting future needs will involve several key steps including: documenting existing uses, documenting remaining permit capacity, identification of plans that are currently being considered, and identification of Council specific ideas.

The PC stated that there were several ways to move forward with the development of the preliminary portfolio of management practices. The entire Council could work through the process, we could use a Council subcommittee, or the PC could provide some ideas to start from.

The Council did not identify members for a subcommittee and asked the PC to follow up via email for both the Management Practices and Plan Section Subcommittees.

Finally the PC identified some key intra and interstate coordination considerations. These included South Carolina future water needs estimates and Florida planning activities on the St. Mary's and EPA's proposed water quality standards for Florida.

Florida coordination

CM: Concern over lack of Florida's coordination with Georgia over the St. Mary's river. He stated that long term water supply option of 33 mgd from St. Mary's. CM is recommending that this alternative be removed from their plan until full consultation with Georgia. EPA's new water quality standards for nitrates are lower than background levels in St. Mary's river. This approach would take loadings back to pre-human impact on river.

Council member Roger Weaver offered to draft public comment letter and send to Chair who will distribute this for consideration in submitting to EPA.

It was noted that the Savannah River Committee is meeting on May 6, 2010. Coastal salt water intrusion will be one of the issues discussed.

11) Local Elected Official Comments –

None

12) Public Comments

Merrill Varn–St. Mary's River Management Commission - I have a few points I would like to make:

a. What is going to be done to improve surface water availability data for St Mary's river?
b. Is low DO in a river taken into account when looking at strategies for future permitting withdrawals?
c. Are state boundaries considered when calculating river flows? Cross-boundary state discussions need to take place to divide resources.
d. I was pleased to hear that the topic of outstanding resource was identified and this should be done for all of Georgia.
e. St Mary's stakeholders have already written letter regarding the TMDL.

Sarah Barczak – Program Director, Southern Alliance for Clean Energy – I believe there are tremendous impacts that power plants have on water resources. Less water use for power generation means more available for other uses. Several new power plants are proposed. I have handouts/fact sheet on the water/energy connection that focuses on water conservation. The two proposed Westinghouse reactors at Vogel will have high water use and consumption. I believe that they will use between 55 to 88 mgd with 50 to 75% consumption which is equivalent to the water demand of 1.3 to 2.3 million residents at 75 GPCD.

Bob Scanlon – Water Resources Director, City of Savannah – I would like to caution the Council to not get specific without contacting end users – specifically big municipalities and industries. People typically do not consider water availability when they decide where they would like to live and that is a challenge that often falls to the utility. Water demand totals are not going to change much, but we need to get into the geographic location of those demands. Also, we should have a long term plan in place to provide water to Atlanta past 2035 which is beyond their current planning horizon where they think they can provide water within their own region.

13) Wrap Up, What to Expect Next Meeting, Council Meeting Evaluation

The next steps in the planning process include evaluation of near term gaps and future needs. Management practices will then be developed to address the gaps and needs. After Council Meeting 6, each Council has increased flexibility on the schedule for meetings. This will allow Councils more freedom to work toward plan completion on a schedule that works best for them. Council meetings could move to more frequent meetings of shorter duration, could move to more sub-committee meetings, or could stay generally the same.

The next meeting will be in June and the Chair asked the PC to send an email proposing June 23rd and maybe a second option. The location at Midway will be proposed. The meeting was adjourned and Council Member Phil Odom generously offered to have meeting attendees join him for local oysters. Thanks to Phil for his hospitality!

cc: Jeff Larson, EPD
Brian Baker, EPD

Coastal Georgia Regional Water Council
Council Members Attendance List

Coastal Georgia Council Members		**4/6/2010**
1	Dennis G. Baxter	
2	Fred G. Blitch	
3	Chris Blocker	X
4	Kay W. Cantrell	X
5	Frank E. Field	X
6	Rick Gardner	
7	John F. Godbee	
8	William K. Guthrie	X
9	Duane Harris	
10	Bill Hatcher	X
11	Cecily Hill	
12	Don Hogan	
13	Eric Johnson	
14	Michelle L. Liotta	X
15	Reginald S Loper	
16	John D. McIver	X
17	Michael J. Melton	
18	Randal Morris	X
19	Phil Odom	X
20	Keith F. Post	
21	Tom Ratcliffe	X
22	Tony Sammons	X
23	Mark V. Smith	X
24	Larry M. Stuber	X
25	James Thomas	X
26	Benjamin Thompson	X
27	Bryan Thompson	
28	Horace Waller	
29	Marky Waters	
30	Roger A Weaver	X
	Total	***16***

Coastal Georgia Regional Water Council
Public Attendance List

Public Attendee		4/6/2010	Representing
1	Ian Adelman	X	Southern Alliance for Clean Energy
2	Tim Barrett	X	GA DNR Fisheries
3	Sarah Barczak	X	Southern Alliance for Clean Energy
4	John Clarke	X	USGS
5	Deatre Denion	X	DCA
6	David Eigenberg	X	GSWCC
7	Franklin Etheridge	X	City of Pembroke
8	Don Gardner	X	UGA CAES
9	Dennis Hutton	X	Chatham County - Savannah MPC
10	Vince James	X	Fort Stewart
11	Christi Lambert	X	The Nature Conservancy
12	Jimmie Martin	X	City of Walthourville
13	Rahn Milligan	X	GSWCC
14	Brent Rabon	X	Fort Stewart
15	Tricia Reynolds	X	Coastal Regional Commission
16	Curtes Roberts	X	City of Midway
17	Bob Scanlon	X	City of Savannah
18	Tas Smith	X	GA Farm Bureau
19	Bryan Snow	X	Georgia Forestry Commission
20	Sonny Timmerman	X	Liberty County Planning Commissioner
21	Merrill Varn	X	St. Mary's River Management Commission
22	Clemontine F Washington	X	City of Midway

Total **22**