

# **Georgia Department of Natural Resources**

Environmental Protection Division, Watershed Protection Branch

4220 International Parkway, Suite 101, Atlanta, Georgia 30354

Linda MacGregor, P. E., Branch Chief 404/675-6232

FAX: 404/675-6247

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## **DRAFT MEMORANDUM**

**TO:** Council Members

**FROM:** Kevin Farrell, GA EPD  
David Ashley, JJG

**SUBJECT:** Council Meeting 3 Summary  
Middle Ocmulgee Water Planning Council

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## **Georgia Comprehensive Statewide Water Management Plan Regional Water Planning Council Meeting 3 Summary**

**Meeting Date:** September 10, 2009

**Location:** Georgia Farm Bureau, Macon, Georgia

**Attendees:** See list

### **1) Welcome and Council Member Introduction**

Elmo Richardson, Council Chairman, welcomed everyone and introduced Senator Ross Tolleson, Chairman of the Natural Resources and Environment Committee. Senator Tolleson welcomed everyone and commented that Georgia is doing what we needed to do for the Lake Lanier dispute. The regional water planning work is even more important in the face of the water war; he thanked the council members for the important work they are doing.

Chairman Richardson thanked the Georgia Farm Bureau for hosting the meeting. He summarized the 3-hour meeting Dr. Couch held with the Council Leadership Forum (consisting of Chairs and Co-Chairs) on July 13, 2009. Meeting attendees had a lot of concerns about the projections and as a result of the projections are being reworked right now. Chairman Richardson quoted Dr. Couch's memo "The Council has the responsibility to develop the regional water plan...with the assistance of EPD and planning consultant; it is not EPD's plan and it is not the consultant's plan". Chairman Richardson stressed the need for council's input during the planning process.

## **2) Agenda and Council Meeting #2 Minutes**

David Ashley also thanked the Farm Bureau for providing the facility and lunch, and presented the agenda for the meeting. A motion and second were made to adopt the agenda. No discussion was forthcoming and the agenda was approved as presented.

## **3) Overview of Planning Guidance**

David Ashley reviewed the planning process and went over the schedule briefly.

<b>Product</b>	<b>Regional Water Planning Council Activities Scheduled for</b>
<b>Regional vision and goals</b>	April 2009 – September 2009
<b>Assessment of baseline resource capacity</b>	November 2009 – March 2010
<b>Forecasts of demand</b>	February 2009 – March 2010
<b>Gap analysis</b>	January 2010 – October 2010
<b>Water management practices to adjust demand and resource capacity</b>	January 2010 – January 2011
<b>Recommend regional water plan</b>	January 2011 – June 2011

Once the Population and Employment forecast is finalized, the planning contractors will work on water demand and wastewater flow forecast. Input from local governments and water providers will be used to finalize forecasts. After the gap between the resource capacity and projected future needs are identified, the council will work on selecting management practices to either reduce demand or increase resource capacity to meet future needs. The draft plan is due January 2011. After public comment period and plan revision, the plan adoption is planned to be June 2011.

David went over the council's responsibilities and EPD's responsibilities. The council's responsibilities include: 1) develop a recommended plan, 2) submit to EPD by January 31, 2011, and 3) make revisions based on EPD and public comment and finalize recommended plan by June 30, 2011. EPD's responsibilities include:

- Provide guidance and template to ensure completeness and consistency
- Provide public notice and 45-day comment period
- Review recommended plan for consistency with State Water Plan, rules and guidance

- Adopt recommended plan if consistent with State Water Plan, rules and guidance
- Use final adopted plan to guide agency decision making

David mentioned that the Planning Guidance can be accessed through the [georgiawaterplanning.org](http://www.georgiawaterplanning.org) website (under the Regional Technical Planning Guidance link on home page) and encourage council members to use it as a resource. Link to the guidance document:

[http://www.georgiawaterplanning.org/documents/20090731\\_Regional\\_Planning\\_Guidance\\_000.pdf](http://www.georgiawaterplanning.org/documents/20090731_Regional_Planning_Guidance_000.pdf)

**Question:** If the plan we adopt cannot go against existing law, can the plan go against existing rules? Can rules be changed?

**Answer:** If they are contradictory to existing rules, they may not be accepted (by EPD). The plan would have to be in agreement with current rules to be adopted, but rules can be changed for the next iteration/revision of regional plans.

**Comment:** Rules can be different for different regions.

Kevin Farrell asked the council members to review the Planning Guidance as a resource for regional planning.

#### **(4 ) Public Involvement Plan**

A draft public involvement plan (PIP) was sent for the council's review prior to the meeting. Charlotte Weber went over the basic elements of the Middle Ocmulgee's draft PIP.

##### **Key Stakeholders**

Ms. Weber asked if any stakeholders are missing from the draft list.

*Additional stakeholders mentioned by the council members:*

- Developers
- Water utilities because they may not be part of the local governments.
- Design professionals – landscape architect, and engineers, etc.
- Soil and water conservation districts (Note: these are considered partnering agencies.)
- Land owners adjacent to or encompassing major tributaries, streams, lakes or other water sources

##### **Procedural Criteria**

*No additional comments from the council.*

##### **Meeting Announcements**

*No additional comments from the council.*

##### **Public Comments**

*Comments on public comments and publicity:*

- Will EPD consider a blog to post public comments or comments from council members?

- We need to get the information out; need more proactive publicity for the council.
- Because of the newsworthiness of the (Lanier) ruling, we can bring more publicity to the planning process.
- After each meeting, could we plan on getting the key topics discussed to local newspapers?
- Consider public announcements through local newspapers. (Tai-Yi Su noted that the media gets announcements currently. They are included in the public notice announcement for meeting dates, and are notified again once the draft agenda is ready.)
- Weblog is a great idea – give members opportunity to feed ideas to the chair/co-chair. (Tai-Yi noted that the chair, co-chair and the planning contractors are working with EPD to establish a “Contact Us” link that would go directly to the council’s chair/co-chair and EPD staff).
- What about posting notices at State Park and historic sites – a lot of local groups are active in monitoring streams and conservation.
- Also consider posting notices at fishing clubs, Bass Pro Shops, and other water focus businesses or clubs.

#### Local Government Involvement

**Comment:** Council member asked to create a separate section for regional commissions/partnering agencies involvement/non-governmental organization (NGO) involvements.

Chairman Richardson mentioned we will have a joint meeting in January to discuss the Resource Assessments.

Chairman Richardson asked council members to get their comments on PIP back to the Chairman. The PIP would be revised according to the comments and will be presented at the next meeting for adoption. A council member asked if it is appropriate to open up for public comment at this time since it is about public involvement. There were no objections and the floor was open for public comments.

#### Public Comments

*Shana Udvardy from Georgia Conservancy:* Shana commented that it is critical to incorporate input from all groups/sectors for the regional plan. Suggested the council provide a section on the regional water council website to allow posting and reading of comments. Suggested the council take an active rather than passive approach to public involvement.

*Bryan Tolar from Georgia AgriBusiness Council:* They (local organizations) can help get the information out through different sectors.

*Adriane Wood from Department of Community Affair (DCA):* DCA website has a list of potential stakeholders. Encourage all to look at DCA’s website.

*Karol Kelly from the Bibb County Extension:* Volunteered to do short presentations at their local organizations and club meetings to help gather input and promote the plan, and they would post the website link to allow more exposure.

## **(5) Visioning and Goals**

Ms. Weber presented two versions of a draft vision for the council for their review and discussion. Version 1 came from council members' submittals. Version 2 was derived from the "35 exercise" from the kick-off meeting.

### Version 1 (derived from council members' submittals)

The Middle Ocmulgee Water Council will work so that the region's surface and subsurface waters retain their natural characteristics, interconnectedness and long-term viability through wise conservation and prudent management of the resource, allowing for continuing economic development and enhanced quality of life for all the region's citizens, now and in the future.

### Version 2 (derived from the "35" exercise)

As members of a council and as citizens of the Middle Ocmulgee Regional area and of Georgia, we will strive to study, participate and contribute to the process of building a culture of water conservation in our region that provides a balanced allocation of water for all uses both for the short and long term. We will work to ensure that water, as a resource, is available, sustainable, and is of exceptional quality and quantity for the well being and prosperity of all that will follow.

## **Comments**

- Liked the mentioning of "continuing economic development". A lot of time, this is forgotten.
- Version 2 – The use of "balanced water allocation" has a negative connotation. The language may be more suited for regulations but not vision.
- Conservation and sustainable use in Version 2 should be kept.

**Question:** What does "natural characteristics" mean? It may mean different things to different people.

**Answer:** Council member Bembry explained "natural characteristics" to him (primary author of Version 1) meant to consider the seasonal variations in a natural water body versus concrete ditch.

Chairman Richardson appointed a small ad-hoc writing committee to work on combining the two versions during lunch. Co-chair Ben Copeland, council members John Bembry, and William Lazenby were asked by the Chairman to work with Charlotte Weber on revising the vision statement during the lunch break.

**Comments:** Vision is a living document and can change in the future so suggest not to be too hung up on it. Chairman Richardson agreed. Dr. Couch also mentioned it.

## **Goals**

Draft goals based on council members' returned assignment, the "35" exercise from the kick-off meeting, and the trends/forces/factors exercise in Council Meeting #1 were presented. Ms. Weber commented that these are initial draft goals for consideration and can be revised later. She briefly went over the following draft goals and asked for comments.

### **Draft Goals – Middle Ocmulgee Water Planning Region**

- Create a regional water conservation program with incentives for increased water efficiency that educates water users on the need for conservation.
  - Demand management/conservation/education
- Promote development patterns that limit the threats to the integrity of lakes, rivers, groundwater, and water recharge areas and that protect sensitive areas such as riparian corridors, floodplains, and wetlands.
  - Land conservation
  - Environmental planning
  - Smart growth/ Low Impact Development (LID)
- Develop enhanced monitoring and enforcement to reduce nonpoint source pollution, keeping the Middle Ocmulgee water resources clean and healthy.
  - Monitoring
  - Enforcement
  - Pollution prevention
  - Stormwater programs
  - Development regulations
  - Illicit Discharge Illegal Connection (IDIC) programs
- Plan and manage the Middle Ocmulgee's water resources to maintain a healthy economy and to preserve a high quality of life for the region.
  - Planning
  - New supplies
  - "Catch all" for other water management practices
- Maximize existing water supply sources to the extent practicable to reduce potential environmental impacts from new sources.
  - Increase supply from existing sources
- Promote properly managed wastewater discharges in areas with available assimilative capacity while promoting beneficial reuse.
  - Siting of discharges/ quality of discharges
  - Reuse

**Comment:** One council member commented that the Middle Ocmulgee region has lots of water in the lower part of the region. In the northern part of the region, the water availability may not be as abundant. It seems that water intensive industries/growth can be located where water is available.

**Chairman Richardson** commented that the discharge from Yellow River wastewater treatment facility from Gwinnett County may have an impact to Macon's Town Creek Reservoir, which is a pumped storage reservoir. The ruling may have impacts to water that supplies Town Creek Reservoir. He also commented that the southern portion of the Middle Ocmulgee planning region relies more on groundwater, while the northern half uses more surface water. The needs are different in different part of the region.

**Comment:** One member commented that the council does not have the charge on promoting land use patterns that promotes managed growth. Would like to keep the goal of encouraging high water users/growth to be located where water availability is plentiful, but don't know what the council can do about it. Local governments ultimately make the decisions and have to enforce through codes.

**Comment (Butts County):** Gwinnett County had a proposal a few years ago for pumping water from Lake Jackson area. This proposal can affect the Middle Ocmulgee region. One council member asked if we should consider in this process how much water the Middle Ocmulgee region would allow Gwinnett to pump from Middle Ocmulgee planning region.

**Senator Tolleson:** We don't know where the ruling would lead Gwinnet County, but Gwinnett County cannot make the decision alone on pumping from downstream. The council can include language to address interbasin transfer in the goals.

**Comment:** One council member commented that the council may want to be more specific about the goals on fish and wildlife. Another mentioned that we may need reservoirs in the northern end of our district, and may want to address language to allow consideration of reservoirs.

**Chairman Richardson:** Asked the Council members to spend some time and review the draft goals and to submit any comments, changes, or additions to us and to be ready to adopt next meeting.

#### **(6) Joint Meeting Planning**

David Ashley gave the presentation on joint meeting preparation. The Resource Assessment will be done based on watershed/aquifer basis. Joint meetings will allow all adjacent councils to see the same information for the watershed/aquifer involved. Two series of joint meetings are planned so far, one in January and one in April of 2010.

Surface Water: Most of Middle Ocmulgee planning region is located in the Ocmulgee River basin, and upper part of the Ocmulgee basin is in the Metro North Georgia Water Planning District. A small portion of the council is in the Flint and Oconee River basins.

Groundwater: Most of Middle Ocmulgee planning region is located in Piedmont region with Crystalline-rock aquifer in the northern part of the region; on the southern side of the region, there are Cretaceous aquifers and a little of the Floridian aquifer.

Mr. Ashley showed the grouping of Resource Assessment/joint meetings. Chairman Richardson invited all members to participate in the joint meetings to remain informed.

#### **(7) Resource Assessment**

Dr. Liz Booth, manager of the Watershed Planning and Monitoring program at EPD, presented an overview of the resource assessment work currently being done for regional planning. Three sets of Resource Assessments (surface water availability, surface water quality and ground water availability) will be provided to the council. The Resource Assessments will be based on the boundary of the resources (watershed and aquifer), not planning regions.

There are fourteen major river basins in Georgia. The watersheds are broken into planning nodes. The planning node locations were selected to catch water withdrawals and wastewater discharges. The basic nodes are selected at locations where long-term monitoring data is available. The model will include water to support instream flow needs and recreational needs. There are three (3) nodes in MOC.

Dr. Booth showed the impaired stream segments in the Middle Ocmulgee planning region based on organics, pH, toxicity, fish consumption, dissolved oxygen (DO), biota (sediment), and fecal coliform.

EPD is developing new DO standards for naturally low DO streams and is looking at better bacterial standards currently.

Assimilative capacity may be affected by future land use pattern, population growth and the increase in impervious surface area. UGA is currently developing future land use forecasts for the regional planning efforts.

EPD has a water quality monitoring group and also contracted with USGS. There are 48 monitoring sites in the upper Ocmulgee basin; USGS monitors 51 sites for EPD. EPD is looking at all historic data that has been collected.

**Question:** Pulaski County is located in the lower part of the basin and we assume that higher flow is available. Does it have higher assimilative capacity?

**Answer:** Effects of discharges and assimilative capacity may occur several miles downstream (of the discharges). It may not show immediately.

**Question:** Did Georgia Tech develop the model?

**Answer:** The model EPD's contractor is using was originally developed by Georgia Tech. Kaolin data does affect sediment, but does not affect organics and DO. It is not included in the water quality model.

**Question:** Is there similar model used in the US?

**Answer:** Yes, a similar model is used for the Chesapeake Bay.

**Question:** What is the timeline on modeling?

**Answer:** We are making conservative assumptions on models. Six staff members have been added due to increased monitoring and more may be added. EPD is training the staff to collect data for these intensive surveys. EPD will go back to verify the assumptions as more data become available. The regional plans will be revised on a 5-year cycle and updated information will be used for the revision. Some of the water quality monitoring on major lakes are conducted on a 5-year cycle, as more staff are added, some of the lakes may be moved to annual monitoring.

**Comments:** We will be making decisions based on models that are not fully calibrated.

**Answer:** Some decisions have been made based on models that are not 100% calibrated, but are calibrated to the best of our knowledge and based on available data.

**Comment:** With the decrease in use in water for the kaolin industry, less groundwater is being pumped for mining of kaolin. This trend should be taken into account.

**Question:** How does the model take into account the difference between usage and consumption?

**Answer:** Not sure. Dr. Wei Zeng will need to answer the questions for the surface water availability model.

**Question:** Will they have data for power consumption?

**Answer:** Most water for hydropower is returned. The energy industry is assisting EPD to prepare the forecast of their future usage.

**Question:** How do we handle agricultural usage, is it considered 100% consumptive?



**Answer:** Will have to confirm with Dr. Zeng. Questions about how the return is captured downstream. Cliff Lewis stated his understanding that ag use is considered consumptive.

**Question:** Is drip irrigation considered 100% consumptive?

**Answer:** Some are accounted for in downstream flow gages. Dr. Zeng is working on the same for septic usage, which is eventually returned as base flow.

David Ashley mentioned that the plan is to invite Dr. Zeng and Dr. Kennedy to the next council meeting to answer questions on surface water and groundwater availability. Mr. Ashley commented that we are fortunate to have this much data available for this planning process.

### **(8) Judge's Magnuson's Ruling**

David Ashley briefly discussed Judge Magnuson's ruling on July 17, 2009 and reminded members of Dr. Couch's memo on the subject. He discussed briefly on the history of the Lanier dispute and Governor Purdue's four-prong strategy: 1) Appeal, 2) Negotiation, 3) Contingency planning, 4) Long-term solution – reauthorize Lake Lanier to include water supply as a purpose. There are many Army Corp of Engineers reservoirs in the country that do not have water supply as part of the original purposes and may be affected by this ruling.

David Ashley played the video message from Governor Purdue and opened the floor for questions and comments.

**Comment:** One council member mentioned that Lanier supplied a huge percentage of Georgia's population. He did not believe that it would be so hard to change the law.

**Senator Tolleson:** Explained that when the congress gets to a vote, Georgia has fewer votes compared to congressmen from Alabama and Florida. This is where the challenge is if the congress has to vote on the issue. If the governors from three states can meet to come to a solution, we may not need to take it to the Congress.

**Comment:** We should look at multi-state water usage, not just within the Middle Ocmulgee planning region.

**Senator:** Georgia can first take care of our planning and then can work with other states.

**Question:** Are there other reservoirs in the state categorized the same way?

**Answer:** Lake Allatoona also does not have water supply in its original purposes. It has been reported that the Judge in Alabama has stayed any ruling pending the outcome of the Lake Lanier decision.

**Senator:** Quite a few states (numbers mentioned varied from 17 to 27 states) may have the same issue. Other states would like to see GA/AL/FL resolve this issue and get re-authorization for Lake Lanier. They have the same interests.

**Comments:** Florida has a lot to gain if the Metro North Georgia area loses this water, but Alabama may have a lot to lose because future development from Birmingham to Charlotte via Atlanta will all be affected. Florida may have more to gain, but too much fresh water may also adversely affect the Apalachicola Bay.

**Question:** What leaves us to believe we can do what has not been done for 20 years?

**Senator:** There are a lot of dynamics in play. Florida may not be viewed well for not working with neighboring states.

**Question:** What is the point of negotiation among the governors?

**Answer:** Alabama wanted guaranteed flow at the state line; Georgia was not willing to meet Alabama's term previously. The two states were within 2 hours of signing agreements two years ago. Alabama and Georgia are coming closer in resolving this issue and this may help Florida to come to the table.

**Comment:** Georgia state line is on the west side of the Chattahoochee River.

**Question:** Is this not a property right issue?

**Answer:** Technically, the State owns the water; so water withdrawal permitting is considered a use right, not a property right. Water quantity regulation traditionally has been a State issue; USEPA regulates only water quality.

### **(9) Municipal and Industrial Water Demand Forecasting Methodology**

David Ashley first gave an update on the status of population and employment projections. Over 600 comments (from 400 correspondences) were received for all planning regions; thirty-two comments were received for the Middle Ocmulgee planning region. The projections are being revised based on these comments. A baseline residential population will be prepared for the planning purpose and it would not include employment factors. The employment projections will only include only the twelve major water-using industries. The revised population projections are currently being reviewed by Office of Planning and Budget (OPB), DCA and the Governor's office and are targeted to be available in October.

Tai-Yi Su gave the presentation on the methodology that will be used for forecasting municipal and industrial water demand and wastewater flow generation. She stressed that these forecasts are basis for regional water planning and will not be used for making individual permit decisions. The forecasts also exclude any new management practice that may alter demand and are not intended to establish the efficiency of water use.

There are four demand categories: agricultural, energy, municipal, and industrial. The future water use for hydropower generation is being prepared by EPD with the assistance from the energy sectors. The municipal category includes residential, commercial and light industrial water demand. The industrial category includes only the twelve major water-using industries.

The per capita water use rate for each county will be calculated using data from USGS's guide "Water Use in Georgia by County for 2005 and Water-Use Trends for 1980-2005", as well as EPD's withdrawal permit records. Water sale/purchase between county and large industrial use will be extracted based on available data to adjust the per capita demand. The Council's input is sought for the following region specific factors:

1. Proposed range of typical per capita water use rate and factors to adjust per capita water use rate: The proposed "typical" range of municipal per capita demand is 75 to 175 gallons per capita per day. Values below or beyond this range typically indicate wholesale (water sale or purchase) or large industrial customers being supplied by the public water providers.

2. Impacts of transient population changes: Water use can be affected by potential addition or expansion of military bases, universities, new or expanded tourist attractions that might affect transient population. If the Council can provide specific information, the planning contractor would review and determine if an adjustment is needed.
3. Weather adjustment: There have been some concerns that 2005 may not be representative because it was a wet year and the overall water use was down due to less outdoor watering. Multiple years of water withdrawal records and rainfall data from 2004 to 2006 can be evaluated to determine whether an adjustment is needed. Data from 2007 and 2008 are not recommended because of the drought and the outdoor watering ban. Data from before 2003 was also not applicable because the permanent odd-even day outdoor watering restrictions became effective in 2003.

The savings gained from replacement of older toilets with low-flow water fixture after 1994's new plumbing code requirement will be estimated. Industrial water demand will be based on the current usage and growth rate projected by the employment forecasts. Wastewater projections will be based on an estimated indoor/outdoor percentage for each region (only the indoor water use generates wastewater that is collected by a sewer system). Part of the municipal wastewater is treated in septic tank (on-site sewage management system) and part of it is treated in centralized wastewater treatment facilities. Distribution of treated effluent to point discharges and land application system will be based on the current ratio between point discharges and land application systems. Changes to effluent disposal ratio will be considered management practices.

The council was also asked to provide input on future trend of on-site sewage management system (septic tank) versus centralized wastewater treatment. Will the ratio (on-site versus centralized treatment) stay the same? Will the trend continue or will a customized scenario be needed based on wastewater service expansion plan or other factors?

**Question:** Bibb County also supplies to other counties (Jones and Monroe). Will that be taken into consideration?

**Answer:** Yes. The data reflects this. As an example, Macon Water Authority provides water to several counties outside of Bibb County and has several large industrial customers, the per capita calculated based on withdrawal rate is on the high side. On the other hand, Jones County's per capita water use is lower because it purchases water from MWA and the withdrawal is within Bibb County. We plan to account for water sale/transfer between counties, if data is available, to better estimate actual usage for each county.

**Question:** Also, the utility may plan to expand water lines to meet demand, so the small area with wells may change in the future.

**Answer:** Yes. The Council can help with this. Please share local information and future expansion plan with the planning consultants to help refine this process.

Only the municipal demand forecast will be prepared on a county basis. The industrial demand will be on planning region basis because of the sensitivity of the locations.

**Question:** Have you reached out to the local water providers/utilities to find out how well these data fare? It can skew everything if it isn't consistent.

**Answer:** We have not; the first step is to use EPD permit data to refine the USGS data. We certainly hope we can get input from local water providers. We are working with EPD on a process to solicit input but decision has not been made yet.

**Request:** Council member (Paul Leath) made a request to EPD to reach out to water providers statewide to find out whether the calculation based on USGS data is close. The providers can also share information on areas with projected growth and their future expansion plans

**EPD:** Notion of checking in with folks is a good idea.

**JJG:** Will follow up to see if we can roll out a consistent approach for all planning contractors for all planning regions. The EPD records we have consist of existing or past water usage, and would not have information on future expansion plans.

### **(10) Agricultural Water Demand Forecast**

Dr. Jim Hook of UGA presented the revised agricultural demand forecasts. He showed the council where to find the Ag demand data by county on the website. He emphasized again that this information will not be used for permitting decision, but for planning purpose.

We have past usage acreage from farmers. There are approximately 1,450,000 irrigated acres.

Major source of data:

- State Soil and Water Conservation Commission (SWCC) has responsibility to meter agricultural water usage.
- EPD permit records: Irrigation rate greater than 100,000 gallons per day (gpd) will trigger need for a permit.
- Aerial imagery: Showed clearly where fields have center pivot irrigation systems.

What crop is grown?

Several crops were added after receiving public comments after the initial forecast. Ag demand forecast does not including landscape irrigation, live stock, and food processing water use. Dr. Hook showed the monthly variations of irrigation demand versus annualized water usage during wet and dry years.

**Question:** Looked at number of nursery operations and found some gaps in data. The current forecast showed 21 acres of nursery going to 24 acres in 2050. They registered 650 acres vs. 21 acres in Pulaski County. Peach County has 0 acres in the forecast and the reported is several hundred acres.

**Answer:** Acreage for special commodities came from mapping and irrigation survey conducted by each county each 3 to 4 years. The data could change significantly from year to year and Dr. Hook had to use existing available data. Blueberry farms have the same challenge – the irrigated acreage can change from year to year. Council members may be able to provide more specific information.

**Comment (Cliff Lewis):** Only irrigation usage is considered for the farm, but not poultry or cattle usage. Poultry is captured under the industrial category under “food”, not under agricultural demand.

**Question:** What demand forecast is considered acceptable and when?

**Answer:** It is up to the council to decide whether the data is acceptable for moving forward.

**Question:** Is water for irrigation considered consumptive?

**Answer:** Approximately 20% is considered loss for evaporation and inefficiency. 80% is the standard assumption for efficiency.

**Question:** Why is there is zero quantity for irrigation in Bibb County?

**Answer:** Because the acreage was so small and there is no reported withdrawal (they are likely < 100,000 gpd each) in Bibb County; need to get the information from the council to make adjustment.

**Comment:** It can cause tension when calling upon the people who are irrigating but do not have permits. It is important to make people understand that this information will not be used for permitting decision, but for planning purpose.

**Comment:** Sod production in Peach County is likely double what was in the current projections. Found discrepancies in all counties from data from Association of Nursery Industry. How can we get better data for creating the baseline projections?

Dr. Hook encouraged Council members to look at the information on the website even up to available acreage (mapping information) and provide specific information to Dr. Hook for consideration.

#### **(11) Vision Statement**

Charlotte Weber presented the following revised vision statement the sub-committee worked on during lunch time:

*The Middle Ocmulgee Water Council will work so that our water resource, both surface and subsurface, is of exceptional quality and quantity for the well being and prosperity of all that will follow. Our plan will consider the resource's natural integrity, wise conservation and prudent management for continuing economic development and enhanced quality of life for all the region's citizens.*

There was no further comment. Chairman Richardson made a motion to adopt the revised vision statement. The vision statement was unanimously approved by the council.

#### **(12) Management Practices**

David Ashley gave an overview of Management Practices. Management practices can be applied to decreases demand or increase resource capacities.

Water conservation is a priority management practice. Common strategies include conservation-oriented rate structures, public education, demand management incentive programs (low flow fixture retrofit/rebate program), water system loss reduction, and outdoor watering restrictions.

There are lots of interests in expanding existing reservoirs – it can be an economic way to obtain additional storage without too much additional environmental impacts. Quarries, if geologically suitable, can be turned into additional storage for water supply purposes. One of the examples is that the City of Atlanta has purchased an existing quarry to add 2 billion gallons of storage.

**Question:** How about the Dawson County reservoir?

**Answer:** Don't know where the project would go. It was a site initially purchased for the City's 2<sup>nd</sup> airport. It was a private proposal to turn part of the land into a water supply reservoir. One of the obstacles is that the proposed reservoir is located in the Etowah River Basin and the pumped water would be an interbasin transfer into the Chattahoochee River Basin, or the water could possibly end up in the Ocmulgee River Basin if the pumped water is used in Gwinnett County. There is an extensive process laid out to evaluate interbasin transfer proposals in the State Water Plan.

Other water quantity management practices include water reuse, desalination, groundwater sources and inter-basin and intra-basin transfers.

Increasing return to river/streams also is a water quantity management practice. The benefit of centralized wastewater treatment is that it can minimize consumptive loss and increase return to rivers. It is both a water quantity and quality management practice. Wastewater treatment technology has advanced greatly and it is possible to produce effluent close to drinking water quality.

Land Application System (LAS) – Applying treated effluent on land and typically on non-food crops. Treatment is continued in vegetation and soil layers. There may be a lag on (treated wastewater) return to streams or to the aquifer during seasons with high evapotranspiration rate.

**Question:** What is the percentage of LAS versus point discharge?

**EPD:** Don't have the data at hand. It may be close to 50/50 but will have to look at data.

Some of the water quality management practice examples include centralized wastewater treatment, land application systems, on-site sewage system management plans, best management practices (BMP)/low impact development solutions (for management of non-point source pollution).

LAS and centralized wastewater treatment are both quality and quantity management practices. Onsite Sewage Management System (septic tank) traditionally is not regulated by EPD, but by County Health departments. Older systems can fail and cause water quality problems; it is important to educate home owners about it. Low Impact Development (LID) is a group of green infrastructure BMP techniques that are designed to mimic the natural hydrologic cycle and to reverse the impacts of impervious surfaces on the water resources.

**Comment (Adriane Wood of DCA):** DCA has worked with the Southface Energy Institute and the Georgia Conservancy on green infrastructure for storm water management.

### **13) Local Elected Officials Comments**

There were no comments by local elected officials.

### **14) Public Comment**

Patti Lanford (DNR fish and wildlife) – Will attend meetings as a resource for the council. Fishery is an important recreational activity for the state. She urged the council members to consider instream water use for maintaining aquatic life.

Shana Udvardy (Georgia Conservancy) – Stressed the importance of joint council meetings. The fact that we need joint council meetings indicated that the regional planning boundaries are not a good fit (compared to river basin boundaries). Upstream councils will affect downstream users. She urged the

council members to consider 1) instream flow requirement. It would benefit aquatic life and eventually benefit the coast by allowing water going downstream; 2) open process for public involvement/ comments: suggest that the council offer opportunity for the public to provide input through website, for different topic area and for different councils; 3) facebook/whitebook of council members – helps general public to get familiar with council members and to get in touch with you; 4) on the push for reservoirs in Georgia – there are a lot more we can do with efficiency; we can do more with conservation to reduce water use, especially outdoor water use. An example is to impose permanent day time outdoor watering ban – lots of other areas do it; 5) Promoting efficiency for agricultural irrigation; 6) Desalination is not cost efficient. Please review the recommendations on the Georgia Water Coalition 2009 annual report.

### **15) Meeting Wrap-up**

Calendars for November 2009 were distributed to the Council to aid in scheduling the next meeting. EPD goal is to have the next meeting between November 9 and 20. Meeting adjourned at 3:10 PM.

### **16) Summary of Action Items**

1. Council members to return comments on goals to the Chairman or the planning consultant.
2. Council members to provide additional comments to the planning contractor for preparing a final draft of the PIP for adoption at Council Meeting #4.
3. Chair/Co-Chair to review PIP suggestions and decide how best to meeting suggestions.
4. Planning contractor to coordinate with EPD to invite Dr. Wei Zeng and Dr. Jim Kennedy for Council Meeting #4.
5. Planning contractor to coordinate with EPD to obtain input from large water utilities for municipal water demand and wastewater flow forecasts.
6. Council members to provide available irrigation data and comments to EPD and Dr. Hook for agricultural demand forecast.

### **Meeting Attendees**

#### **Council Members in attendance**

Russ Adams

Tony Bass

John Bembry

Jason Briley

Ben Copeland Jr.

Keith Dalton

Jerry Davis

Richard Haddock

Jim Ham

Charlie Harris

William Lazenby

Paul Leath

Hal Newberry

Harvey Norris

Eva Persons

Barry Peters

Robert Ray

Elmo Richardson

Terry Scarborough  
William Whitten

Thomas Whicker

Council Members not in attendance

Blair Cleveland  
Robert Dickey  
Bobby Hamby  
Jay Matthews

Larry McSwain  
Tony Rojas  
Van Whaler

Staff in attendance

Kevin Ferrell – EPD  
Ted Hendrickx – EPD  
Elizabeth Booth – EPD

David Ashley – JJG  
Tai-Yi Su – JJG  
Charlotte Weber – JJG

Partnering Agencies and General Public

\*Adriane Wood (Department of Community Affairs - DCA)  
\*Karol Kelly (UGA Cooperative Extension – Bibb County)  
\*Keegan Malone (GSWCC - Georgia Soil and Water Conservation Commission)  
\*Sharon Marshall (Three Rivers Regional Commission)  
\*Patti Lanford (GADNR – WRD – Fisheries)  
\*Kristi Harpst (Middle Georgia Regional Commission)  
\*David Eigenberg (GSWCC)

Dr. Jim Hook (University of Georgia NRSPAC)  
Skip Langley (Regional Representative for Senator Johnny Isakson)  
Bill Stembridge (Regional Representative for Senator Saxby Chambliss)  
Bryan Tolar (Georgia Agribusiness Council, Agribusiness.org)  
Mark Wyzalek – Macon Water Authority  
Shana Udvardy (Georgia Conservancy)  
Amanda Marshall (Georgia Conservancy)  
Brandon Ashley (Georgia Farm Bureau)  
Les Ager



Cliff Bowden (Georgia Farm Bureau)

Tas Smith (Georgia Farm Bureau)

Brad Spooner

\*Indicates attendee represented an agency