



Georgia's State Water Plan

Middle Chattahoochee Water Council Meeting 11 September 14, 2011 – Callaway Gardens Agenda

Objectives:

- 1) Comment Review
- 2) Consensus on the Final Plan
- 3) Resolution to submit Final Plan to EPD

- 9:00 - 9:30 a.m. Registration
- 9:30 - 9:45 Welcome, Introductions, Chairman's Discussion - Matt Windom
Adopt April meeting summary, review agenda
- 9:45-10:00 Discussion of GA EPD Direction to the Councils - Matt Windom
- 10:00-12:00 Overview/Discussion of Comments Received - Jim Hawkins
- 12:00-1:00 Lunch
- 1:00-1:30 Local Elected Official and Public Comments
- 1:30 - 2:00 Final Discussion of Plan for Submittal to EPD
- 2:00-2:30 p.m. Resolution - Adoption of Plan for Submittal to EPD

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To: Middle Chattahoochee Water Planning Council

From: Jim Hawkins, Robert Osborne, and Steve Simpson, Black & Veatch

cc: Tim Cash, Assistant Branch Chief, GA EPD

Subject: Meeting Summary: Council Meeting 10 on April 13, 2011

The council meeting was held on April 13, 2011 at the Bartlett's Ferry Dam Clubhouse (Lake Harding). The list of attendees is follows (Attachment 1). In addition to these minutes, the presentations (slides) discussed in this meeting will be posted on the Middle Chattahoochee web portal (<http://www.middlechattahoochee.org/>).

Welcome and Introductions

Council Chair Matt Windom stated that a quorum was present and thanked everyone for attending. Chair Windom said he was impressed with the council member turnout. Chair Windom recognized the passing of council member Larry Clark with a moment of silence and then provided an invocation. After an introduction and safety message from Arnold Lindsay, Southern Company's Plant Supervisor at Bartlett's Ferry Dam, Windom allowed members of the public to introduce themselves. The public sign-in sheet is included as an attachment.

Next, Windom asked if there were any comments for the last two Council meeting summaries. There were no comments and both summaries were approved by consensus. Next, Chair Windom said they needed to again have elections for chair and vice-chair. Council member Jeff Lukken nominated Matt Windom and Harry Lange for Chair and Vice-Chair, respectively. The Council approved this nomination by consensus. Windom thanked the Council.

Chair Windom commented the Plan Review Committee had met since the last Council meeting so there were a few more items to vote on today. Chair Windom reviewed the Council objectives which were the following:

- 1) Chair and Work Group Reports
- 2) Consensus on the Draft Plan
- 3) Resolution to submit Draft Plan

Overview of Plan Revisions and Plan Review Committee Recommendations

Council member Jeff Lukken asked Jim Hawkins to provide an update on the Committee's recommendations. Jim said most comments were incorporated into the draft plan; however, there were a few more comments that were received and are summarized as a handout to the Council. Jim provided a brief overview of comments incorporated into the draft since the last Council meeting.

Jim reviewed each of the eight items in the handout, beginning with the following Item 1:

Item 1. page 3-14, insert the following additional impact:

***River Flow Impacts.** In addition to Corp operations and the affects on river flow, the Council is concerned about upstream and regional consumptive use and flow returns to the river. Upstream interbasin transfers and increases in consumptive use reduce downstream flows and reduce the natural flows in the river. The Council encourages better stewardship through land use planning and permitting to maximize flow returns to the river. Furthermore, a more scientific understanding is needed for such uses as agricultural irrigation, wastewater land application, and septic systems in order to better quantify the water balance with truer representations of consumptive uses associated with these uses.*

Council member Ken Penuel asked if this item speaks to the upcoming ACF Master Water Control Manual update. Jim said yes and also mentioned that actually all of the points in Chapter 3 relate to the updated control manual. Council member Steve Davis asked if this language also addresses issues during times of drought. Jim said yes.

There was no further discussion on this item.

Next, Jim reviewed the following Item 2:

Item 2. page 3-12, add the following to the first paragraph:

Similarly, the relationships between water turbidity, water detention/velocity, water temperature, precedent weather/flow conditions, pH, growing season duration and algal growth require further study in West Point and Walter F. George lakes to establish a chlorophyll-a standard that is appropriate for these reservoirs. A chlorophyll-a standard of 25 micrograms/liter for Walter F. George Lake has been suggested as reflective of Southeastern Plains Ecoregion reservoirs (Raschke 1994, EPA 1999).

Council member Steve Davis commented that there were inconsistencies with the chlorophyll-a modeling and we need more scientific study especially for different ecoregions.

Next, Jim reviewed the following Item 3:

Item 3. page 3-5, add the following to the second paragraph under **Navigation:**
Navigation is important to the regional economy and must be maintained between Columbus and Apalachicola Bay.

Ken Penuel commented that he had heard the locks will be potentially reduced to three times a day for maintenance and suggested we may need to address funding. Council member Paul Chappell thought this language implies funding. Jeff Lukken agreed they did not want to interject the Council into the ACOE business. Penuel agreed with Lukken.

Jim reviewed the following Item 4:

Item 4. page 6-4, Table 6-1, revise WW-2 as follows:

WW-2: Encourage studies to determine the appropriate water returns ratios for <u>agricultural irrigation and wastewater land application and septic systems</u>	The assumption of 100% consumptive use is believed to inadequately reflect the quantity and timeliness of water returns from <u>agricultural irrigation and wastewater land application and septic systems</u> . This exacerbates the magnitude and duration of gaps in the EPD resource assessments. The studies would be scaled to reflect appropriate geographic and physiographic provinces, since returns would be dependent on topography, soil, and climate differences.
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There was no discussion on this item.

Jim reviewed the following Item 5:

Item 5. page 7-14, Section 7-4 Recommendations to the State, at the end of Recommendation 1, insert the following:

The following modeling constraints are the beginning point for revisions to the Corps' water control manual.

INSERT Table 5-1 showing the desire flows and lake levels

Chair Windom commented that the language really tried to look at the entire basin and not just Middle Chattahoochee.

Next, Jim reviewed the following Item 6:

Item 6. page 7-16, revise the third recommendation to read as follows:

3. Metro North District Returns and Nutrient Loading

The May 7, 2009 Metro North District Plan includes ambitious predictions of returns to the river for which the Middle Chattahoochee resource assessments now greatly depend. The Council would like a comprehensive audit of these predictions and ongoing measurement and regular reporting on the progress to achieving these goals. Furthermore, the Council desires that such progress be reported as a range of statistical flows, including mean, minimum, and maximum values of consumptive use.

The Middle Chattahoochee Council is also concerned about the nutrient load increase projected for 2050 that is estimated at the Whitesburg gauge. Nutrient loadings of phosphorus and nitrogen are expected to increase 200 percent by 2050. The Middle Chattahoochee region should not be burdened with additional waste water treatment or storm water BMPs caused by increases in upstream discharges.

Specific to nutrients, the Council is concerned about the increases in phosphorus and nitrogen and the resulting chlorophyll-a to West Point Lake and Lake Walter F. George and the potential for degradation of lake water quality.

The Council requests that the Metro North District provide: 1) specific details of how the increased nutrient load will be mitigated before it reaches the Middle Chattahoochee basin, and 2) provide annual progress reports of nutrient levels and reduction effectiveness.

Finally, the Council recommends a peer review of the lake and watershed models to better understand the methodology as it relates to the output and calibration. Pending the review, the council recommends that the model outputs not be utilized for setting water quality standards instream or for any other regulatory purposes, including point source permitting in the region.

Lukken asked the Council what we are asking EPD to do with this language. Lukken continued and asked if the Council wanted EPD to permit without modeling. Council member Steve Davis thought we were asking EPD to “holdup” on the modeling until the model is peer reviewed. Chair Windom said he felt many council members were uneasy about the model. Steve Simpson noted that these ideas about the model are reflected in different parts of the plan. After some more discussion, there was consensus to leave the text as suggested.

Next, Jim reviewed the following Item’s 7 and 8:

Item 7. page 8-6, insert the following text as follows:

The Council recommends an increased awareness of water balance in the region and therefore, has requested that additional measurement and water return ratio studies be performed to better understand consumptive uses and related water returns. Once completed, this information will better equip the Council and region for managing consumptive uses and allow the Council’s vision of an abundant water supply for our descendants to be achieved.

Item 8. pages 8-5 to 8-7, the following change will be made:

*Referring to EPD discussions with Black & Veatch about the draft plan Section 8-5 will be removed and will be incorporated into an **Executive Summary** that will be inserted at the beginning of the plan.*

There were no discussions on these items. However, a council member did ask if the Council needed to revise the census number to reflect the actual census numbers for 2010. Chair Windom thought this would not change the results much in the plan and was probably better to defer this change.

There was no further discussion. Each of the items will be incorporated into the plan.

Final Discussion of the Plan for Submittal to EPD and Plan Process/Timeline

Chair Windom asked the Council members if they have any additional comments about the plan. Council member Aaron McWhorter said he was concerned that the plan did not discuss erosion control sufficiently. Council member Gordon Moss said the plan did discuss erosion control on page 6-7 of the plan. Lukken suggested they should have a system to address any council comments. Jim Hawkins said he or Steve Simpson would help Council Members with questions.

Chair Windom asked the Council if there were any other final comments and told the Council there will be another chance to comment after the public comment period.

Council member Paul Chappell asked what was the timeline for the Council going forward. Steve Simpson said this is a good question and reviewed the following milestone schedule with the Council:

<u>Completion Date</u>	<u>Milestone</u>
April 13, 2011	Council Meeting 10
May 2, 2011	Recommended Plan to GA EPD
May-July 2011	Public Notice of Draft Plan
August 2011	Final Production of Adopted WDCP
September 30, 2011	GA EPD Approves the Middle Chattahoochee Regional WDCP

Council member Steve Davis asked the Council if they will meet again. Steve Simpson said they have talked with EPD about another September Council, but this is not confirmed.

Resolution - Adoption of Plan for Submittal to EPD

Chair Windom passed out a resolution (Attachment 2) and asked the Council to consider this resolution. Paul Chappell made a motion to adopt the plan for submittal to EPD. Jimmy Knight seconded this motion. Chair Windom asked the Council in a vote. The resolution to adopt the plan for submittal to EPD passed unanimously.

Public comments

Next, Chair Windom asked if there were any local elected officials or members of the public that would like to comment. There were no comments.

Wrapup/Council Meeting 9 Evaluation

Council member Alan Bell asked the Council if it true that Judge Magnuson's ruling is being reversed. Several members said no. There is a potential that the ruling may be stayed, but there is no judgment yet.

Next, Windom praised EPD. He said EPD honored its commitment to back away from the process and he appreciates that. Tim Cash said it was a fine plan and recognized the council members for their hard work.

Finally, Chair Windom thanked the council members, Black & Veatch, and stakeholders. There were no additional comments and the meeting was adjourned.

Attachment 1:
Middle Chattahoochee Water Planning Council
Council Meeting Attendance – April 13, 2011

Council Members

Alan Bell
Paul Chappell
Steve Davis
Philip Eidson
Thomas Ellis
Joe Griffith
Jimmy Knight
Harry Lange
Jeff Lukken
Aaron McWhorter

Gordon Moss
Ken Penuel
Denny Rogers
Jimmy Thompson
Robert Watkins
Don Watson
Matt Windom
Jim Woods
Robie York

Council Members Not In Attendance

Jimmy Bradley
Larry Dillard
Gardiner Garrard
Gerald Greene
Bill Gregory

Bill Heath
Joe Maltese
Walter Rosso
Randy Simpkins
Brad Yates

Planning Consultants

Jim Hawkins, B&V
Steve Simpson, B&V

Robert Osborne, B&V

Georgia EPD

Tim Cash, Assistant Branch Chief
Bill Morris

Georgia State Agencies

Patti Lanford, GA DNR – WRD Fisheries

Attachment 2
Council Resolution

**A RESOLUTION
BY COUNCIL CHAIR MATT WINDOM
MIDDLE CHATTAHOOCHEE REGIONAL WATER PLANNING COUNCIL**

A RESOLUTION AUTHORIZING MATT WINDOM, COUNCIL CHAIR, AND HARRY LANGE, VICE-CHAIR, ON BEHALF OF THE MIDDLE CHATTAHOOCHEE REGIONAL WATER COUNCIL, TO SUBMIT THE COUNCIL'S RECOMMENDED STATE WATER PLAN TO ALAN BARNES, DIRECTOR OF THE ENVIRONMENTAL PROTECTION DIVISION ON OR BEFORE MAY 2, 2011 FOR THE PURPOSE OF PLAN REVIEW AND APPROVAL IN ACCORDANCE THE JANUARY 8, 2008 GUIDANCE DOCUMENT TITLED, *GEORGIA COMPRHENSIVE STATE-WIDE WATER MANAGEMENT PLAN*, ADOPTED BY THE COUNCIL IN IT'S 2009 MEMORANDUM OF AGREEMENT WITH THE ENVIRONMENTAL PROTECTION DIVISION.

WHEREAS, during its 2004 session, the General Assembly passed the "Comprehensive State-wide Water Management Planning Act" (O.C.G.A. §12-5-520) that declared the need for a comprehensive state-wide water management plan and set forth policies to guide regional water planning efforts; and

WHEREAS, O.C.G.A. §§ 12-5-31, 12-5-96, and 12-5-522 call for the preparation of regional water development and conservation plans; and

WHEREAS, the purpose of this plan, as stated by O.C.G.A. §12-5-522(a), is to guide Georgia in managing water resources in a sustainable manner to support the state's economy, to protect public health and natural systems, and to enhance the quality of life for all citizens. The plan lays out statewide policies, management practices, and guidance for regional planning. The provisions of this plan are intended to guide river basin and aquifer management plans and regional water planning efforts statewide in a manner consistent with O.C.G.A. §§12-5-522 and 12-5-570 et seq.; and

WHEREAS, the Governor, Lieutenant Governor, and Speaker appointed members of the Middle Chattahoochee Regional Water Planning Council (the Council) and charged them with developing such a regional plan; and

WHEREAS, the Council agreed in a 2009 Memorandum of Understanding between the Council and the Environmental Protection Division (EPD) to develop and submit a recommended regional State Water Plan to the EPD Director; and

NOW, THEREFORE, BE IT RESOLVED BY THE MIDDLE CHATTAHOOCHEE REGIONAL WATER PLANNING COUNCIL, the Council Chair, Matt Windom and Vice Chair, Harry Lange, are hereby authorized to submit the Council's draft recommended plan to the EPD Director on or before May 2, 2011 for the purpose of plan review and approval.

BE IT FURTHER RESOLVED, this plan represents the consensus approval of the Council as to the overall content of the plan.

BE IT FURTHER RESOLVED, the plan is inclusive of attachment documents reference therein which include meeting minutes of all Council meetings, Joint Council meetings and Work Group meetings. Contained in these meeting minutes is a record the opinions, objections, requests and debate by Council members on specific issues of the plan.

BE IT FURTHER RESOLVED, the Council requests the Director to review the recommended plan and attachments thereto to determine if they are consistent with the rules for regional water planning and guidance adopted pursuant to those rules.

BE IT FURTHER RESOLVED, the Council requests that EPD solicit public comment on the draft plan.

BE IT FURTHER RESOLVED, the Council welcomes public comment to the draft plan and will endeavor to make any revisions as may improve upon the plan.

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

August 23, 2011

Mr. Matt Windom, Chairman
Middle Chattahoochee Water Planning Council
991 Dixson Road
Bowdon, Georgia 30108

RE: EPD Comments on Middle Chattahoochee Council
Initial Recommended Water Plan

Dear Chairman Windom:

I want to thank you for your timely submittal of the Middle Chattahoochee Regional Water Planning Council's initial recommended regional water plan for EPD's review. In addition to EPD's review of your Council's plan to determine if it is consistent with the requirements of the State Water Plan and the rules for regional water planning and guidance adopted pursuant to those rules, EPD has provided, and just completed, a forty-five day public notice and comment period for all ten initial recommended regional water plans.

This letter serves to transmit EPD's comments arising from EPD's review of your Council's plan, as well as public comments received. This letter highlights those additional measures necessary to complete your Council's recommended plan by September 30, 2011, to make it consistent with the provisions of the rules for regional water planning and guidance adopted pursuant to those rules. As the Council finalizes its Regional Water Plan, please continue to coordinate with Tim Cash and Bill Morris.

- The State Water Plan specifically highlights water conservation as a priority management practice to be implemented to help meet water demand in all areas of the state. In the final recommended plan and/or supplemental materials, the Council should consider adding additional information or narrative describing how cost and applicability of conservation practices to all water use sectors were considered in the decision making process for selection of water conservation management practices. To assist Councils in evaluating demand management practices, EPD provided Detailed Guidance for Evaluating Practices to Manage Demand dated on September 21, 2010 (see pages 8 & 9).

As required by Georgia's Comprehensive State-wide Water Management Plan, all public comments received that are relevant to the Council's regional water plan should be considered by the Council, and any changes to the plan deemed necessary should be made prior to submittal of the Council's final recommended regional water plan.

EPD looks forward to receiving the Middle Chattahoochee Regional Water Planning Council's final recommended regional water plan, revised as called for in this letter, by September 30, 2011. Once the plans are submitted, EPD will determine if the plans are consistent with the

Matt Windom

8/23/11

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State Water Plan and rules and guidance for regional planning, and will either adopt the recommended regional water plan as submitted or adopt the recommended regional water plan with conditions.

Let me reiterate my appreciation for the Council's time and efforts to develop a meaningful Regional Water Plan for the Middle Chattahoochee Water Planning Region. As reflected in nearly all of the public comments, with this set of regional water plans, Georgia has taken important and meaningful strides toward the continued sustainable management of our State's precious water resources.

Sincerely,

A handwritten signature in black ink that reads "Linda MacGregor". The signature is written in a cursive, flowing style.

Linda MacGregor, P. E.

Branch Chief

Watershed Protection Branch

Copy: Mr. Steve Simpson, Black & Veatch
Mr. Tim Cash, Georgia Environmental Protection Division

General Comments:

Page ES-4, in the table, the description of the surface water availability assessment is not fully accurate. The RA only looked at alteration in the low end of the flow regime. Consider revising based on language on p. 3-7 or limiting the statement to alteration of low flows in some other way.

Page ES-4, in resource assessment summary table, consider rewording current conditions for Chattahoochee basin to read Results in the Chattahoochee basin indicate no “gap” between ability to meet instream flow targets while meeting off-stream needs.”

In general use of the term “Gaps” – EPD defined gaps vs. council defined gaps may be confusing and overly generalized in the plan for example in the executive summary page (ES-4), Local Policy Context (page 2-9 last paragraph, etc.). Consider use of “impacts” such as on page 3-11 which may be less confusing than very broadly using “Gaps”.

Page 2-7, Local Policy Context, consider adding information update to reflect the recent 11th circuit court ruling.

Page 2-9, paragraph 1, reservoir discussion in first sentence of paragraph is confusing. Please review for accuracy.

Page 3-10, paragraph prior to table 3-3 where it states no apparent “water withdrawal gaps”, please revise to state no apparent “surface water availability gaps.”

Page 3-12, first paragraph, first sentence - spelling of “dependant.”

Page 3-13, second paragraph, in the last sentence, consider adding “100% of the time” after met.... and furthermore. Also “rationale” should be “rational” (same sentence).

Page 5-1, Section 5.1, first paragraph, in the sentence that begins “No observed shortfalls...” please add “surface water availability” after the word potential....gap.

Page 5-5, Figure 5-2, the demand numbers in the Claiborne figure are different from those shown in Kennedy's Initial Future Assessment package (updated Jan 2011 for new model calibration). Please review and correct as needed.

Page 5-7, figure 5-3, in the table that compares current and future assimilative capacity, the “at assimilative” and “exceeds assimilative capacity” stream segments are added together so it appears things get worse in the future. In several 2050 models there is a decrease in segments that “exceed assimilative capacity.” Recommend adding a column to the table to show “at” and “exceed” as separate categories.

Page 5-7, figure 5-3, in the table, verify and correct listed mileages for “very good, good and moderate” categories for current and 2050 assimilative capacity results.

Page 6-10, bullet re: farm ponds: The last sentence ("As they are not to be used...") can be interpreted in different ways. It can be taken as a conclusion about the demonstrated effects of farm ponds, a conclusion that cannot be supported by the available evidence.

Consider revising the last two sentences to be a recommendation for study, consistent with the rest of the paragraph. The recommendation for study could easily be worded in a way that clarifies the Council's intent that farm ponds be designed and used in a way that does not exacerbate gaps at low flows.

Pages 7-15 and 7-16: The first paragraph under "Metro North District Returns..." and the 2nd half of the last paragraph in that section are duplicates. Delete whichever is in the wrong place (it appears the text on page 7-16 is what needs to be deleted).

Water Conservation:

1. The Detailed Guidance page 8, (B) states: "In order to effectively evaluate the potential of demand management to close a current or future resource gap, the Council must quantify the maximum amount of water that can be saved through a water conservation portfolio of a variety of conservation practices for multiple water users in portions of the region contributing to the existence or creation of a gap." (emphasis added)

The Detailed Guidance goes on to detail five steps the Councils should take to document that they have achieved this evaluation process. Including:

"3) Evaluate the water savings achievable from implementation of the region-specific water conservation practices (for all water use sectors compiled in the water conservation portfolio...)

"3) c) The Council needs to include, as a supplement to the Plan, a brief Technical Memorandum describing the decision making process, models used, inputs and outputs, and appropriate references used to meet this objective." (emphasis added)

RECOMMENDATION: Revise the TM to include estimates in water savings for a portfolio of demand management practices.

- o Since the users in the areas expecting gaps in the Middle Chattahoochee are largely municipal, consider using the Coosa-North Georgia Water Plan as a model for estimating savings from simple conservation practices.
 - o Alternatively, document the models used to narrow the scope of potential practices evaluated, data input and outputs presented and any discussions that occurred during the decision making process. Where possible document
 - o In situations where additional data are needed to calculate demand management savings and costs, include in the implementation section of the Regional Water Plan (Section 7-1)
2. The Detailed Guidance page 8, (B) states: "In order to effectively evaluate the potential of demand management to close a current or future resource gap, the Council must quantify the maximum amount of water that can be saved through a

water conservation portfolio of a variety of conservation practices for multiple water users in portions of the region contributing to the existence or creation of a gap.” (emphasis added)

RECOMMENDATION: Revise the Plan and the TM to address multiple water users.

- Energy users are significant at 95 MGD, and Ag is too at 34 MGD; Industrial at 4 MGD (not significant)
 - Consider adding a narrative description of any discussions that occurred regarding the multiple water users conservation efforts.
 - If other water use groups are already employing water conservation practices, consider listing those practices.
 - Alternately, consider endorsing the list of basic industrial conservation practices identified in the State Water Plan – Section 8; or the benchmarks identified for energy and industrial water users in the WCIP.
 - Where data is lacking, consider including implementation actions to collect and report conservation/efficiency related activities (as a reference, use the Energy, Ag and Industrial Benchmarks in WCIP).
 - For agricultural conservation efforts, consider including in the TM language and calculations for estimating potential savings from farm practices, similar to those the Upper/Lower Flint demand management TM.
3. Page 9 of the Detailed Guidance states, “Cost is expected to be used as a comparison in selecting the appropriate portfolios (in other words, the cost of implementing demand management practices should be compared to the cost of implementing other water quantity management practices.)”

RECOMMENDATION: Revise the Plan and/or TM to include narrative describing how cost and any cost comparisons were used to finalize the list of management practices.

- The “Supplemental Guidance for Planning Contractors: Water Management Practice Cost Comparison” (revised April 2011) provides ranges of cost for a variety of water quantity management practices.

Template and Style Comments

Need to add title and date on plan cover page.

Executive Summary (ES) comes before Acronyms and Abbreviations (other plans have ES right before section 1 after TOC, acronyms & abbreviations and acknowledgements).

In general check plan for consistency with format and style templates for consistency with other RWP’s.

GEFA Comments

The Acronyms and Abbreviations table lists GEFA's name incorrectly. The correct name is the Georgia Environmental Finance Authority. GEFA's name was officially changed by the legislature in 2010.

River Valley Regional Commission Comments

River Valley Regional Commission reviewed the Middle Chattahoochee plan and found it to be consistent with the regional comprehensive plans.