



B&V Project 164139
B&V File C-1.4
June 22, 2010

To: Middle Chattahoochee Water Planning Council

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

cc: Tim Cash, Assistant Branch Chief, GA EPD

Subject: Meeting Summary: Council Meeting 6 on June 22, 2010

The council meeting was held on June 22, 2010 at the Columbus Convention & Trade Center, Columbus, GA. The list of attendees is attached. In addition to this summary, all the presentations (slides) discussed in this meeting will be posted on the Middle Chattahoochee web portal (<http://www.middlechattahoochee.org/>). The public sign-in sheet is included as an attachment.

Welcome, Introductions, and Chairman's Discussion

Council Chair Matt Windom welcomed members and thanked everyone for attending. Matt Windom provided the invocation. He then provided an opportunity for the public attending the meeting to introduce themselves.

Matt said since they had last met, he and Council Vice-Chair Harry Lange attended the Joint Leadership Meeting with ACF Water Councils on May 10, 2010. The meeting was primarily with the Lower Flint and Middle Chattahoochee Chairs and Vice Chairs. Matt thanked Jimmy Knight for attending the meeting as well. Matt said he thought the sense of cooperation with the other councils was good, and that the councils shared a concern over the shortfall at Bainbridge, with the Lower Flint council feeling that the shortfall concern was overstated. Matt said there was general concern and consensus that elimination of agricultural irrigation would be a non-starter for the Councils; however, other options should be explored. Harry Lange thought it was good building more cooperation between the Councils.

Matt also advised the council that on June 7th, the Middle Chattahoochee, Upper Flint, and Lower Flint-Ochlockonee water council chairs and vice chairs met with EPD Director Allen Barnes. Matt said that Director Barnes told the council leaders that he is not sure that some gaps can even be closed, but he expects that the councils will work toward closing gaps. Matt said several of the council leadership felt that the development of a plan that closes all the gaps was a problem; a more realistic effort would be a plan that shows we were working toward a solution. Matt reported that part of the plan may

Middle Chattahoochee Water Planning Council
Council Meeting 6
Meeting Date: June 22, 2010

B&V Project 164139
June 22, 2010

involve asking for more information. He said another point that was discussed was the importance of sharing information with the local governments, and emphasized that each council member needs to help communicate the effort to local governments. Matt also discussed the issue of funding management practices and the need to identify funding sources in the plan. Overall, he thought the meeting with Director Barnes was productive and open.

There were no questions from the Council members

Since there was not a quorum, Chair Windom deferred approval of the last council meeting summary and moved forward with the agenda.

Assessment Forecasts Update

Robert Osborne from Black and Veatch gave an update on water demand forecasts. Corrections have been made in several forecasts, and in some cases, the forecasts are still not complete (i.e., energy). Robert explained how transient population from Fort Benning has been incorporated into the water demand forecasts. The basis of this data was provided by Council Member Steve Davis.

The agricultural water demand forecasts have been revised and include forecasts for nursery operations, as well as current snapshot information for animal operations and golf courses. Aaron McWhorter questioned the agricultural irrigation projections summary that shows no irrigation in Heard County; this is not correct.

Council member Jeff Lukken asked for clarification on how the Ft. Benning transient population was used in the demand forecasts, asking, "Were the figures added to the population numbers?" Robert replied saying that the OPB population figures do not include transients, but for water demand forecasting we summed the water demand forecasts for the permanent population included in the OPB forecasts with the water demand forecasts for transient population at Ft. Benning to determine the total water demand forecasts.

Joe Maltese questioned whether the energy information was from Georgia Power only, and what the vetting process was. Steve Simpson replied that EPD has formed an industry input group that includes Georgia Power; the current resource assessment and initial future assessment uses existing reported use data, not permitted quantities.

Matt Windom voiced a general concern about whether it would be appropriate to include a safety factor in the demand projections to account for future industries that may not be present today, as well as a more conservative approach to water planning to ensure that adequate supply is available in light of uncertainties in future projections. Steve Davis

Middle Chattahoochee Water Planning Council
Council Meeting 6
Meeting Date: June 22, 2010

B&V Project 164139
June 22, 2010

agreed with this concern. Matt Windom asked whether other councils were considering a “safety factor” approach.

Joe Maltese advised of a concern about coordination when future conditions change. Tim advised that the plans will be used as a checklist in addressing future permitting and GEFA financing activities.

Resource Assessment Work Group

Jim said the work group has been meeting every three to four weeks since April. Members include Steve Davis, Jimmy Knight, Joe Maltese, Gordon Moss, Denney Rogers, Don Watson, Jeff Lukken, Matt Windom and Harry Lange. Jim brought the Council’s attention to the Work Plan, which presents high level goals, a fall-summer schedule, and a summary table of the water quantity modeling requested for the ACF Basin (this provides direction to Wei Zeng’s modeling group at EPD). He stressed this is a work in progress.

Jim explained that both Scenario 5 and 6 will describe two scenarios in 2050. Scenario 5 (Future State) will be based on current operating rules for the Federal lakes. Scenario 6 (Desired State) will depict the ACF subject to changes to the operating rules for the Federal reservoirs. Jim stressed that Scenario 5 are the criteria by which the Council was intended to evaluate the future state. It also provides important references and comparisons to the 2010 Baseline analysis . However, the work group recognized that the current operating rules on Federal Lakes are under review and may change again after the AL-GA-FL litigation is settled. Therefore, the work group decided to evaluate the ACF Basin subject to some changes to the operating rules, hence Scenario 6. EPD has been agreeable to consider Scenario 6, but has reminded the work group that changes to the operating rules will require Congressional authorization and take many years to gain approval.

Jim noted that the committee has just begun to consider the initial results of Scenario 5 and how to express the gaps. The group hasn’t yet begun to consider management practices to close gaps. Jim said the June 10, 2010 work group meeting minutes (sent to all Council members) provide a good snapshot of the group’s latest efforts.

Council member Joe Maltese asked for clarification on the determination of “average shortfall” and “maximum shortfall” and asked what was the frequency of the averages? Jim responded saying the average shortfall was the average of all days until 2050 wherein the modeled flow was below adjusted flow regime. At the Bainbridge node, there are approximately 2500 days during the 70 year planning period wherein this shortfall occurs. The maximum shortfall is the one day having the greatest shortfall. Jeff Lukken commented that, since approximately 90 percent of the time there is no shortfall, that he is still most concerned about drought conditions.

Middle Chattahoochee Water Planning Council
 Council Meeting 6
 Meeting Date: June 22, 2010

B&V Project 164139
 June 22, 2010

Council chair Matt Windom noted that the 2007 drought showed the largest number of shortfall days (in any one year) and that the maximum shortfall occurred during the 1986 drought.

Matt also noted that there are no water quantity shortfalls in the Chattahoochee river system since conservation storage in the Federal reservoirs are used to supply the future demands. Council member Joe Maltese commented that the reservoirs are sacrificed to meet rivers flows and demands and that this may not represent a state that the Council will reach consensus approval.

Chair Windom thanked Black & Veatch for their effort.

Surface Water Availability Forecasts and Modeling Conditions

Steve Simpson reviewed the results of the recent surface water availability model runs. Steve explained that the new analysis includes two model runs:

1. Revised Current Conditions: This updates the current conditions model run presented at the joint meetings in January. Revisions include changes to demand inputs, including Alabama demands, energy demands, and agricultural demands.
2. Baseline Future Conditions: This includes 2050 forecasted demand conditions with no new management practices applied.

Steve noted that the process was still very active and that further revisions were to be expected. Steve presented the following results.

Surface Water Availability Model Results **Revised Current Conditions and Initial Future Conditions**

FLINT

	Length of Shortfall(% of time)	Average Shortfall (cfs)	Long-term Average Flow (cfs)	Maximum Shortfall (cfs)	Corresponding Flow Regime (cfs)
MONTEZUMA					
Current	<1%	61	3391	94	623
2050	<1%	1	3429	1	593
BAINBRIDGE					
Current	13%	361	7880	1376	2506
2050	11%	316	7981	1215	2506

CHATTAHOOCHEE

Middle Chattahoochee Water Planning Council
 Council Meeting 6
 Meeting Date: June 22, 2010

B&V Project 164139
 June 22, 2010

	Demand Shortage (cfs)	At-site Flow Requirement Shortage (cfs)	Minimum Reservoir Storage (acre-feet)	Minimum Percentage Reservoir Storage	Basin-wide Flow Requirement Shortage
WHITESBURG					
Current	0	0	539,960	50%	None
2050	0	0	471,867	43%	None
COLUMBUS					
Current	0	0	14,310	5%	None
2050	0	0	14,269	5%	None
COLUMBIA					
Current	0	0	30,816	13%	None
2050	0	0	64,924	27%	None
WOODRUFF					
Current	0	0	585,086	36%	None
			at Buford, WP, & WFG	at Buford, WP, & WFG	
2050	0	0	551,060	34%	None
			at Buford, WP, & WFG	at Buford, WP, & WFG	

Steve explained that the Bainbridge node shortfall includes both the effects of consumptive water use between Montezuma and Bainbridge as well as diversions of water to reservoirs in the upper part of the basin. Steve advised that the diversion effect included both physical pumping to reservoirs and tributary flow interception by reservoirs. To better explain the maximum shortfall, he presented the following breakdown of results showing the contribution to the shortfall by consumptive water use and the calculated contribution to the shortfall by upper basin diversions.

Middle Chattahoochee Water Planning Council
 Council Meeting 6
 Meeting Date: June 22, 2010

B&V Project 164139
 June 22, 2010

BAINBRIDGE NODE GAP – SUMMARY

Scenario	Length of Shortfall (% of time)	Average Shortfall (cfs)	Long-term Average Flow (cfs)	Maximum Shortfall (cfs)	Corresponding Flow Regime (cfs)
Total Flow Gap	13%	361 (233 MGD)	7880 (5093 MGD)	1377 (890 MGD)	2506 (1620 MGD)
Due to Lower Basin Water Use	13%	339 (219 MGD)	7880 (5093 MGD)	816 (528 MGD)	2506 (1620 MGD)
Due to Upper Basin Diversion	6%	72 (46 MGD)	7880 (5093 MGD)	636 (411 MGD)	4246 (2744 MGD)

Steve

reminded the Council Members that Wei Zeng encouraged the council to focus on the average shortfalls; the bottom line from this analysis is to focus on what management practices can be implemented to reduce consumptive water use.

Council member Steve Davis expressed concern that if increased returns from the Metro North District were due to conversion of septic tanks, he believed this was not enforceable. Council chair Matt Windom agreed and reminded the Council that we have to be comfortable with these numbers. Tim Cash noted that while the plan does not have a separate enforcement mechanism, the plan is enforceable because EPD will not be allowed to issue a permit and GEFA will not be allowed to provide funding if an entity is not following the water plan.

Council member Jeff Lukken expressed the view that on average, and approximately 90 percent of the time, there are no gaps and no shortfalls. He urged the council to keep this in mind and to focus on times of drought and the practices to address times of shortfall.

Council member Ken Penuel asked whether the Lower Flint council had endorsed a reduction in consumptive use. Steve said while agricultural concerns use a lot of water, the agriculture community wants to ensure that the associated water demands are not overstated. The Lower Flint Council has been focused on comparing the agricultural projections with the agricultural metering program results and now appears to be fairly satisfied that the numbers are in the right range.

Chair Windom commented that we are going to do our best to close the gaps in the ACF Basin and these measures will require the ACF Councils' cooperation.

Middle Chattahoochee Water Planning Council
Council Meeting 6
Meeting Date: June 22, 2010

B&V Project 164139
June 22, 2010

Council member Ken Penuel asked “So what is the perception [of the initial Scenario 5 results]? Are the results good or bad?” Steve said the perception is different for each user.

Council member Joe Maltese said the Army Corps of Engineers modeling suggests that the gaps are much greater. He said the Council has to understand what these shortfall numbers means for the drought. He said it is all relative with the modeling assumptions. For example, are we starting with full or half-filled lakes? Steve noted that he believes the EPD model started with the lake full at the beginning of the modeling runs. Council Member Aaron McWhorter commented that to assume the lakes are going to be full is somewhat naïve and added, “The lakes were not full just prior to the 2007 summer drought and yet we managed through these conditions”.

Council member Don Watson asked if the modeling reflected Alabama demands. Steve said yes, both the existing and future resource assessment runs include only existing demands, as no forecasting was performed for Alabama.

The increased returns in the Columbia node were discussed. Steve Davis advised that this make sense, as increased water demands in the Columbus area are reflected at the Columbus node and the increased returns were reflected in the Columbia node. Since the returns from the Columbus area are greater than water withdrawals between Columbus and Columbia, consumptive demand appears to be negative.

Steve Simpson then presented several graphs prepared to help the council express the qualitative gaps identified. The two primary concerns were West Point Lake level and river flow at Columbus. The 2050 model results were used to calculate an exceedance curve by level for West Point Lake. This curve can be used to express the amount of time lake level is projected to be below desired levels, which some council members view as a qualitative gap. The 2050 model results were also used to calculate a daily flow exceedance curve at Columbus. This curve can be used to express the amount of time river flow is projected to be below desired levels, which some council members view as a qualitative gap. Matt Windom commented that he found them useful. Joe Maltese asked if another curve could be added to the lake level exceedance graph to indicate lake level without the effects of consumptive water use. Steve Simpson advised that he was not sure if the model results could be disaggregated this way, but would check.

Chair Windom asked Steve to present surface water availability modeling results for the Tallapoosa basin. Steve said these results were not included in today’s presentation, but would be included in the presentation online.

Council member Jeff Lukken said he appreciated Steve and Jim’s approach to explaining these models and appreciated them making them easier to understand. He noted he has seen presentations of Dr. Aris Georgakakos’ model and it appeared pretty impressive. He thought it would be good for the Council to view this model. Steve said that the

Middle Chattahoochee Water Planning Council
Council Meeting 6
Meeting Date: June 22, 2010

B&V Project 164139
June 22, 2010

committee talked about a demonstration of the model. Steve said that Dr Aris Georgakakos assisted EPD with the development of the model being used by EPD for resource assessments. Steve advised that both Wei and Aris agree that either tool will give similar results with the same inputs.

Council member Joe Maltese said he thought there were differences with the model outputs, even with the same inputs. He noted that solutions become clearer with Dr. Georgakakos' model.

A handout documenting some of the differences in modeling approach and assumptions was distributed and reviewed with the council. This summary includes lake levels, storage amounts, target flows, etc. The summary is a draft in progress, and has been checked with EPD. Joe Maltese requested that the summary include an additional row for storage and information on FERC license flow requirements.

Chair Windom said if the council wants to bring Dr. Georgakokas to a Council Meeting to review his model he would support this. Tim Cash noted Wei and Georgakakos agree they are using the same tool and they all agree the difference is in the inputs. He noted that Georgakakos's River Basin Planning tool is the foundation for our work. Jim said that any desire by the Council to consider Dr. Georgakakos' work should be done in July in order to stay on schedule.

Surface Water Quality Forecasts and Modeling Conditions

Steve Simpson reminded council members that GA EPD was performing two sets of water quality modeling, dissolved oxygen modeling for point source discharges and watershed modeling for point and nonpoint discharges. The schedule for the completion of the watershed modeling for the ACF is unchanged and is still expected in November of 2010. Since the last council meeting, GA EPD has performed additional dissolved oxygen modeling for point source discharges and has prepared a technical memorandum summarizing the results. Steve presented the surface water quality modeling results from this technical memorandum, which were recently received from GA EPD.

Steve showed two Georgia maps which showed the current permitted municipal and industrial infrastructure capacity compared to the projected 2050 wastewater generation projections. This comparison shows that total existing permitted flows are similar to 2050 projections for many counties in the state. Therefore, dissolved oxygen modeling results under permitted conditions should offer a reasonable approximation of conditions under 2050 projections.

Steve then showed the list of permits that were modeled for the Chattahoochee River Basin. Steve reminded the Council that it would be good for them to review it for

Middle Chattahoochee Water Planning Council
Council Meeting 6
Meeting Date: June 22, 2010

B&V Project 164139
June 22, 2010

corrections when they can download this presentation. Steve explained that the notes column in the list is helpful in understanding how each permit was modeled.

Steve reviewed the proportion of stream reaches in the council in the various categories of available assimilative capacity and noted that the models gave us the expected results, that less assimilative capacity was available under permitted conditions than under existing conditions. Steve stressed that most of the tributaries have been completed, but there is not data on the main stem rivers that were being modeled hydrodynamically. Steve then reviewed the available assimilative capacity in a series of maps for the region.

Steve then explained the results for the Tallapoosa basin, which also showed areas with and without additional available assimilative capacity.

Chair Windom noted that they would move the Army Corps of Engineers presentation to after lunch, and the Council adjourned for lunch.

U.S. Army Corps of Engineers Update to ACF Water Control Manual

Jim reviewed a presentation developed by Andy Andrews with the Army Corps of Engineers covering the same information presented at the ACF Water Conference in Bainbridge on June 1, 2010.

The presentation summarized the longstanding tri-state water wars, Judge Magnuson's court ruling on July 17, 2009, and some of the ruling's impacts, in the context of the update of the ACF Water Control Manual. The Army Corps of Engineers has done the following since the ruling:

- Reopened NEPA scoping due to new and significant information
- Revised Notice of Intent
- Working to comply with Magnuson Ruling in updating the Water Control Manual

The presentation noted that the Army Corps of Engineers will not pursue reallocation for water supply in the Water Control Manual update effort. If the states reach a settlement, the Corps will submit the agreement for consideration and possible referral to Congress. If Congress enacts legislation regarding ACF management, the Corps will update the operations manual accordingly.

The presentation noted that the current water control manual is outdated and inadequate with regards to drought operations. The water control manual should address current conditions and needs in the basin, including drought operations. The presentation explained the process and schedule for updating the water control manual. The process is due to be completed by June 2012. The Army Corps of Engineers noted changes in this schedule might arise due to the litigation, state negotiations, or the ACF schedule.

Middle Chattahoochee Water Planning Council
Council Meeting 6
Meeting Date: June 22, 2010

B&V Project 164139
June 22, 2010

The presentation noted the following as summary points:

- The Corps cannot resolve the issues created by the Magnuson ruling through the water control manual update process.
- The water control manual effort is an update, not a study.
- The issues are complex.
- The water control manual updates will not meet all stakeholder expectations.
- The Magnuson ruling has “Draconian” implications.

Council member Ken Penuel asked if Operating Zone 4 was related to our modeling scenarios. Jim said no, that this would be operating during a drought scenario.

Council Member Joe Maltese said we probably should expect a new round of litigation after the water control manuals are updated.

In summary, Jim said that the Corps will not be seeking to resolve issues related to the Magnuson ruling in the control manual update, but it will comply with the ruling. The control manual can also be modified based on any settlement or Congressional action that might affect it. The Corps will next provide an opportunity for public comment next year.

Management Practices Update

Jim provided the council with a management practices selection handout, and reviewed the outline with the council. The draft document was developed starting from the categories of management practices and some of the individual management practices from the electronic survey of the Middle Chattahoochee Water Council previously performed. The draft document also includes additional detail and options, particularly for agricultural water use. There was some discussion that council members objected to some of the management practices listed. Kristin advised that management practices were listed with the intent to cover a wide spectrum of options so that the process solicits and documents council input on which management practices options are eliminated or kept. Jim advised that group discussions will be conducted later in the meeting and encouraged council input.

Jim emphasized that water conservation is considered a priority practice and must be included in the Council’s plan. He presented slides on water conservation practices based on the water conservation guidance provided by GA EPD. The guidance divided water conservation practices into four tiers as follows:

- **Tier ONE practices** – mandatory through rules or law (permittees)
- **Tier TWO practices** – options addressed through rule (permittees)
- **Tier THREE practices** – optional, basic (permittees and others)

Middle Chattahoochee Water Planning Council
Council Meeting 6
Meeting Date: June 22, 2010

B&V Project 164139
June 22, 2010

- **Tier FOUR practices** – optional, beyond basic to help “close the gap” (permittees and others)

The presentation cited existing and expected regulations related to water conservation and deriving from the Statewide Water Plan and the recently passed Water Stewardship Act, as well as the Water Conservation Implementation Plan.

The presentation noted that many water conservation goals and practices are available for consideration. Some are already required, and new requirements will be going into place in the coming months. For the regional councils, it is expected that the councils will decide which water conservation goals and/or practices are appropriate for their region and include them in the WDCP. Jim encouraged the Council to read the more in depth information in the premeeting packet.

Management Practices Selection Discussion

The council broke up into three groups and discussed screening the management practices for various categories. Following the discussions, the facilitators and council members reported back the discussion highlights to the entire group.

Water Demand & Return

Facilitator: Kristin Rowles

Kristin reported that the group consensus was no options were really off the table completely. There are areas we need to flesh out with more details on practices. There is no one-size-fits-all approach for the practices. Management practices should include specific practices identified for drought conditions. Selection of practices should leave flexibility for local governments to adapt to local conditions. For agricultural practices, we will likely defer to input from the LFO and UFL councils, which have more expertise in these practices. Management practices concerning septic systems will probably need discussion at the full council level due to differing opinions on this issue.

Water Supply

Facilitator: Jim Hawkins

Jim reported a general concurrence of the draft list in the group. The group also noted:

- Encourage development of groundwater wells for M&I demand with emphasis on new development, expanded supplies, and gardening and landscaping. Consider work by Dr. Tom Crawford at West Georgia State regarding well yields in the Piedmont.
- Don't consider desalination; it's not practical
- Need better quantification of Alabama demand projections and we should scrutinize Alabama return flows for IBT communities such as Opelika.

Middle Chattahoochee Water Planning Council
Council Meeting 6
Meeting Date: June 22, 2010

B&V Project 164139
June 22, 2010

- Consider recommendation for DeKalb County (Metro North District) to return future flows to the Flint vs the Chattahoochee.

Water Quality

Facilitator: Steve Simpson

Council Members: Jimmy Knight, Joe Maltese, Gordon Moss, Ken Penuel, Jim Woods

The group reviewed a draft water quality writeup that identified a number of things already in place to deal with water quality, such as existing permitting programs, state mandated minimum stream buffers, etc. The group identified that many of the existing programs and practices should be improved. The group also identified potential desirable practices as reducing the permitted discharge limits of point sources, eliminating or reducing future land application system permits, improving enforcement of erosion and controls. Better land use planning, conservation land acquisition programs, and encouraging dense developments to have wastewater treatment versus septic systems. The group also discussed already developed best management practices and agreed that the council should encourage better implementation of best management practices, encourage the continued collection of more water quality information. The group also discussed the potential impact of proposed Florida nutrient standards; a fair and equitable way of addressing the nutrient standards needs to be developed.

Following the group reports, Jim indicated that this input will be incorporating in updated version of Chapter 6 for ongoing consideration by the council.

WDCP Development

Jim referred the council members to pages 47-53 of the pre-meeting packet. This is a revised draft table of contents for the regional Water Development and Conservation Plan (WDCP). Jim noted that this is a guideline for the council to follow in developing its plan. It can be adapted to regional conditions.

Chair Windom suggested forming a committee to assist the planning contractor in reviewing drafts of the plan. Paul Chappelle, Steve Davis, Jimmy Knight, and Joe Maltese volunteered for this committee. After some discussion, it was suggested that Council Member Jeff Lukken should be the chair of this committee. Matt asked Jim to follow up with Jeff to see if he would be willing to serve as the chair.

Local Elected Officials and Public Comments

No local elected officials and public members signed up to provide comments; however, Council Chair Matt Windom asked if there were any members of the public who would like to comment. The following attendees made public comments:

Middle Chattahoochee Water Planning Council
Council Meeting 6
Meeting Date: June 22, 2010

B&V Project 164139
June 22, 2010

Dick Timmerberg, West Point Lake Coalition, said he was glad that lake levels are being looked at; he believes lake levels should be looked at as the priority. He reminded the Council that Judge Magnuson reiterated that the lakes were originally authorized for specific purposes; he is concerned that the resource assessment process considers storage in the four federal reservoirs being used for other purposes. Dick advised that he believes wants versus needs should be identified, and then all involved should act to be good stewards of the resource. Dick encouraged the Council to review Dr. Georgakakos' model.

James Emory, Troup County Engineer, commented that he was glad to see lake levels acknowledged. However, the resource assessments have ignored the original authorized lake purposes. James pointed out that the lakes impound about three fourths of the entire Chattahoochee basin stream reach length.

Bert Earley, water quality forester with the Georgia Forestry Commission, said that the GFC were recognized by GA EPD as the lead agency for forestry water quality. He advised that GFC performs a survey every two years plus has a quality assurance evaluation program to document implementation of Best Management Practices. Bert indicated he is available to the council and will provide the survey information for B&V to distribute to the council. Jim advised that this document will likely be posted online.

Next Meeting

Chair Windom asked the Council to set a date for the next meeting. The Council selected September 14, 2010 in the City of Franklin. Jimmy Knight volunteered to assist in identifying meeting arrangements.

Matt indicated that he has appreciated the efforts of the council in furthering the planning effort. Council member Paul Chappell requested additional clarification in what to print out and bring to Council meetings. Jim advised that better direction would be provided.

Middle Chattahoochee Water Planning Council
Council Meeting 6
Meeting Date: June 22, 2010

B&V Project 164139
June 22, 2010

Attachment 1:

**Middle Chattahoochee Water Planning Council
Council Meeting Attendance – June 22, 2010**

Council Members

Paul Chappell
Steven Davis
Gardiner Garrard
Bill Gregory
Jimmy Knight
Harry Lange
Jeff Lukken
Joe Maltese

Aaron McWhorter
Gordon Moss
Ken Penuel
Denney Rogers
Jimmy Thompson
Don Watson
Matt Windom
Jim Woods

Council Members Not In Attendance

Alan Bell
Jimmy Bradley
Larry Clark
Larry Dillard
Phillip Eidson
Thomas Ellis
Gerald Greene
Joe Griffith

Bill Heath
Walter Rosso
Randy Simpkins
Robert Watkins (sent representative)
Brad Yates
Robie York

Planning Consultants

Jim Hawkins, B&V
Robert Osborne, B&V
Kristin Rowles, GWPPC

Steve Simpson, B&V
Mark Masters, GWPPC

Georgia EPD

Tim Cash, Assistant Branch Chief
Bill Morris

Georgia State Agencies

Bert Earley, Georgia Forestry
Commission



MIDDLE CHATTAHOOCHEE WATER COUNCIL

Meeting #6 June 22, 2010

Council Members

Attending

Alan	Bell	
Jimmy	Bradley	
Paul W.	Chappell	✓
Larry	Clark	
Steven R.	Davis	✓
Larry F.	Dillard	
Phillip	Eidson	
Thomas A.	Ellis	
Gardiner W.	Garrard	✓
Gerald	Greene (Ex-Officio)	✓
Bill C.	Gregory (Alternate)	✓
Joe	Griffith	
Bill	Heath (Ex-Officio)	
Jimmy.	Knight	✓
Harry	Lange (Vice Chair)	✓
W. Jeff	Lukken	✓
Joe	Maltese	✓
Aaron	McWhorter	✓
Gordon	Moss	✓
Kenneth	Penuel	✓
Denney	Rogers	✓
Walter F.	Rosso	
Randy	Simpkins	
Jimmy	Thompson (Alternate)	✓
Robert	Watkins	* Alternate attended
Don A.	Watson (Alternate)	✓
Matt	Windom (Chair)	✓
Jim R.	Woods	✓
Brad	Yates	
Robie M.	York	

Alternate attended





MIDDLE CHATTAHOOCHEE WATER COUNCIL

Meeting #6, June 22, 2010
Public Sign-In

Name	Organization
Tony Black	GSWCC
Andy Lucas	GA Farm Bureau
Bryan Tolar	GA Agribusiness Council
David Wono	JTA
Patti Lanford	GADNR-Fisheries
Dick Timmerberg	West Point Lake Coalition
John Asdon	GA Power
Ed Moor	City of West Point
Chad Knudsen	GA Power
Lance Renfrow	RVRC
Joe Krewer	DCA
Will Garwood	DCA
Peter Luzzan	Fast Bowling
George Lee	CT Gov OFFICE
William Kent	Columbus Water Works
Lindsay Averett	Oglethorpe Power
Keith Hill	GPC
Laura Hartt	Upper Chattahoochee Riverkeeper
Bert Earley	Georgia Forestry Commission





MIDDLE CHATTAHOOCHEE WATER COUNCIL

Meeting #6, June 22, 2010

Local Elected Official Comment Sign-In

Name

Public Comment Sign-In

Name



**DRAFT - Summary Input Data/ Input Assumptions
ACF Resource Assessment – Future 2050 Scenarios**

Station	Station Type	Location	Planning Node	USACOE Action Zones: Max Conservation Storage/Conservation Lake Level (Low - High)/Flow Targets ⁽¹⁾	Future 2050		Desired State		Water Coalition	
					Flow (cfs) Instantaneous	Storage/ Lake Level Impact (Elevation)	Flow (cfs) Instantaneous	Lake Level Impact (Elevation)	Flow (cfs) 7 Day Average/ Daily Average	Lake Level Impact (Elevation)
Lake (Lake Lanier)	Dam	Buford Dam		1,087,600 ac-ft 1,035 – 1,071 ft NVGD		USACOE RIOP Action Zones				
River	Gage	Downstream of Buford Dam	Buford Dam		450 cfs ⁽²⁾					
River	Gage	Atlanta	Atlanta	750 cfs at Peachtree Creek	750 at Peachtree Creek					
River	Gage	Whitesburg	Whitesburg						1,350 1,000	
Lake (West Point)	Dam	West Point Dam		306,127 ac-ft 620 – 635 ft NVGD		USACOE RIOP Action Zones				632 ft NVGD bottom of conservation pool; 635 – 641 ft NVGD induced storage for flood control
River	Gage	Downstream of West Point Dam	West Point Reservoir	675 cfs minimum release	675					
River	Gage	Columbus	Columbus		1,200 ⁽³⁾				1,850 800	
Lake (WF George)	Dam	Walter F George Dam		244,400 ac-ft 184.5 – 190 ft NVGD		USACOE RIOP Action Zones				187 ft NVGD
River	Gage	Columbia (Farley)	Columbia						2,000	
Lake (Andrews)	Dam	Andrews		8,200 ac-ft Run of the river impoundment						
Lake (Seminole)	Dam	Woodruff Dam	Woodruff Dam	66,847 ac-ft Run of the river impoundment		100,000 ac-ft ⁽⁴⁾				
River	Gage	Downstream of Woodruff Dam		RIOP minimum (4,500 – 5,000) ⁽⁵⁾	RIOP minimum (4,500 – 5,000) ⁽⁵⁾				5,000	

1. Conservation storage values from Federal Storage Reservoir Critical Yield Analysis Alabama-Coosa-Tallapoosa (ACT) and Apalachicola-Chattahoochee-Flint (ACF) River Basins (USACOE, February 2010)
2. 450 cfs is the minimum release that Buford Dam is physically capable of releasing. There is no at site flow requirement in the Corps IOP except 750 at Peachtree Creek.
3. The 1200 cfs flow target at Columbus is not mentioned in specific USACOE operation rules, but this number has historically been used in Corps Models as a minimum flow to protect the Columbus NPDES discharge.
4. Approximately 100,000 ac-ft at Woodruff used for storage as a modeling technique to make sure Lake Seminole is not empty while storage is still available in the upstream reservoirs.
5. Per the RIOP 4,500 cfs becomes the flow target when the storage left in all 3 reservoirs is below the total storage of Lake Lanier's zone 4. It is referred to as the Drought Zone in the RIOP.