### Middle Chattahoochee

# Middle Chattahoochee Council Meeting

December 1, 2022

### GEORGIA WATER PLANNING

waterplanning.georgia.gov

## Agenda

#### Objectives:

- 1) Review water quality assessment results
- 2) Review and discuss committee reports from Water Quality and Quantity Committees
- 3) Discuss outstanding committee issues in break-out session (Water Quality/Water Quantity)
- 4) Discuss plan revisions that need input from the full Council
- 5) Consider revisions to recommendations from Inter-Council Coordination Committees
- 6) Discuss schedule for remaining plan revisions and meetings
- 7) Learn about seed grant proposal from region

	9:45	Registration
	10:00	Welcome, Agenda Review – Kristin Rowles (GWPPC)
	10:10	Chair's Report & Seed Grant Proposal from Region – Chairman Davis
	10:20	Summary from Last Meeting – Courtney Cooper (GWPPC)
	10:30	Surface Water Quality Assessment Results – Corinne Valentine & Steve Simpson (B&V)
	11:15	Water Quality Committee Report – Ed Moon (Council Member)
	11:30	Tallapoosa Surface Water Quantity Assessment Results, Alternative Population Scenario, and Follow-up on West Point Results – <i>Kristin Rowles (GWPPC) and Wei Zeng (EPD)</i>
	12:00	Group Photo
	12:15	Lunch
	1:00	Forecast Dashboard Update – B&V
	1:10	EPD Update – <i>Kelli-Ann Schrage (GAEPD)</i>
	1:20	Water Quantity Committee Report – Patrick Bowie (Council Member)
	1:35	Inter-Council Coordination Committee Report – Ken Van Horn (Council Member)
	1:50	Break-Out Sessions: Water Quality/Water Quantity
	2:40	Break
	2:50	Report Back from Small Groups & Plenary Discussion of Plan Revisions
	3:30	Next Steps in Plan Review and Revision – Meagan Szydzik (GWPPC)
	3:35	Public Comment
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## Introductions

**KELLI-ANN SCHRAGE** Liaison for:

STEVE DAVIS Columbus Water Works Council Chair for: Middle Chattahoochee Sddavis@cwwga.com (706) 649-3430

Middle Chattahoochee

**Council Advisor for:** 

Middle Chattahoochee

simpsonsl@bv.com

(770) 521-8105

(470) 938-3351

Kelli-ann.sottile@dnr.ga.gov

### KRISTIN ROWLES GWPPC

MARK MASTERS GWPPC

MEAGAN SZYDZIK GWPPC

COURTNEY COOPER GWPPC Council Lead for: Middle Chattahoochee <u>krowles@h2opolicycenter.org</u> (404) 822-2395

Council Advisor for: Middle Chattahoochee <u>mmasters@h2opolicycenter.org</u>

Council Advisor for: Middle Chattahoochee <u>mszydzik@h2opolicycenter.org</u> (770) 543-8497

Council Advisor for: Middle Chattahoochee <a href="mailto:ccooper@h2opolicycenter.org">ccooper@h2opolicycenter.org</a>

Georgia EPD

**STEPHEN SIMPSON** 

Black & Veatch

#### **CORINNE VALENTINE**

Black & Veatch

**JASON HOWARD** 

Black & Veatch

GEORGIA WATER PLANNING Council Advisor for: Middle Chattahoochee valentinec@bv.com (770) 752-5256

Council Advisor for: Middle Chattahoochee howardje@bv.com (770) 521-8133

### Middle Chattahoochee Council Members

Name	City	County	Name	City	County	
Hannah V. Anderson	Fort Gaines	Clay	Kevin Hayes	Franklin	Heard	
John M. Asbell	LaGrange	Troup	Bill Heath	Breman	Haralson	
Victoria Barrett	Richland	Stewart	Ken Johnson	Fort Gaines	Clay	
Laura Lee Bernstein	Columbus	Muscogee	Harry Lange	Cataula	Harris	
Patrick Bowie	LaGrange	Troup	Carvel Lewis	Georgetown	Quitman	
Jimmy Bradley	Cuthbert	Randolph	Adolph McLendon	Richland	Stewart	
Barbie Crockett	Centralhatchee	Heard	George E. Moon III	West Point	Harris	
Steve Davis, Chair	Columbus	Muscogee	Mac Moye	Lumpkin	Stewart	
Philip Eidson	Tallapoosa	Haralson	Denney Rogers	Ephesus	Heard	
Tony Ellis	Tallapoosa	Haralson	Jim Thornton	LaGrange	Troup	
James Emery	LaGrange	Troup	Kenneth M. Van Horn	Cusseta	Chattahoochee	
Gardiner Garrard	Columbus	Muscogee	Jason Weeks	Georgetown	Quitman	
Dan Gilbert	Columbus	Muscogee	Don Watson (Alternate)	LaGrange	Troup	
Joseph Griffith	Buchanan	Haralson	Matt Windom	Bowdon	Carroll	
Tim Grizzard	Franklin	Heard	Robert York	Bremen	Carroll	
Jimmie L. Hayes	Morris	Quitman				
Senator Jason Anavitarte (Ex-Officio)			Representative Randy Nix (E	Representative Randy Nix (Ex-Officio)		

# Chair's Report

Presented by Chairman Davis



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# Summary from Last Meeting

Courtney Cooper



## August 23 meeting

- Discussed surface water availability assessment results
- Discussed revisions to management practices and recommendations
- Considered revisions to recommendations from Plan Review & Inter-Council Coordination Committees

# Surface Water Quality Assessment Results

Corinne Valentine & Steve Simpson



## How This Presentation Relates to the Plan

- Section 3.3.3 Surface Water Quality
  - Covers existing water quality
- Section 3.4.1 303(d) List and TMDLs
  - Documents assessed stream segments meeting/not meeting designated uses
- Section 5.3 Surface Water Quality Comparison
  - Compares current and future projected differences in water quality
- Section 6.2 Selected Water Management Practices
  - WQ1 through WQ8
- Section 6.3 Recommendations to the State
  - Recommendations 3, 8, 9, 11

## Water Quality Overview

- Impaired Waters Identification (305(b)/303(d) list
  - Based on actual water quality test data from specific stream reaches
  - Addressed by Total Maximum Daily Loads and Implementation Plans
- Dissolved Oxygen Modeling (Assimilative Capacity)
  - Calculated under low flow, high water temperature, maximum permit flows and limits
  - Future conditions evaluated with revised permit limits
- Watershed Modeling
  - Current conditions calibrated based on water quality test data
  - Future conditions projected based on land use changes

### Middle Chattahoochee Impaired Stream **Segments**



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## **Dissolved Oxygen Modeling**

- Current Conditions
  - 2019 Permit Limits
- Future Conditions
  - 2060 Assumed Permit Limits
- DOSAG and Riv-1 Models:
  - High temp, low flow conditions
- Assimilative Capacity
  - How DO levels compare to water quality standard of 5.0 mg/L (or natural conditions)





### **DO Conditions: Below Lake Lanier**

### **Current Conditions**



### **Future Conditions**







### **DO Conditions: West Point to Columbus**

Legend Available Assimilative Capacity Very Good Good Moderate Limited None or Exceeded Unmodeled Lakes and Streams

#### **Current Conditions**



#### **Future Conditions**





### DO Conditions: Tallapoosa Basin

### **Current Conditions**



### **Future Conditions**





## **DO Conditions: Flint Basin**

### **Future Conditions**

Legend

--- Very Good --- Good --- Moderate --- Limited

None or Exceeded

Available Assimilative Capacity

Unmodeled Lakes and Streams



### Current Conditions



## Watershed Modeling

Model updates are underway

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## Watershed Modeling: Nutrients

- Current (2008) and future (2050) landuse
- Meteorological information (2001-2012)
- Point Source Discharges
  - Current 2014, Future 2050
- Heat maps
  - Loadings by subbasin under representative wet and dry years
  - Total Nitrogen
  - Total Phosphorus
- Increases under dry year conditions
  - Point source-driven
- Increases under wet year conditions
  - Nonpoint source-driven (land uses)



### MIDDLE CHATTAHOOCHEE LAND USE CHANGES (2008-2050)









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### COMPARISON OF CURRENT AND FUTURE WATERSHED MODEL HEAT LOADS





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### COMPARISON OF CURRENT AND FUTURE WATERSHED MODEL HEAT LOADS







## Chlorophyll a: Lake Lanier

- From 2017 Plan:
  - Chlorophyll-a exceedances were projected under current and future conditions
    - Due to combination of point and nonpoint sources
  - Total P loading is expected to primarily be from nonpoint sources (~86%)
  - Reductions in total P loadings are currently being evaluated as part of a draft TMDL for chlorophyll-a under consideration for Lake Lanier
- TMDL finalized in 2017 and EPD has implemented the interim Total P limits identified in the TMDL





## Chlorophyll a Levels in Lake Lanier



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## Chlorophyll a: West Point Lake



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- From 2017 Plan:
  - Chlorophyll-a standards are projected to be met under future conditions
  - Increases in total N projected in 2050
  - Future total P loadings are projected to decrease due to point source controls (Figure 5-5)



Chlorophyll a standards are: 22  $\mu$ g/L (U/S Forebay) 24  $\mu$ g/L (LaGrange Intake)

## Chlorophyll a: Lake Walter F. George



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- From 2017 Plan:
  - Chlorophyll-a exceedances were projected under current and future conditions
  - Current total P loading is primarily from point sources (~67%)
  - Future projected increases in nutrient loadings will be primarily point source related



Chlorophyll a standards are: 18  $\mu$ g/L (Midlake) 15  $\mu$ g/L (Dam Forebay)

## Chlorophyll a: Lake Seminole

- From 2017 Plan:
  - Total P loading is primarily from point sources
  - Future projected increases in nutrient loadings will be primarily nonpoint source related
  - Chlorophyll a standards are not yet established



# COMPARISON OF CURRENT AND FUTURE



Total nutrient loading to lakes from all watershed areas, including point and nonpoint sources





### COMPARISON OF CURRENT AND FUTURE LAKE GROWING SEASON AVERAGE NUTRIENT LEVELS

	Scenario	Lake Lanier	West Point Lake	Lake Walter F. George	Lake Seminole
	Current NPS	0.60*	0.50	0.36	0.82
Total N (mg/l)	Current PS + NPS	0.98	3.91	2.34	1.42
	2050 NPS	0.74*	0.61	0.41	0.89
	2050 PS +NPS	-	6.74	3.76	2.21
	Current NPS	0.039*	0.033	0.032	0.046
Total P (mg/L)	Current PS + NPS	0.036	0.109	0.142	0.079
	2050 NPS	0.046*	0.035	0.033	0.048
	2050 PS + NPS	-	0.105	0.110	0.088

#### \*Without the TMDL Reductions

- ✤ Lake Lanier has a not to exceed Total N criteria of 4 mg/L in the photic zone
  - Max Total N (under Current Permit conditions): 1.37 mg/L
- ↔ West Point Lake has a not to exceed Total N criteria of 4.0 mg/L in the photic zone
  - Max Total N (under Current Permit conditions): 6.29 mg/L
- ✤ Lake Walter F. George has a not to exceed Total N criteria of 3.0 mg/L in the photic zone
  - Max Total N (under Current Permit conditions): 3.66 mg/L
- Florida Lake Seminole Criteria 1.27-2.23 mg/L Total N and 0.05-0.16 mg/L Total P
  - Max Total N at Dam Pool current conditions 1.06 mg/L, future conditions 2.80 mg/L
  - Max Total P at Dam Pool current conditions 0.126 mg/L, future conditions 0.111 mg/L

## Watershed Modeling: Nutrients

### Current Conditions addressed in Plan Section 3.3.3

#### **Nutrients**

Watershed and lake models were run assuming current levels of water use and wastewater disposal and current land use profiles as inputs. These inputs accounted for nutrient loading from the contributing watershed over twelve years of recently observed hydrology. Watershed model results are summarized as follows:

- Lake Lanier Watershed: Nitrogen and phosphorous loads are primarily nonpoint source related.
- Chattahoochee Watershed: Point sources are the primary contributors of nitrogen and phosphorous loading in the watershed.
- Tallapoosa Watershed: In this smaller watershed, nitrogen and phosphorus loads are impacted by both point and nonpoint sources.



## Watershed Modeling: Nutrients

### Future Conditions addressed in Plan Section 5.3

"Watershed and lake modeling indicate that <u>future increases in nutrient loads</u> to the Lake Lanier watershed, Chattahoochee River Basin, and Flint River Basin <u>are primarily due to</u> <u>projected increases in point source</u> <u>discharges and secondarily due</u> <u>to changes in land use and nonpoint</u> <u>runoff</u>. The modeled trends for nutrient loads over the planning horizon for the Chattahoochee River Basin are illustrated in Figure 5-4." Figure 5-4: Modeled Nutrient Loading Trends from the Surface Water Quality Resource Assessment: Chattahoochee River Basin



#### Chattahoochee Nitrogen



# Water Quality Committee Report

Presented by Ed Moon



## Water Quality Committee: October Meeting

- Meeting on October 17, 2022
- Review and discuss Section 3 Current Conditions
- Review and discuss Section 5 2060 Projected, time permitting
- Select representative to present at today's council meeting

Members: Victoria Barrett, Laura Lee Bernstein, Harry Lange, Ed Moon

## Key Changes to Water Quality

### **Section 3 Current Conditions**

### 1. River Model (Dissolved Oxygen Modeling)

- a. AKA Assimilative Capacity. Assimilative capacity evaluates how DO levels compare to water quality standard of 5.0 mg/L (or natural conditions).
  b. Dr. Liz Booth (EPD) presented these in May
  c. Updated municipal and industrial wastewater facilities operating at their full permitted discharge levels (flow and effluent discharge limits with 2019 values

### 2. Lake and Watershed Models (Nutrient Modeling)

a. This data has not been updated, and we will not get an update prior to the RWP report update. Only the language was updated.

### **3**. 303(d) list

- a. Streams not supporting designated uses, and Total Maximum Daily Load (TMDL) which addresses these pollutants
- b. Updated with 2022 data. Revised from stream quality number to simpler (Impaired, none, pending)


### Key Changes to Water Quality

#### Section 5 Future Conditions

#### 1. River Model (Dissolved Oxygen Modeling)

- a. Dr. Liz Booth (EPD) presented these in May
- b. Updated to 2060 (from 2050). Improved language for clarity
- c. Assumptions in permitting show the DO improving from current because of planned changes to wastewater discharge permits becoming more stringent as permittees update permits

#### 2.Lake and Watershed Models (Nutrient Modeling) a. This data has not been updated, and we will not get an update prior to the RWP report update. Only the language was updated.



### Water Quality

#### Discussion

#### 1. River Model (Dissolved Oxygen Modeling)

- a. Add language in Section 5 of generally why the results look better in the future.
- b. Why is Mountain Oak Quality reduced? (Future right, current left)





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### Tallapoosa Surface Water Availability Assessment & Other BEAM Updates

Kristin Rowles and Wei Zeng



### Outline

- West Point Follow-up
- Alternate Population Scenario
- Alabama-Coosa-Tallapoosa (ACT) Model Results for Tallapoosa
  - Water Supply Challenges
  - Wastewater assimilation Challenges



### West Point Reservoir Follow-Up

Observation and question from council member at last Council meeting

 West Point simulated elevations being different from historical observations – why?

Three major reasons:

- Corps historical operations having evolved over time while our simulation is on a fixed set of operation rules, i.e. 2017 Water Control Manual
- Corps operational discretion and operational imprecision in practice and the model's precise execution of the rules
- Water demand differences between historical observation and simulated scenarios

EPD shared results from model verification:

 Showed consistency of HEC ResSim and historical observations, and of BEAM and HEC ResSim simulations

### **Alternate Population Scenario**

County	2020	2030	2040	2050	2060
Harris	34,712	37,327	39,640	41,902	44,818
Harris alternate scenario	34,668	39,873	44,141	49,233	54,907
Muscogee	191,626	179,704	166,681	153,247	141,670
Muscogee alternate scenario	206,922	225,912	233,750	238,600	247,548



#### Alternate Population Scenario Water Withdrawal Projections

County	Facility	Scenario	2019 mgd	<b>2060</b> mgd
Harris	Harris County Water	Current Scenario	1.86	3.99
	Works	Alternate Scenario	1.86	3.00
	Pine Mountain Valley Water Association	Current & Alt Scenario	0.427	0.917
Muscogee	Columbus Water	Current Scenario	33.24	23.22
	Works	Alternate Scenario	33.24	37.7
	Fort Benning	Current & Alt Scenario	1.55	1.07

#### Alternate Population Scenario Wastewater Discharge Projections

County	Facility	Scenario	2019 mgd	2060 mgd
Muscogee	Columbus Water	Current Scenario	37.64	27.83
	Works	Alternate Scenario	37.64	45.1



### Middle Chattahoochee Region: ACT Metrics

	% model period with water supply challenge	
Water	Total volume of shortage	
Availability	Shortage volume in 2007-2008 drought	
· · · · · · · · · · · · · · · · · · ·	Shortage volume in 2011-2012 drought	
Wastewater Discharge	% model period with wastewater assimilation challenge	
Assimilation	Total volume of shortage	
Lake	None	
Elevation or Streamflow		

#### ACT Model Domain in Middle Chattahoochee Region





Hazen

#### ACT Baseline & Future Scenarios Settings

Simulation Period	1939 – 2018 (model period includes various hydrologic conditions)
Withdrawal and Discharge Amounts	<ul> <li>3 Scenarios</li> <li>Baseline: Average water and wastewater demands for 2010-2018</li> <li>Baseline Drought: 2011 demands</li> <li>Forecast (ag growth): 2060 demands with agriculture 2060 forecast</li> </ul>
Instream Flow Protection Thresholds	Per permit conditions
Reservoir physical and operational data	From reservoir owner or GAEPD

#### Water and Wastewater Facilities Analyzed in the Middle Chattahoochee Region

	Facility Type	Analyzed (# of facilities)	Challenge Indicated (# of facilities)
Water Withdrawals	Municipal	6	2
	Industrial	1	0
	Energy	0	0
Wastewater Discharges	Municipal	6	6
	Industrial	0	0

#### Facilities With Water Supply Challenges

FACILTY BEAM Node	Scenario	City of Bremen (permit 071-1301-02) 7585	Haralson County Water Authority (permit 071-1301-01) 7705	
Waste Supply	Baseline	0.03%	2.75%	
Challenge (% Days)	Baseline Drought 0.02%		2.79%	
	Forecast 0.21%		2.99%	
Shortage Volume (million gallons)	Baseline	<b>0.63</b> 2007-08 drought: 0.63 2011-12 drought: 0.00	<b>1,586</b> 2007-08 drought: 435 2011-12 drought: 356	
	Baseline Drought	<b>0.31</b> 2007-08 drought: 0.31 2011-12 drought: 0.00	<b>1,546</b> 2007-08 drought: 426 2011-12 drought: 357	
	Forecast (ag growth)	<b>7.41</b> 2007-08 drought: 5.41 2011-12 drought: 1.46	<b>2,361</b> 2007-08 drought: 642 2011-12 drought: 532	

#### Facilities With Wastewater Assimilation Challenges

FACILTY		City of Bremen	City of Buchanan	City of Tallapoosa	City of Villa Rica	City of Bremen	City of Bowdon
BEAM Node		7278	7388	7718	8038	8308	8918
7Q10 Flow (cfs)		0.31	0.11	17.88	0.13	0.19	0.03
Mastawatar	Baseline	1%	2.15%	1.81%	0.44%	0.42%	0.12%
Wastewater Challenge (% Days)	Baseline Drought	1%	2.15%	1.82%	0.44%	0.42%	0.12%
	Forecast (ag growth)	1%	2.15%	1.80%	0.44%	0.42%	0.12%
Shortage Volume (million gallons)	Baseline	19.69	17.54	2,139	4.46	2.94	0.46
	Baseline Drought	19.60	17.54	2,146	4.46	2.94	0.46
	Forecast (ag growth)	19.60	17.54	2,118	4.46	2.94	0.46

WPCP=Water Pollution Control Plant

### Summary

- Moderate water supply challenges under baseline and future water use conditions
- Moderate wastewater assimilation challenges under baseline and future water use conditions
- Additional evaluation can be added according to stakeholders' inputs

#### Questions?

Contact Information:

Wei Zeng, Ph.D., Professional Hydrologist Manager, Water Supply Program Watershed Protection Branch, Georgia EPD 470-251-4897 (Zoom Phone) New! 470-898-3891 (Cell)

Wei.Zeng@dnr.ga.gov

## Break for Group Photo and Lunch



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## Forecast Dashboard Update

Black & Veatch



#### Forecast Dashboard Available NOW on the Georgia Water Planning Website



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### **Forecast Dashboard**







# **EPD Updates**

Kelli-Ann Schrage

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## Water Quantity Committee Report

Presented by #####



### Water Quantity Committee Meeting Overview

- Meeting on October 11, 2022
- Review and discussed Section 3 Current Conditions, West Point results, and alternative population scenario
  - Members present: James Emery, Steve Davis, Patrick Bowie
- Meeting on November 8, 2022
- Review and discuss Section 5 2060 Projected and alternative population scenario
  - Members present: Matt Windom, James Emery, Patrick Bowie, Harry Lange



### Key Changes to Water Quantity

### Section 3 Current Conditions

#### Surface Water Availability

- 1. Added discussion about BEAM assessment and results
- 2. Reviewed description and clarified text for reservoir operations description (3.3.1)
- 3. Revised figures for USGS estimates
- 4. Updated flow results at Columbus to 1850 cfs (7-day)

#### **Groundwater Availability**

- 1. Consolidated figures & tables
- 2. Added new assessment results
- 3. Refined discussion about how EPD estimates sustainable yield

### Key Changes to Water Quantity

#### Section 5 Future Conditions (2060)

#### Surface Water Availability

1. Integrated BEAM assessment results for 2060

#### **Groundwater Demand**

- 1. Added discussion about the GA-FIT program and how the new work relates to the plan
- 2. Reviewed discussion of sustainable yield in the Claiborne aquifer

### **Today's Small Group Discussion**

- 1. USGS water use figure in Section 3
- 2. Tallapoosa BEAM results
- 3. Water Control Manual discussion in Section 3 (including EPD review)
- 4. Alternative population scenario



Presented by Ken Van Horn



### Inter-Council Coordination Committee October 12, 2022

**Upper Flint** 

• Beth English

Lower Flint -Ochlockonee

Hugh Dollar

- Jay Smith
- Jimmy Webb

Middle Chattahoochee

- Steve Davis
- Patrick Bowie
- Harry Lange
- Ken Van Horn

#### Meeting on October 12, 2022

- 1. Reviewed and Discussed JT-3
  - 1. Reviewed existing language
  - 2. Reviewed optional alternative language
  - 3. Discussed collaborated agreed removal
- 2. Select representative to present at August council meeting

#### JT-3: Original Text from 2017 Plan

 Consider the creation of a new coordinated, interstate planning organization for the ACF System. Membership in this organization to represent Georgia shall include, but not be limited to, members of the regional water planning councils with water planning regions that include parts of the ACF. Consider the recommendation of the ACF Stakeholders in its Sustainable Water Management Plan regarding an ACF transboundary water management institution as this organization is developed.



#### JT-3: Alternative 1

 Consider the creation of a new coordinated, interstate planning organization for the ACF System. Membership in this organization to represent Georgia shall include, but not be limited to, members of the regional water planning councils with water planning regions that include parts of the ACF.

#### JT-3: Alternative 2 (revised during discussion)

 The Councils recommend the proactive development of and/or engagement with a (an existing) tristate framework designed to address interstate water issues in the future and the inclusion of the regional water planning councils within this framework. Consider providing a framework to update the previous ACF Compact.

#### **Recommendation to Council**

- Ultimately, it was determined that all three councils did not view JT-3 as a priority recommendation to the State; therefore, the Joint Recommendation JT-3 will not be included in the updated plans.
- Each council can discuss the inclusion of this recommendation in separate recommendation to the state.
- Recommended Text:
  - The Council recommends the proactive development of and/or engagement with a (or an existing) tristate framework designed to address interstate water issues in the future and the inclusion of the regional water planning councils within this framework. Consider providing a framework to update the previous ACF Compact.



## **Break-Out Sessions**

Water Quality / Water Quantity

### Water Quantity Committee

- Tallapoosa Results
- Alternate Population Scenario
- Section 3 Edits to Discuss



# Water Quantity Committee Sections 3: Items to Review

Section 3.1

• Revisions – USGS data, discussion of use estimates (pp. 3-2 & 3-3)

Section 3.2

- Revisions regarding maintenance for locks and dams per committee input (p.3-7, highlighted)
- Addition of description of whitewater park and its flow needs (p. 3-8, highlighted)

Section 3.3.1

- Correction of seven-day average flow metric for Columbus to 1,850 cfs, Table 3-7 (p. 3-18), added results summary on p. 3-28, and additional minor edits on pp. 3-11, 3-13, 3-17, 3-18
- Added information on how reservoir operations are modeled in BEAM (pp. 3-11, 3-29)
- Added Tallapoosa results (starting on p. 3-18)
# Water Quantity Committee Sections 3: Pending Review

Section 3.3.1

- Discussion of ACF Results and Water Control Manual: pp. 3-23 to 3-30
- EPD is reviewing relative to BEAM and Water Control Manual
- Future review by committee



#### Water Quantity Committee Section 3.1

- New graph with USGS 2015 data
- New text (p. 3-2) on water use data





### Water Quantity Committee USGS Data Review





### Section 3.2, p. 3-7: Navigation edits

- **3.** Navigation is one of the Congressionally authorized purposes of the federal reservoir projects on the Chattahoochee River. The head of navigation begins at Columbus and extends south to Apalachicola Bay. Maintaining this navigational channel is the responsibility of the U.S. Army Corps of Engineers and flow control is provided by upstream reservoirs. At this time, navigation of the river is hindered by a lack of maintenance of the locks and dams. In a Report to Congress, the US Army Corps of Engineers estimated that the total costs of returning these facilities to service in suppor of navigation would cost an estimated \$94.2 million for dredging and maintenance repair needs.<sup>5</sup> Navigation is important to the regional economy, and the Council strongly recommends that navigation must be maintained between Columbus and Apalachicola Bay.
- <sup>5</sup> U.S. Army Corps of Engineers, Dredging and Maintenance Needs Walter F. George, George Andrews, and Jim Woodruff Locks and Dams Report for Congress, June 2020.

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#### Water Quantity Committee Section 3.2, p. 3-8: Recreation edits

Another important recreational use of the Chattahoochee River in this region is whitewater rafting. The Chattahoochee Whitewater Park in Columbus is a two-mile stretch that offers the longest urban whitewater course in the world. This recreational resource is an important driver of waterfront development. The course attracts tourism, hosts international competitions, and enhances quality of life for the region. Recreational opportunities on the course are dependent on river flow levels, which are directly tied to upstream dam releases by Georgia Power and the US Army Corps of Engineers. Timing of releases is important to recreational opportunities, and coordination of dam operators and recreational stakeholders is important to maintaining this important in-stream use of the river. Management Practice IU-3 in Section 6 addresses the need for cooperation to support recreation in the whitewater park.

#### Water Quantity Committee Section 3.3.1: Reservoir operations edits

The resource assessments were conducted following the operations and storage management described in the current Water Control Manual infor the Federal reservoirs in the Chattahoochee River. For other reservoirs, the resource assessment incorporates data from reservoir owners if they provided storage and operational data to GAEPD for this purpose. Storage and operational data were not available for Georgia Power reservoirs in the region, and these reservoirs were modeled as run-of-river projects.

Added on p. 3-11 and 3-29.



#### Water Quantity Committee Updated Table 3-7 with 7-Day Average Metric of 1,850 cfs (p. 3-18)

Table 3-7: Surface Water Availability Streamflow Results: Chattahoochee River at Columbus

Columbus Flow Summary	Scenario	Metric	
		Daily Flow ≥ 1,350 cfs	7-Day Average Flow ≥ <del>1,350</del> _ <u>1,850</u> cfs
% Time Below Streamflow Metric	Baseline	92.31%	<del>99.97<u>97.98</u>%</del>
	Baseline Drought	92.06%	<del>99.96<u>97.81</u>%</del>
*% Time is for calculated as a proportion of the full model period (1939-2018).			



## Break

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### Report from Small Groups & Plenary Discussion of Plan Revisions



#### Interstate Coordination/Planning Original Text from 2017 Plan Joint Recommendations

 Consider the creation of a new coordinated, interstate planning organization for the ACF System. Membership in this organization to represent Georgia shall include, but not be limited to, members of the regional water planning councils with water planning regions that include parts of the ACF. Consider the recommendation of the ACF Stakeholders in its Sustainable Water Management Plan regarding an ACF transboundary water management institution as this organization is developed.

### **Alternatives Discussed in ICC Meeting**

- Consider the creation of a new coordinated, interstate planning organization for the ACF System. Membership in this organization to represent Georgia shall include, but not be limited to, members of the regional water planning councils with water planning regions that include parts of the ACF.
- The Councils recommend the proactive development of and/or engagement with a (an existing) tristate framework designed to address interstate water issues in the future and the inclusion of the regional water planning councils within this framework. Consider providing a framework to update the previous ACF Compact.
- The Council recommends the proactive development of and/or engagement with a (or an existing) tristate framework designed to address interstate water issues in the future and the inclusion of the regional water planning councils within this framework. Consider providing a framework to update the previous ACF Compact.



## Next Steps in Plan Review and Revision

Meagan Szydzik

### **Next Steps**

- Next Meeting: <u>March 16<sup>th</sup></u>, 2023
  - Discuss High Priority Management Practices
  - Alternative Population Scenario
  - Reviewing Section 7: Implementation Schedule & Fiscal Implications of Management Practices
  - Last review of Plan before Public Review Period (Council will receive the full Plan to read over and suggest any final comments before the next meeting)
  - After today's meeting  $\rightarrow$  Clean versions of the Plan to review without markup
  - Committee Meetings?



## Public Comment

