



# LFO Water Quantity Committee Report

# LFO Water Quantity Committee

- Jimmy Webb – Chair
- Steve Bailey
- John Bridges
- Jimmy Champion
- Hal Haddock
- Gary Leddon
- Chris Hobby
- George McIntosh
- Doyle Medders
- T.E. Moye
- Greg Murray
- Mike Newberry
- Richard Royal
- Howard Small



# Committee Efforts

- Held Committee Meetings
  - June 11, June 15, August 16
  - Meeting summaries: pp.19-29 of pre-meeting packet
- Reviewed model results from EPD
  - Current conditions
  - Future conditions (with no new management practices)
  - Storage
- Discussed management practice selection
- Developed recommendations to Council for today's meeting

# Management Practice Selection

- Used “Strawman” document as guide to discussion
- Strawman: pages 30-42 of pre-meeting packet
  - Marked up with most recent changes
  - Need council feedback and approval to include in October draft plan

# MONTEZUMA

Table 1. Summary of Montezuma Node

	Length of Shortfall(% of time)	Average Shortfall (cfs)	Long-term Average Flow (cfs)	Maximum Shortfall (cfs)	Corresponding Flow Regime (cfs)
Current	0.01%	1 0.6 mgd	3421 2211 mgd	1 61 mgd	593 383 mgd
2050	0.01%	1 0.6 mgd	3409 2203 mgd	1 0.6 mgd	593 383 mgd

# BAINBRIDGE

Table 2. Summary of Bainbridge Node

	Length of Shortfall(% of time)	Average Shortfall (cfs)	Long-term Average Flow (cfs)	Maximum Shortfall (cfs)	Corresponding Flow Regime (cfs)
Current	13%	352 227 mgd	7910 5113 mgd	1376 890 mgd	2506 1620 mgd
2050	13%	355 229 mgd	7904 5108 mgd	1295 837 mgd	2506 1620 mgd
MidChat-SWFA0001	0%	1 0.6 mgd	7906 5110 mgd	1 0.6 mgd	2008 1298 mgd

Storage needed to offset  
Bainbridge shortfall:  
162,223 acre-feet



# OCHLOCKONEE

## Quincy

Scenario	Length of Shortfall (% of time)	Average Shortfall (cfs)	Long-term Average Flow (cfs)	Maximum Shortfall (cfs)	Corresponding Flow Regime (cfs)
Current Demand	5%	5	264	11	11
2050 Forecasted Demand	3%	6	291	12	12

## Concord

Scenario	Length of Shortfall (% of time)	Average Shortfall (cfs)	Long-term Average Flow (cfs)	Maximum Shortfall (cfs)	Corresponding Flow Regime (cfs)
Current Demand	9%	26	1107	60	68
2050 Forecasted Demand	8%	34	1115	79	97

# Demand Management:

## *Municipal and Industrial Water Conservation*

- The Council recommends that non-farm water users in the region implement Tier One and Tier Two practices. Including:
  - Water conservation plans
  - Outdoor watering restrictions
  - Car wash regulations
  - Demonstration of progress toward conservation goals
  - New plumbing fixture requirements (Water Stewardship Act)
- The Council supports the use of Tier 3 and 4 practices through incentive programs in the region.

# Demand Management: *Agricultural Water Conservation*

- The Council supports the implementation of Tier 1 and 2 practices, including:
  - Flint River Water Conservation and Development Plan requirements (2006)
    - End-gun shut
    - Leak prevention and repair plans,
    - Pump-safety shutdown systems
    - Rain-gauge shut-off switches on travelers, solid set, or drip systems
    - Low-flow protection requirements (suspension of irrigation when surface flow falls below 25% average annual discharge in Ichawaynochaway and Spring Creek sub-basins or below 7Q10 in streams in the rest of the basin)
  - Compliance with forthcoming requirements (established by Water Stewardship Act of 2010) regarding active, inactive, and unused permits.

# Demand Management: *Agricultural Water Conservation*

- The Council supports implementation beyond Tier 2 through incentive programs, especially including cost-share funding available through the Soil and Water Conservation Districts and the Georgia Soil and Water Conservation Commission.
- The Council endorses the following benchmark from the Georgia Water Conservation Implementation Plan as an objective for agricultural water conservation in the region:

**By January 2012, all new, and by January 2020, all existing agricultural irrigation systems should have application efficiencies of 80% or greater.**

- A focus on a desired performance outcome will support increased conservation while allowing farmers to select what practices and approach will work best for their own operations.



# Demand Management: *Agricultural Irrigation Suspension*

The Lower Flint-Ochlockonee Water Planning Council recognizes that in some years irrigation suspension may be needed in order to sustain in-stream flows in particularly dry periods. The Council makes the following recommendation regarding the use of irrigation suspension:

*Irrigation suspension should only be used through implementation of the Flint River Drought Protection Act, and irrigation suspension should only be pursued by voluntary means, which requires adequate funding to support implementation of the Act.*



## Demand Management:

### *New Agricultural Irrigation and Water Conservation Technology and Innovation*

- Innovation in irrigation equipment and methods often has resulted in substantial water conservation benefits
- Trend is expected to continue

# Demand Management:

## *Other Agricultural Recommendations*

- The Council recognizes that future quantification of permits may have some value as a long-term management option and recommends study of the costs and benefits of agricultural water withdrawal permit quantification in Georgia as a potential management option for the future.
- The Council recommends evaluation of the costs and benefits of the establishment of agricultural irrigation institutions in Georgia as a potential management option for the future.



Supply and Flow Augmentation:  
*Streamflow augmentation via direct  
pumping from aquifers*

The Council supports further evaluation of the practice in order to support in-stream flows in dry periods.

- Environmental impacts
- Feasibility

# Supply and Flow Augmentation: *Replacement of surface water withdrawals with groundwater withdrawals*

- The Council recommends that this practice be implemented with incentives.
- Furthermore, the Council recommends that for permittees that implement this practice, the affected permits will maintain their status, prior to conversion
  - Grandfathered surface water withdrawal permits would be converted to groundwater withdrawal permits with the same regulatory status as before conversion with respect to conservation requirements, seniority, and potential interruption.

# Supply and Flow Augmentation: *Aquifer Storage and Recovery (ASR)*

The Council supports the use of this practice as needed for future water supplies in the region. The Council recognizes the need for further evaluation of specific proposals for ASR in the region on a case-by-case basis and recommends that any such proposal be thoroughly evaluated for its environmental and other impacts.

# Supply and Flow Augmentation: *Farm Ponds*

The Council supports the continued development of farm ponds in the region through existing incentive programs from the Soil and Water Conservation Districts and the Georgia Soil and Water Conservation Commission.



# Supply and Flow Augmentation: *Inter-basin Transfer*

- The Council does not endorse any specific proposals for an IBT at this time.
- However, the Council urges policymakers not to preclude IBT as an option for future water management in the region, as needed.

# Supply and Flow Augmentation: *Reservoirs*

To address concerns about flow shortfalls in the Flint River, the Council recommends evaluation of reservoir storage options in the Flint River Basin that can provide for flow augmentation in dry periods. This evaluation should include assessment of feasibility, siting, costs, benefits, and environmental and economic impacts.



# In Development

- Discussion on identifying practices (6.1)
- Fiscal implications/funding (6.3)
- Review revised groundwater results
- Recommendations for metering program
- Coordination with Upper Flint/Middle Chattahoochee councils
- Further editing (document will be shorter)

# Scope of Recommendations

- Apply recommendations to whole Lower Flint Ochlockonee region
  - All watersheds in region (Flint, Chattahoochee, Ochlockonee, Suwannee-Satilla)
- Consider coordination with neighboring councils

# Committee Recommendation

- Lower Flint-Ochlockonee Council approve draft recommendations prepared by the Committee for incorporation in the draft Water Development and Conservation Plan, Chapter 6 [for the October draft plan]

