Georgia's
State Water Plan

Regional Water Development and Conservation Plan Review and Revision
Savannah-Upper Ogeechee Water Planning Council
November 17, 2016

www.georgiawaterplanning.org

Savannah-Upper Ogeechee Council Meeting 3

Meeting Objectives:

1) Identify any additional Management Practices to recommend updating
2) Identify any additional Joint efforts/Council coordination elements
3) Report Back to Joint Meeting
4) Conduct Council Meeting Business

1:15 pm – 2:00 pm **Discussion**

- **Breakout Sessions Debrief**
  - What are implications for the Plan updates?
- **Management Practices Identified for Review and Revision**
  - How should MPs be addressed in light of the Resource Assessment updates? Would you like to request additional information?
- **Council Coordination Recommendations**
  - Is there further joint coordination needed prior to finalizing update of the SUO Plan?
- **Report Back**
  - What insights, messages, concerns, or priorities would be most beneficial to bring back and share with other Councils at this afternoon's Joint Council Meeting?

2:00 pm – 2:20 pm **Council Meeting Business**

- Approve meeting summary from Council Meeting 2
- 319(h) Grant Project Update
- Potential Dates for Office Hours/Subcommittee Conference Call
- New Business

2:20 - 2:30 pm **Public Comments**

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Savannah-Upper Ogeechee Council Meeting 3

Breakout Session Debrief

- What are your first thoughts?
- Do you have questions or concerns about the information?
- Other comments

Savannah-Upper Ogeechee Gap Review

Groundwater

Surface Water

Surface Water Quality

Georgia

Savannah-Upper Ogeechee Gap Summary:

There are no changes from Round 1

Savannah-Upper Ogeechee Gap Summary: Surface Water

Savannah

- Water demand (off stream needs) and Flow Regime (instream needs as specified by the Corps' Water Control Plan) can be fully met by available water and storage
- There is reserve storage in the major Corps storage reservoirs' conservation pool through the most critical drought
- Agreement allowing storage use will have to be reached with reservoir owners

Ogeechee

- Potential Gaps at Claxton, Eden, and Kings Ferry Nodes

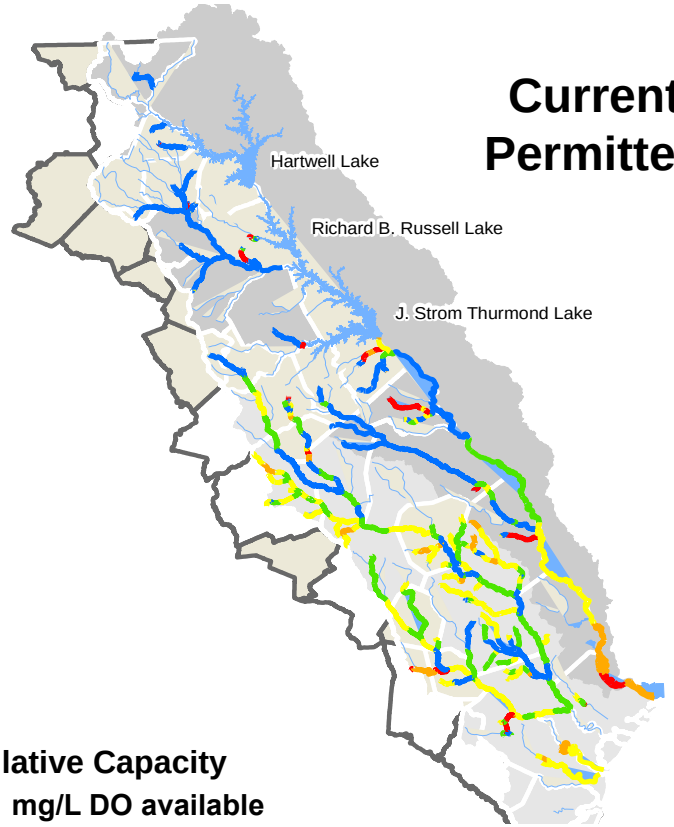
Assimilative Capacity/ Surface Water Quality Gaps

- Assimilative Capacity Assessment Round 2 Results
  - DOSAG & GA Estuary Models
  - 2000 thru 2012 (2012 is critical year)
- Preliminary Results for Round 2:
  - Assimilative capacity for DO appears to be generally improving compared to Round 1

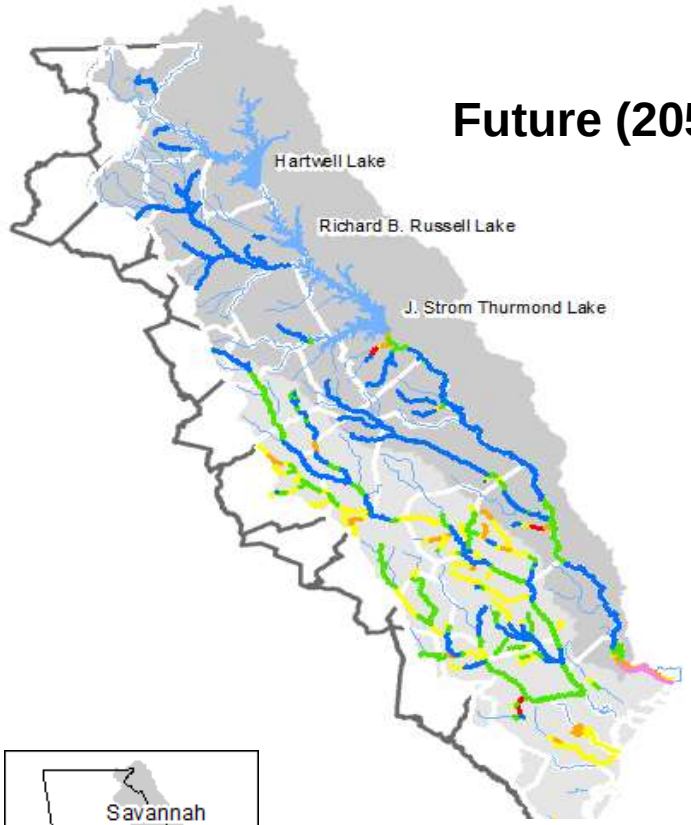
Changes in Permit Limits Associated with Modeling Assumptions under Future Conditions (2050)

River Basin	Number of Permitted Facilities	Number of Facilities with Increase Permitted Flow in 2050	Number of Facilities with Tighter BOD limits in 2050	Number of Facilities with New or Tighter NH_3 limits in 2050	Number of Facilities with New or Tighter DO limits in 2050
Savannah	63	26	34	50	16
Ogeechee	27	9	2	21	1
Total	90	35	36	71	17

Assimilative Capacity Gaps



Current Permitted



Future (2050)

Legend

Avalable Assimilative Capacity

- **Very Good ≥ 1 mg/L DO available**
- **Good 0.5 mg/L to < 1 mg/L DO available**
- **Moderate 0.2 mg/L to < 0.5 mg/L DO available**
- **Limited >0 mg/L to <0.2 mg/L DO available**
- **At Assimilative Capacity 0 mg/L DO available**
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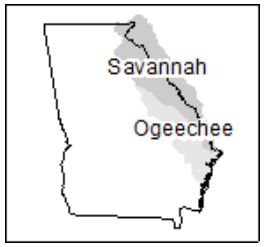
- **Unmodeled Lakes and Streams**



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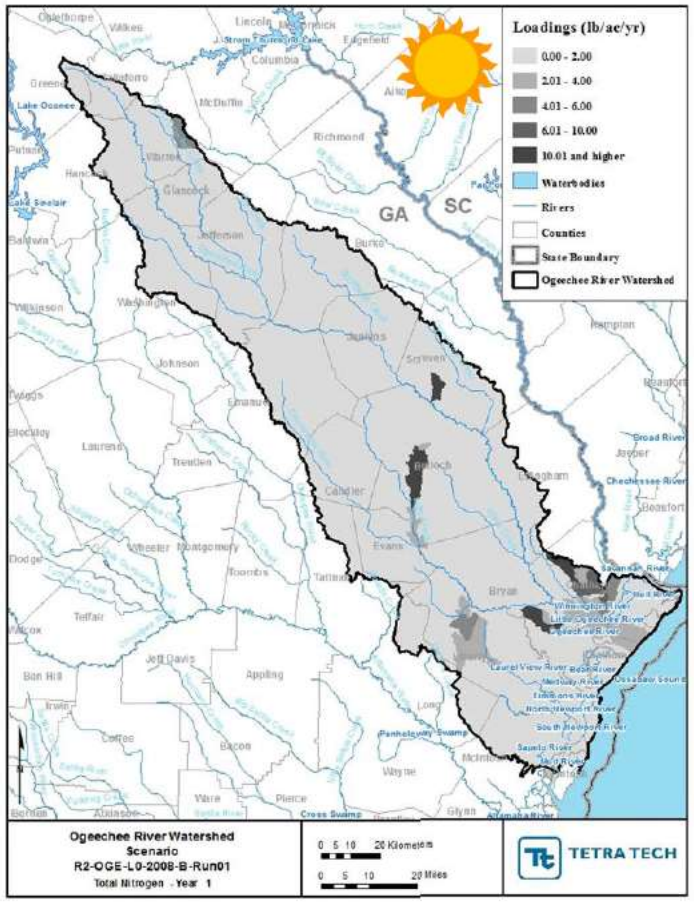
Surface Water Quality Gaps

- EPD examined nutrient (TN and TP) in the region
  - Current and Future (2050) Conditions
  - Dry and Wet Years
    - Areas of high loadings in dry years can indicate point sources as potential cause (i.e. wastewater discharge)
    - Areas of high loading in wet years are indicative on nonpoint source runoff

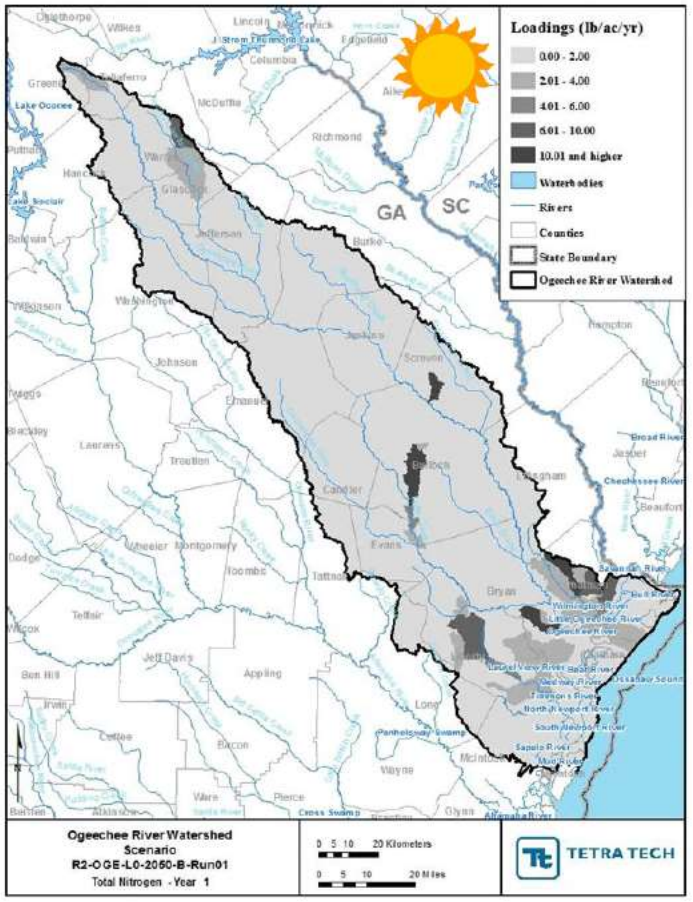
Surface Water Quality Gaps: Current and Future Comparison

Ogeechee Basin: Total N "Heat Maps" – Dry Year

CURRENT CONDITIONS



FUTURE CONDITIONS (2050)



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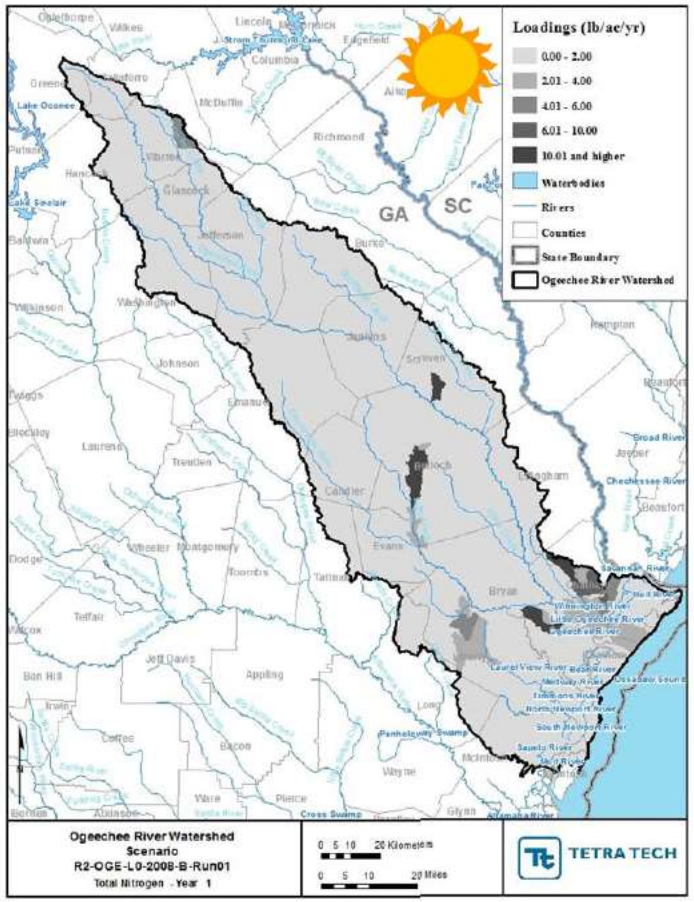
Surface Water Quality Gaps: Dry and Wet Year Comparison

Ogeechee Basin: Total N "Heat Maps"

CURRENT CONDITIONS



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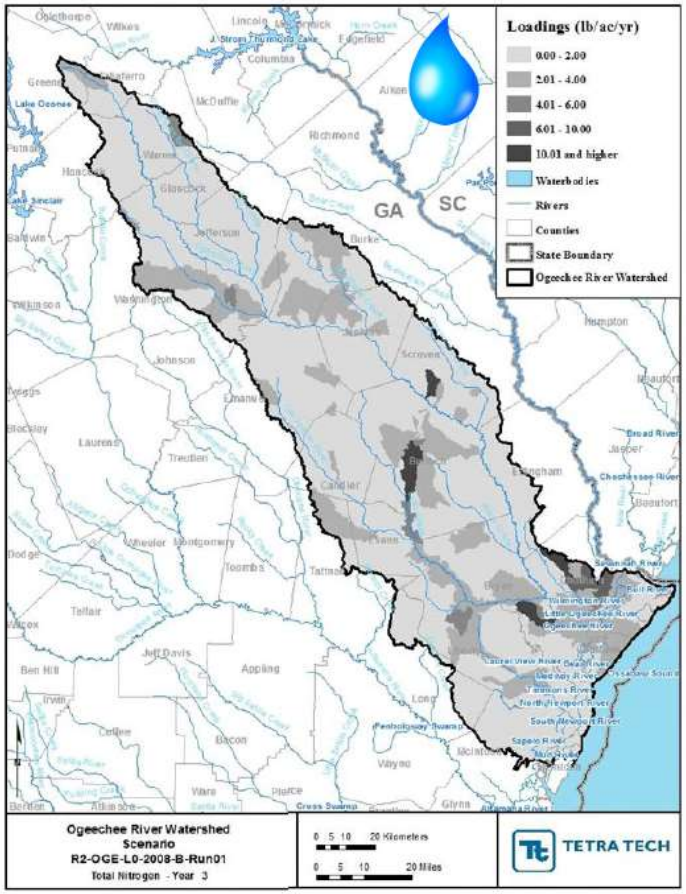

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Savannah-Upper Ogeechee Council Meeting 3

- Review Management Practices
- Handouts
  - Inter-Council Planning Document
  - Five Year Review and Revision Cycle Document
  - Round One Management Practices

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Savannah-Upper Ogeechee Council Meeting 3

- Report Back
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Savannah-Upper Ogeechee Council Meeting 3

Council Meeting Business:

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- 319(h)Grant Project Updates
- Potential Office Hours/Subcommittee conference call
- New Business
- Public Comment Period

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Georgia's
State Water Plan

Public Comment Period

- Please limit comments to 3 minutes total
- Council encourages written submission of comments as well

Thank You!

Questions? Comments? Need More Information?

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Optional Slides

Demand Forecasting Summary Statistics

- Population Changes over the Planning Period (2015 – 2050)

Counties with Highest Projected Population Growth	**% Change**	**Columbia**	**115%**
		Franklin	**16%**
		Glascock	**15%**
	# People	**Columbia**	**163,300**
		Franklin	**3,700**
		Madison	**3,200**

Counties with Lowest Projected Population Growth	**% Change**	**Lincoln**	**37%**
		Taliaferro	**30%**
		Warren	**28%**
	# People	**Lincoln**	**-2,800**
		Elbert	**-2,600**
		Wilkes	**-2,200**

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Demand Forecasting Statistics (cont.)

- Water Demand over the Planning Period (2015 – 2050)

Counties with Highest Water Demand Increase (Excluding Industry and Agriculture)			
	% Change	Burke	145%
		Columbia	111%
		Franklin	27%
	MGD	Burke	68
		Columbia	20
		Franklin	0.7

*Red text denotes counties with highest population growth statistics

Demand Forecasting Statistics (cont.)

- Water Demand by sector over the Planning Period (2015 – 2050)

Counties with Highest Surface Water Demand Increase (Excluding Industry and Agriculture)	**% Change**	**Burke**	**153%**
		Columbia	**120%**
		Hart	**83%**
	MGD	**Burke**	**69**
		Columbia	**20**
		Hart	**1**

Counties with Highest Groundwater Demand Increase (Excluding Industry and Agriculture)	**% Change**	**Madison**	**11%**
		Columbia	**3%**
		Glascock	**0.4%**
	MGD	**Madison**	**0.3**
		Columbia	**0.0**
		Glascock	**0.0**

*Red text denotes counties with highest population growth statistics

Demand Forecasting Statistics (cont.)

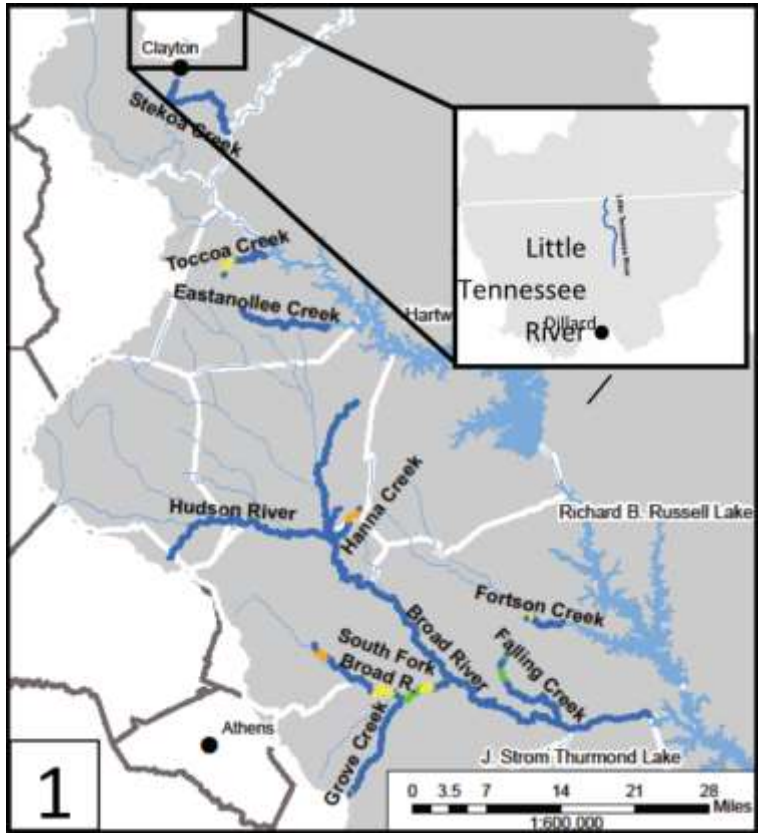
- Wastewater flows over the Planning Period (2015 – 2050)

Counties with Largest Increase in Wastewater Flows			
	% Change	Columbia	112%
		Franklin	30%
		Hart	19%
	MGD	Columbia	13
		Franklin	0.8
		Hart	0.6

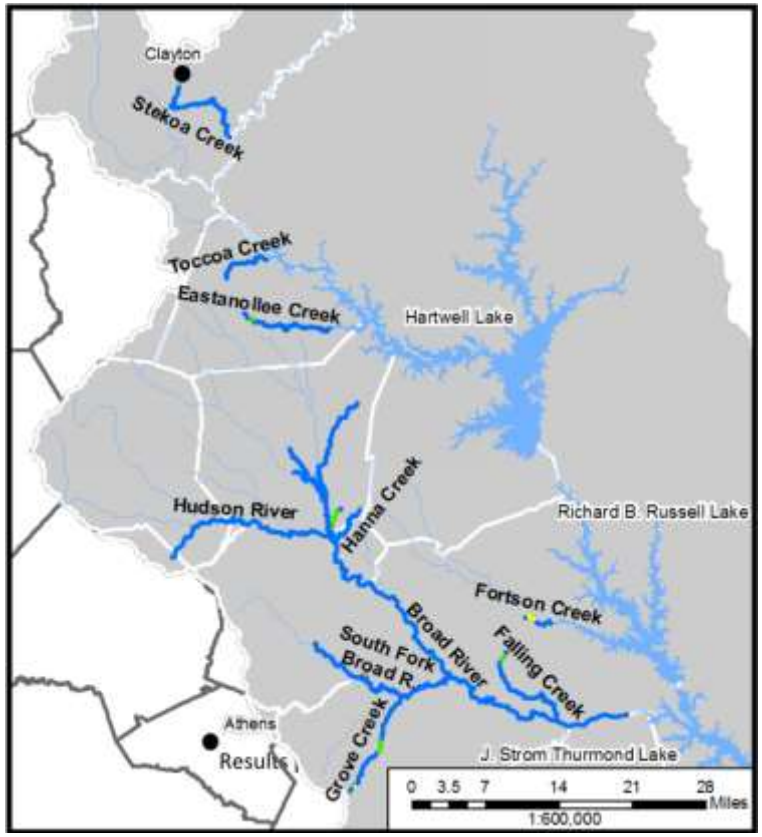
*Red text denotes counties with highest population growth statistics

Surface Water Quality/Assimilative Capacity Gaps

- Savannah Basin GA DOSAG Model Results



Round 1



Update

Legend

Avalable Assimilative Capacity

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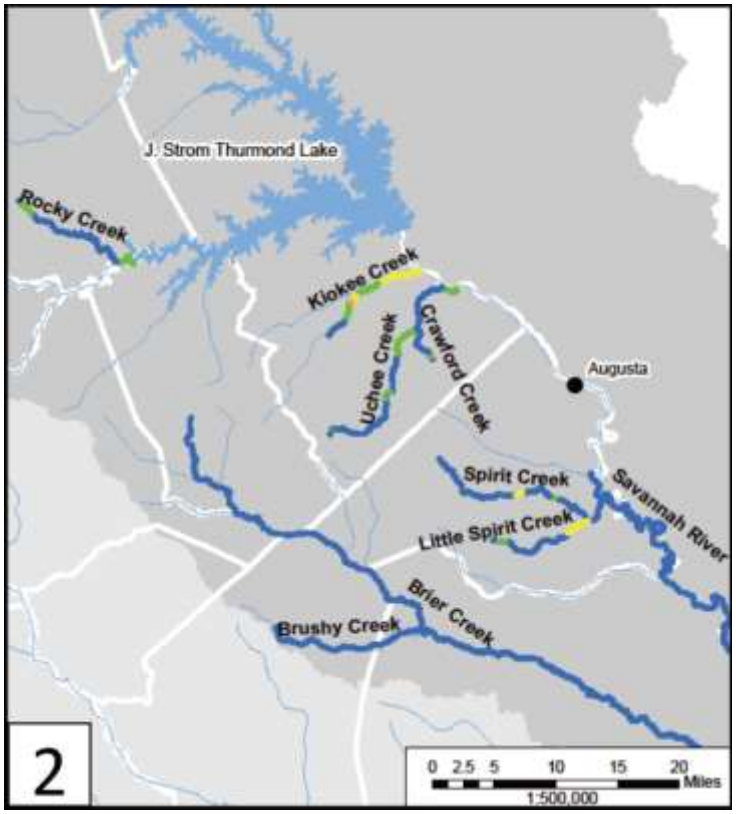

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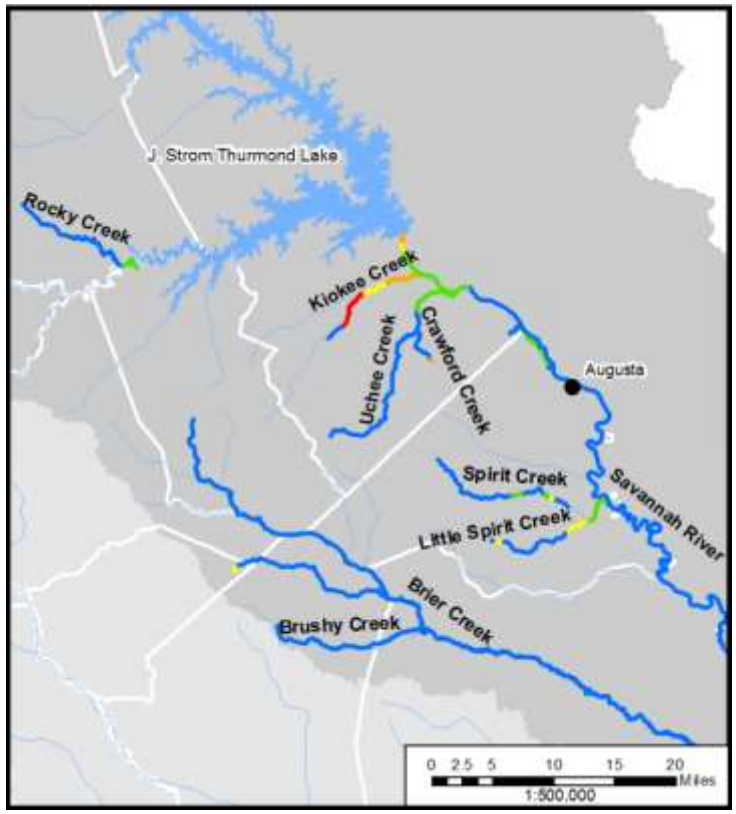

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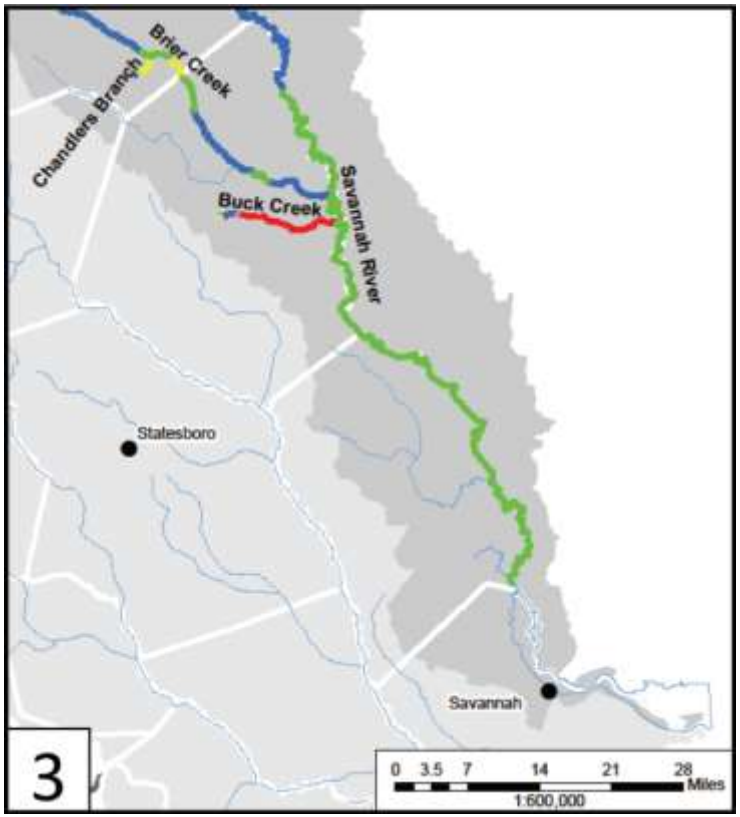

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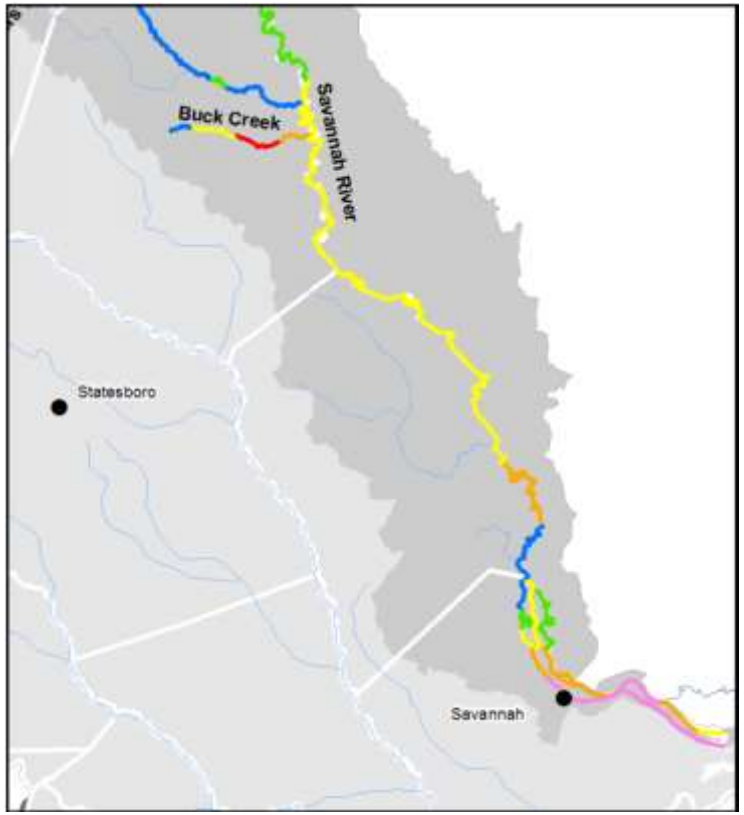

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Surface Water Quality/Assimilative Capacity Gaps

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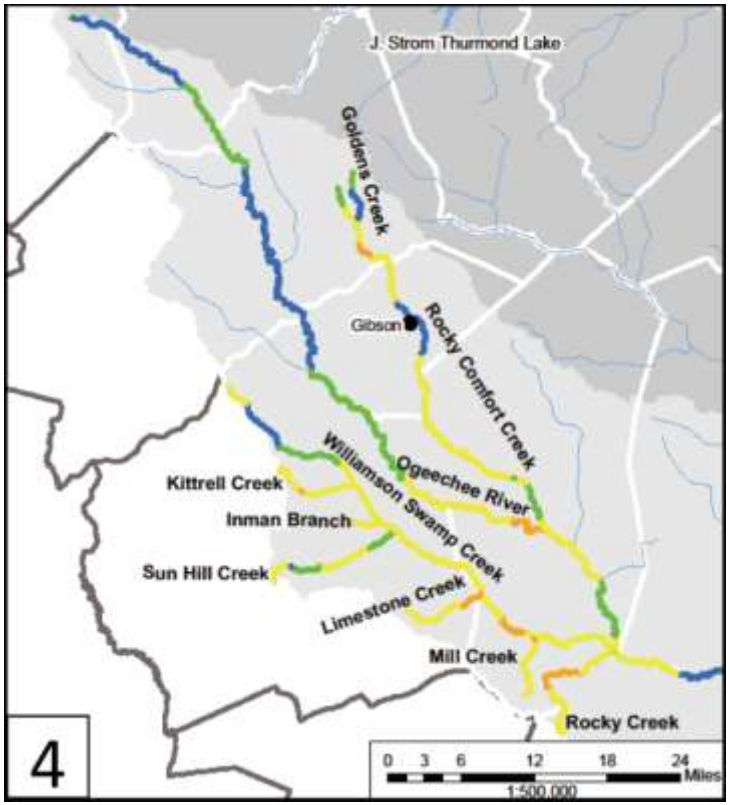

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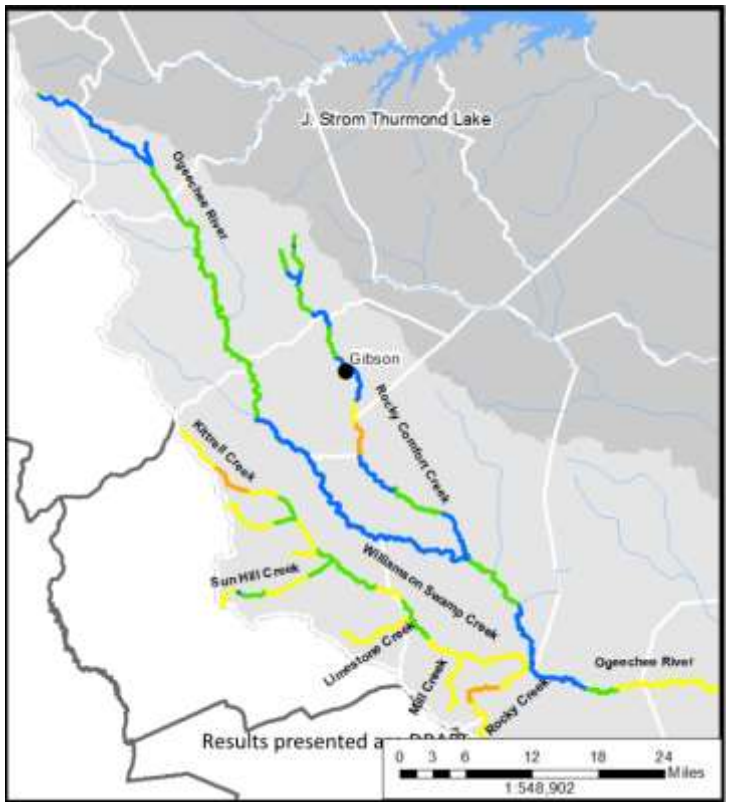

Update

Legend

Available Assimilative Capacity

- Very Good ≥ 1 mg/L DO available
- Good 0.5 mg/L to < 1 mg/L DO available
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Surface Water Quality/Assimilative Capacity Gaps

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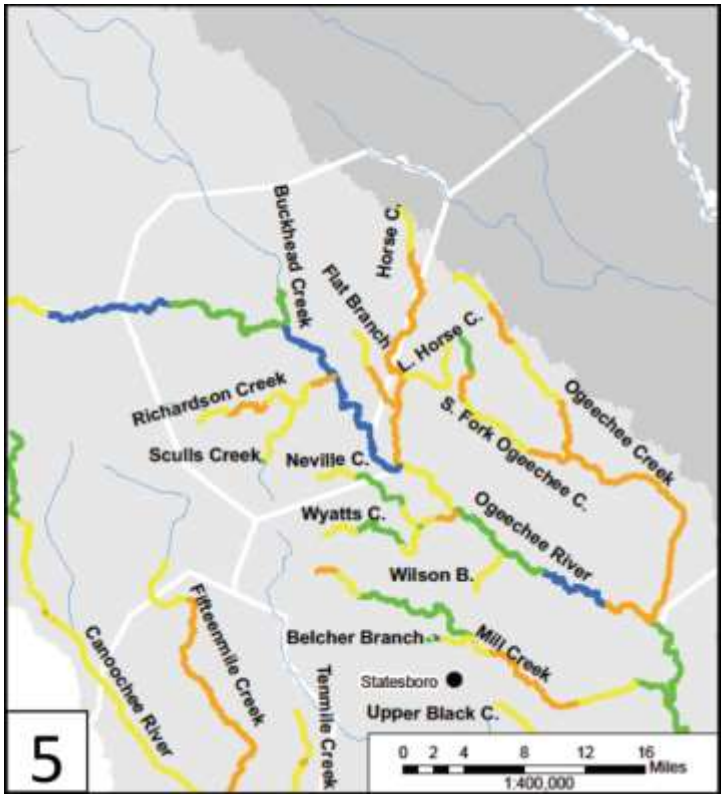

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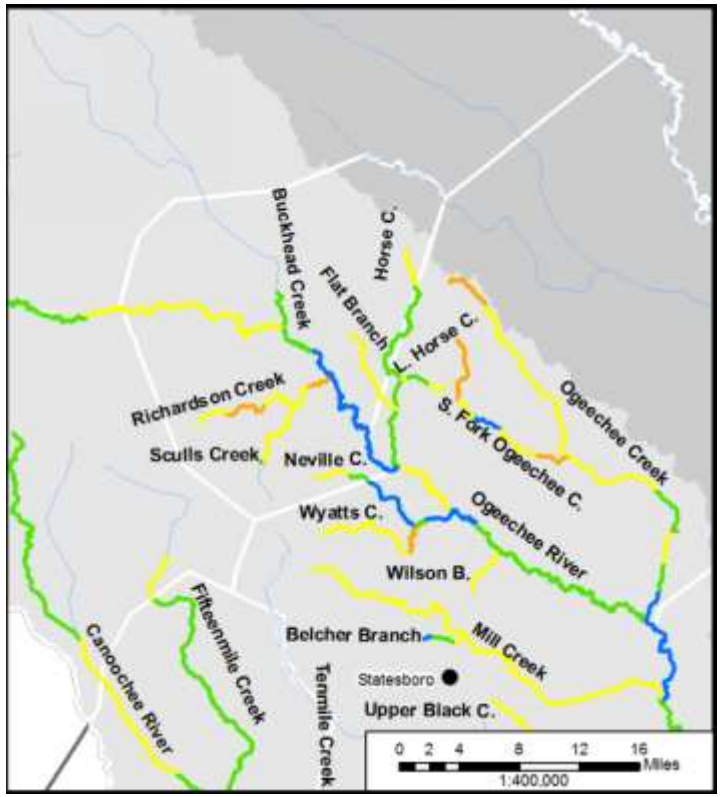

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