

# UPPER OCONEE REGIONAL WATER PLAN



Hard Labor Creek (GA DNR)



Georgia's  
**State Water Plan**



**GEORGIA**  
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION



# METRO NORTH GEORGIA WATER PLANNING DISTRICT

## **Metropolitan North Georgia Water Planning Act (2001)**

- created Metropolitan North Georgia Water Planning District (Metro Water District)

## **Metro Water District plans completed (2003)**

- Watershed (i.e., Stormwater) Management Plan
- Wastewater Management Plan
- Water Supply & Water Conservation Management Plan

## **Metro Water District plans updated (2009)**

## **Metro Water District plans updated, integrated into one (2017)**



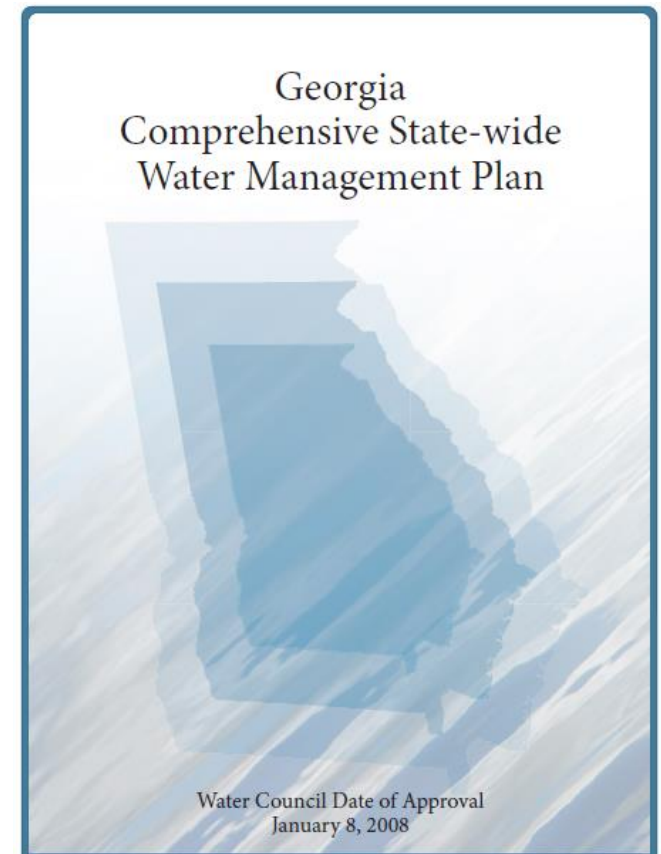
# ORIGINS OF REGIONAL WATER PLANNING

## Comprehensive Statewide Water Management Planning Act (2004)

- State Water Plan (2008)

## Regional Water Planning

- Councils appointed (2009)
- Initial plans adopted after 3-year planning process (2011)
- Plans updated, adopted (2017)
- Plans reviewed, revised every 5 years





# STATEWIDE WATER PLANNING POLICY STATEMENT

*“Georgia manages 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.”*

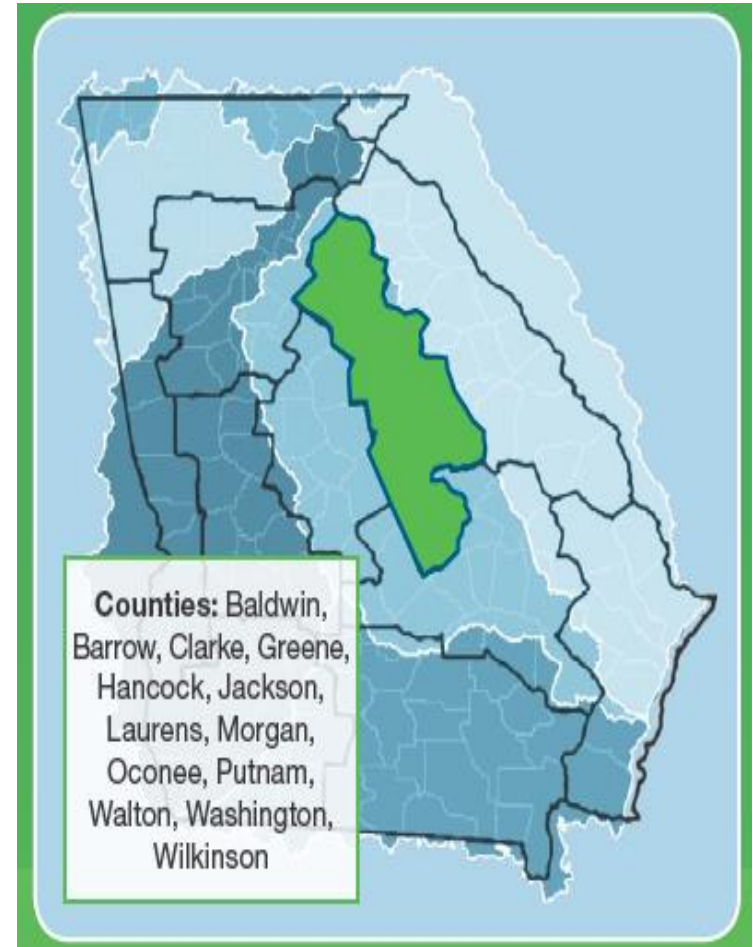
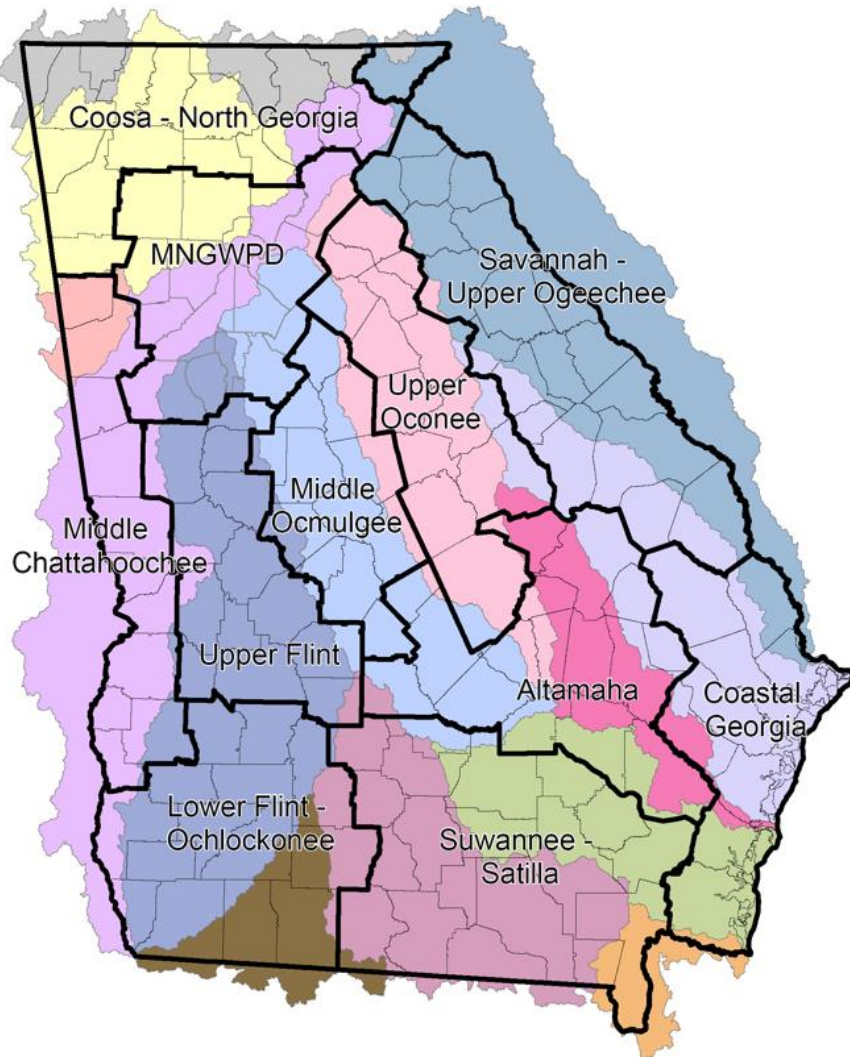


GA State Capitol (C. Carey 2009)

(2004 Comprehensive Statewide  
Water Management Planning Act)



# GEORGIA'S WATER PLANNING REGIONS





# UPPER OCONEE REGIONAL WATER PLANNING PARTNERS

- **Oconee Regional Water Planning Council**
  - Appointed by Governor, Lieutenant Governor & House Speaker
  - 18 members
  - Representing 13 counties
  - Oconee, Ocmulgee, Ogeechee, Savannah, and Altamaha watersheds
- **Stakeholders**
  - E.g., fishing, boating, homeowners, chambers of commerce, environmental groups, universities & general public
- **Neighboring Councils, including Metro District**
- **Implementing actors**
  - Local governments, water utilities, farmers, industry & others
- **Contractors**
- **Georgia Environmental Protection Division (EPD)**



# MAIN ELEMENTS OF UPPER OCONEE REGIONAL WATER PLAN

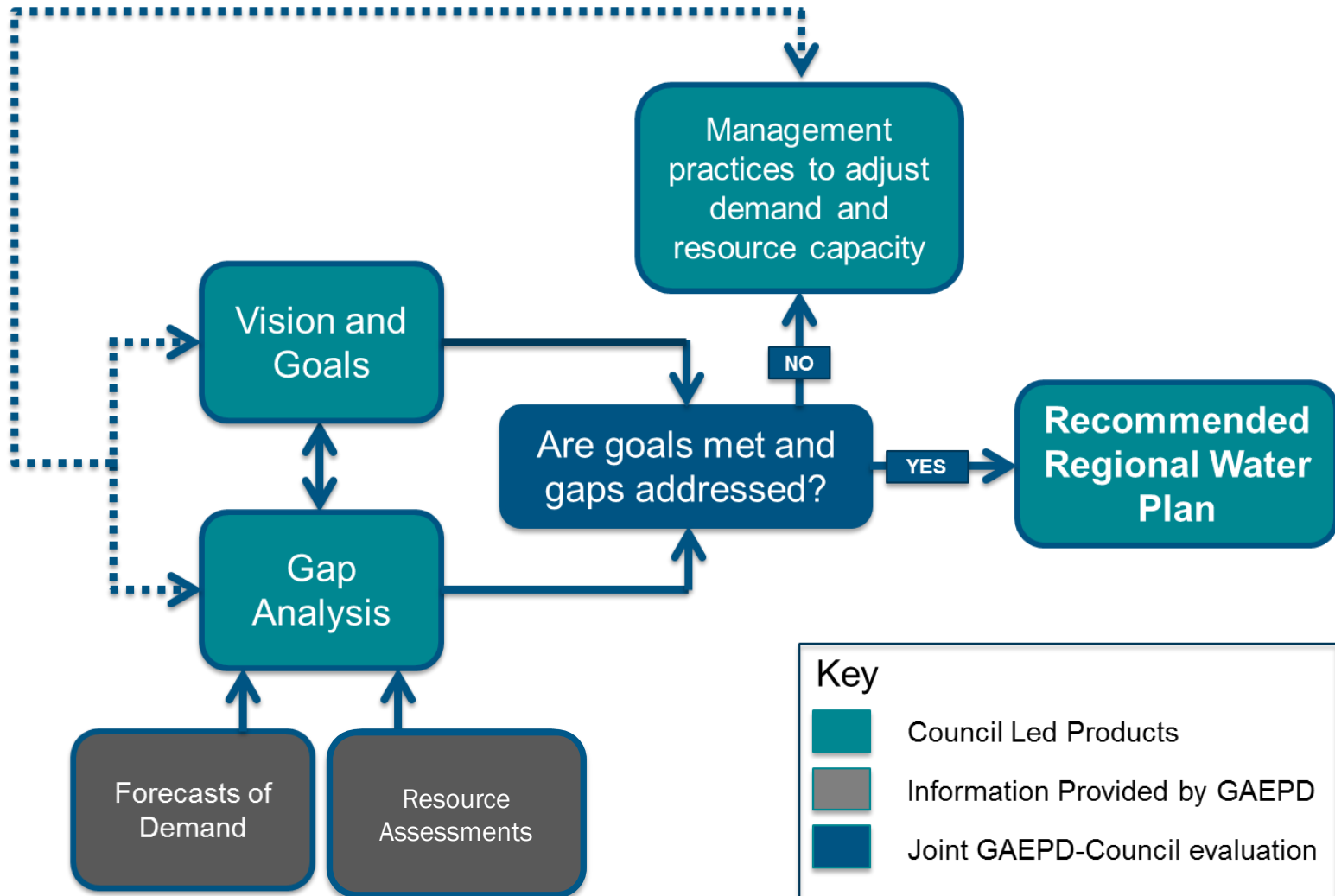


Dyar Pasture Recreation Area (USDA)

- Council's Vision & Goals
- Current & Future Water Supply Needs
- Current & Future Wastewater Needs
- Resource Assessments
- Management Practices
- Recommendations to State



# UPPER OCONEE REGIONAL WATER PLANNING PROCESS





# UPPER OCONEE COUNCIL'S VISION

*“Create a regional plan that focuses on managing water as a critical resource vital to our health, economic, social and environmental wellbeing. Build trusting partnerships with neighboring regions and develop an educated and engaged citizenry that embraces sound water management.”*



Athens City Hall (M. Rivera 2012)



# UPPER OCONEE REGION GOALS

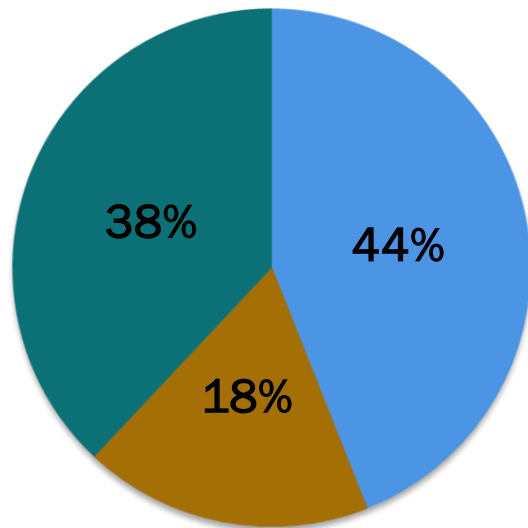
## Seven Goals

1. Promote alternatives and technologies that conserve, reuse, return, and recycle water
2. Balance economic development, recreation, and environmental interests
3. Educate stakeholders on importance of water quality and water conservation
4. Encourage data and information development/accessibility
5. Identify means of reducing non-point source pollution
6. Recommend strategies for generating revenue to maintain high level of service while promoting water conservation/efficiency
7. Identify/plan measures to sustain adequate water supply



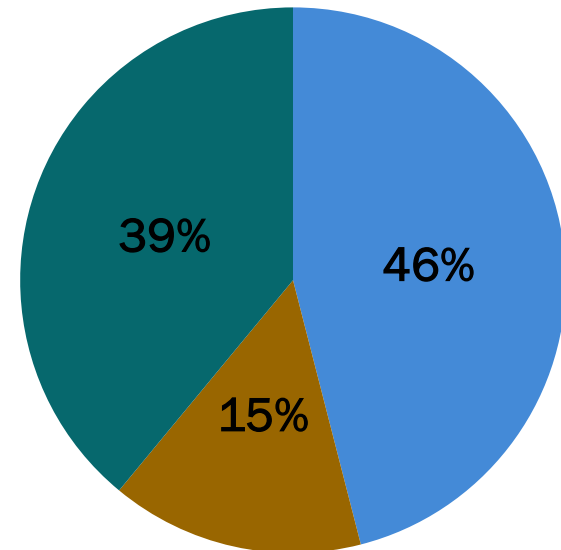
# UPPER OCONEE REGION WATER DEMAND FORECASTS

**2015**  
Total = 166.2 MGD



■ Municipal  
■ Agriculture  
■ Industrial

**2050**  
Total = 225.8 MGD



Percent of total water demand by sector



# UPPER OCONEE REGION RESOURCE ASSESSMENTS

## Current & Future Conditions

- Surface water availability
- Groundwater availability
- Surface water quality

## Potential Gaps

- Determine if there are potential shortfalls in current or future water availability or water quality



# UPPER OCONEE REGION RESOURCE ASSESSMENTS

## Surface Water Availability: Planning Nodes

- Planning nodes are locations on rivers or major tributaries where existing flow data are available
- Typically, nodes are located at or near US Geological Survey stream gages (pictured) or at dams





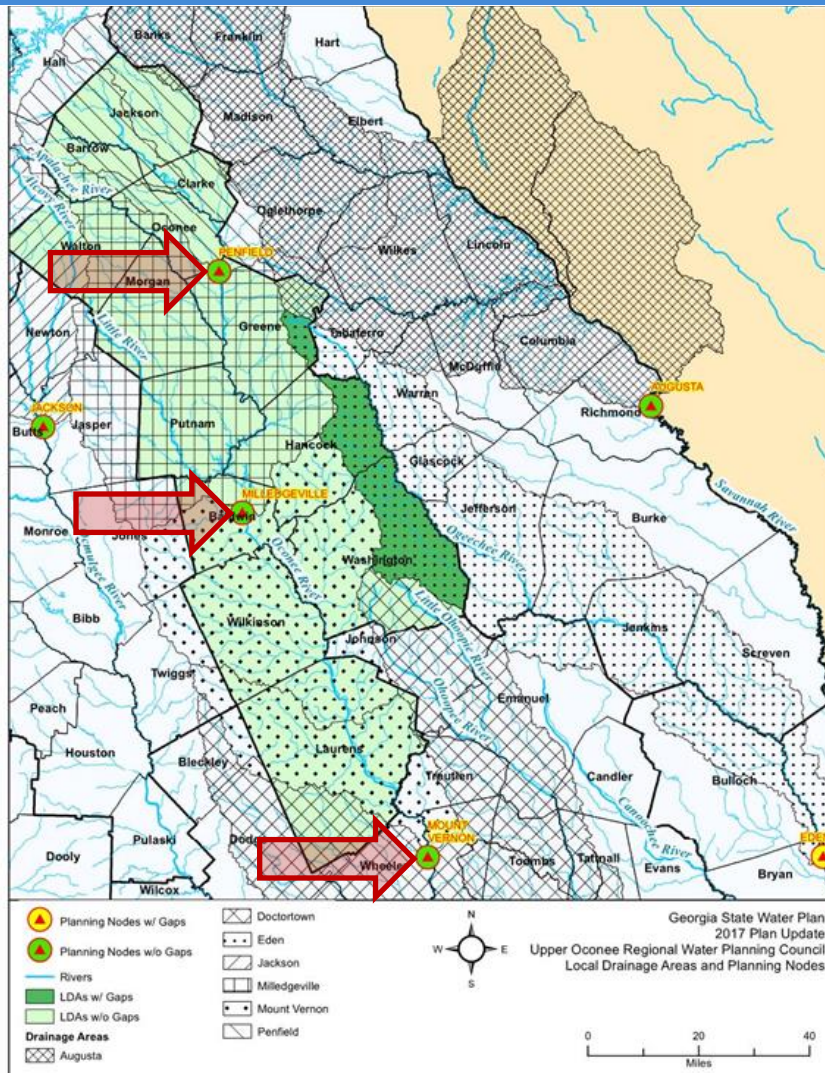
# UPPER OCONEE REGION RESOURCE ASSESSMENTS

## Surface Water Availability

### 3 Planning Nodes in Region

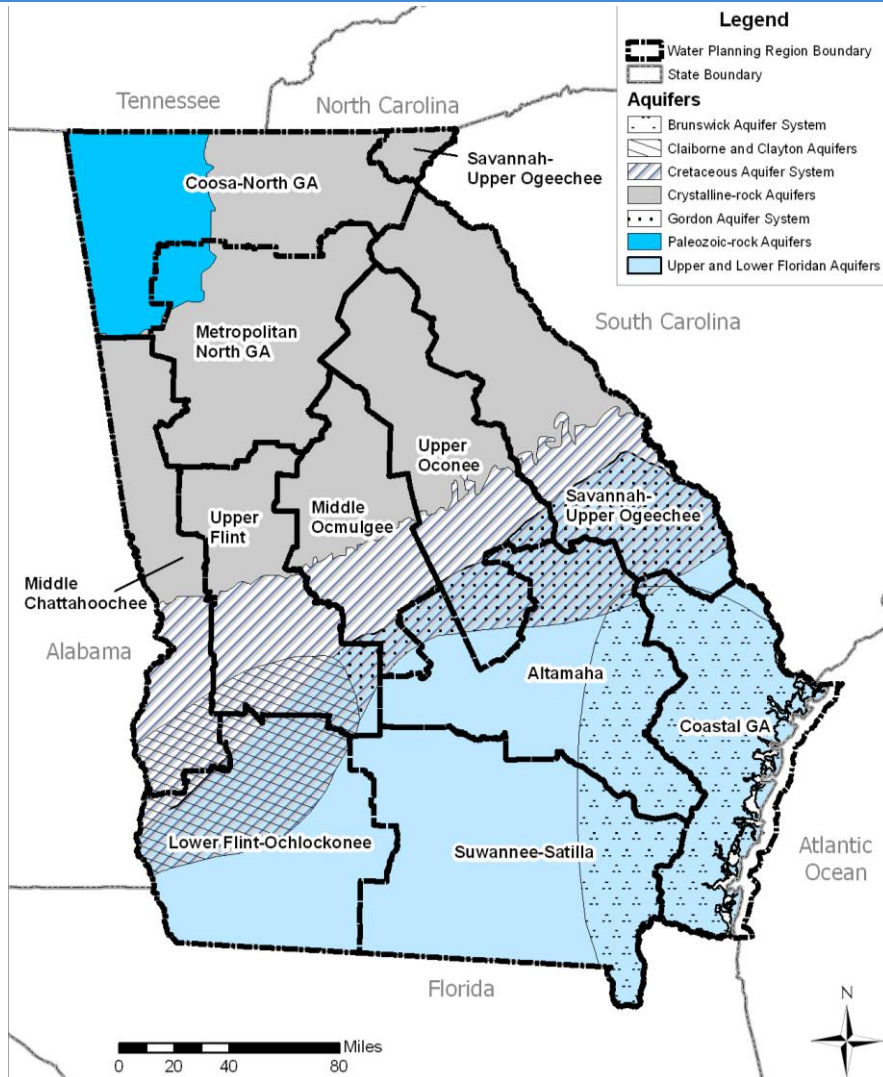
- Penfield
- Milledgeville
- Mount Vernon

Modeling indicated no potential gaps (current or future) when stream flows are compared against defined threshold levels.





# UPPER OCONEE REGION RESOURCE ASSESSMENTS



## Groundwater Availability

3 aquifers evaluated within the Upper Oconee region:

- Cretaceous
- Floridan
- Crystalline-Rock

Modeling indicated no potential gaps (current or future)



- All GA streams/lakes have designated uses
  - fishing, recreation, and/or drinking water
- Some water bodies may be impaired and not support designated use
- ~800 stream miles impaired
- Small amount of Lake Sinclair also impaired





# UPPER OCONEE REGION RESOURCE ASSESSMENTS

## Surface Water Quality: Potential Gaps & Recommendations

### Laurens, Morgan, Putnam, & Wilkinson Counties

- Some stream segments may have low dissolved oxygen, limiting capacity to assimilate wastewater in future

### Lakes Oconee & Sinclair

- Excess nutrient loading due to future wastewater discharges and land use changes may impact drinking water and recreation by 2050

### Recommendations

- Use advanced treatment when expanding or building wastewater treatment plants
- Because state is developing nutrient standards for both Lakes, management practices that reduce nutrient loading from point and non-point sources may be needed



# UPPER OCONEE REGION RECOMMENDATIONS TO THE STATE



Lake Sinclair Recreation Area (USDA)

- Identify long-term funding mechanisms to assist responsible parties with plan implementation
- Coordinate across state agencies to facilitate implementation
- Develop a long-term ambient trend monitoring network for the region



# UPPER OCONEE REGIONAL WATER PLAN IMPLEMENTATION

## Council's Role

- Help raise awareness of Plan
- Work with partners to implement Plan

## State's Role

- Provide funding & staff to support future Council activities & technical work
- Provide funding to support implementation, e.g., seed grants, GA Environmental Finance Authority loans



# UPPER OCONEE REGIONAL WATER PLAN IMPLEMENTATION

## Your Role

*“Sound water resources management involves meaningful participation, coordination, and cooperation among interested and affected stakeholders and citizens as well as all levels of governmental and other entities managing or utilizing water”*

*(2004 Comprehensive Statewide Water Management Planning Act)*

## Next Plan Update (2021-22)

- Contact me or another Council member to learn more about providing input prior to the next update
- Early involvement and diverse input is crucial to our planning success



# FOR MORE INFORMATION



Hard Labor Creek (GA DNR)

[waterplanning.georgia.gov](http://waterplanning.georgia.gov)

[Council Member]

[Email address]

DEPARTMENT OF NATURAL RESOURCES