



Georgia's State Water Plan

Update on Water Planning in Georgia

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www.georgiawaterplanning.org

Global Water Facts

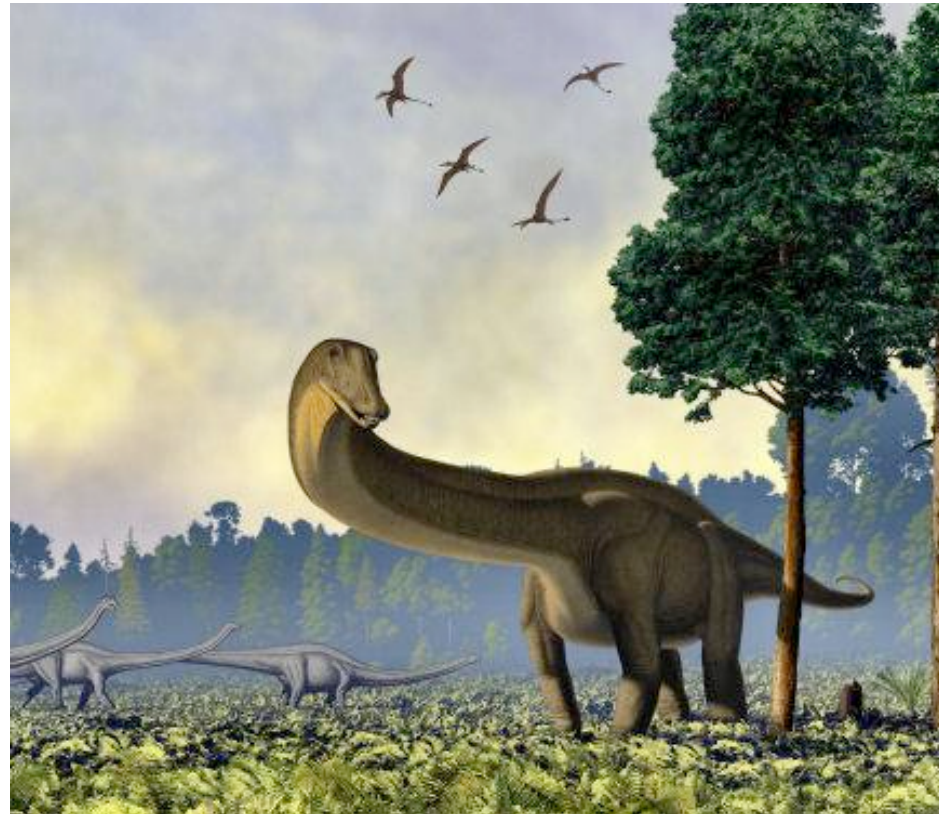
💧 The same amount of water is on earth today as when the earth was created and the dinosaurs roamed.

💧 97% is salt water

💧 2% is captured in polar ice caps

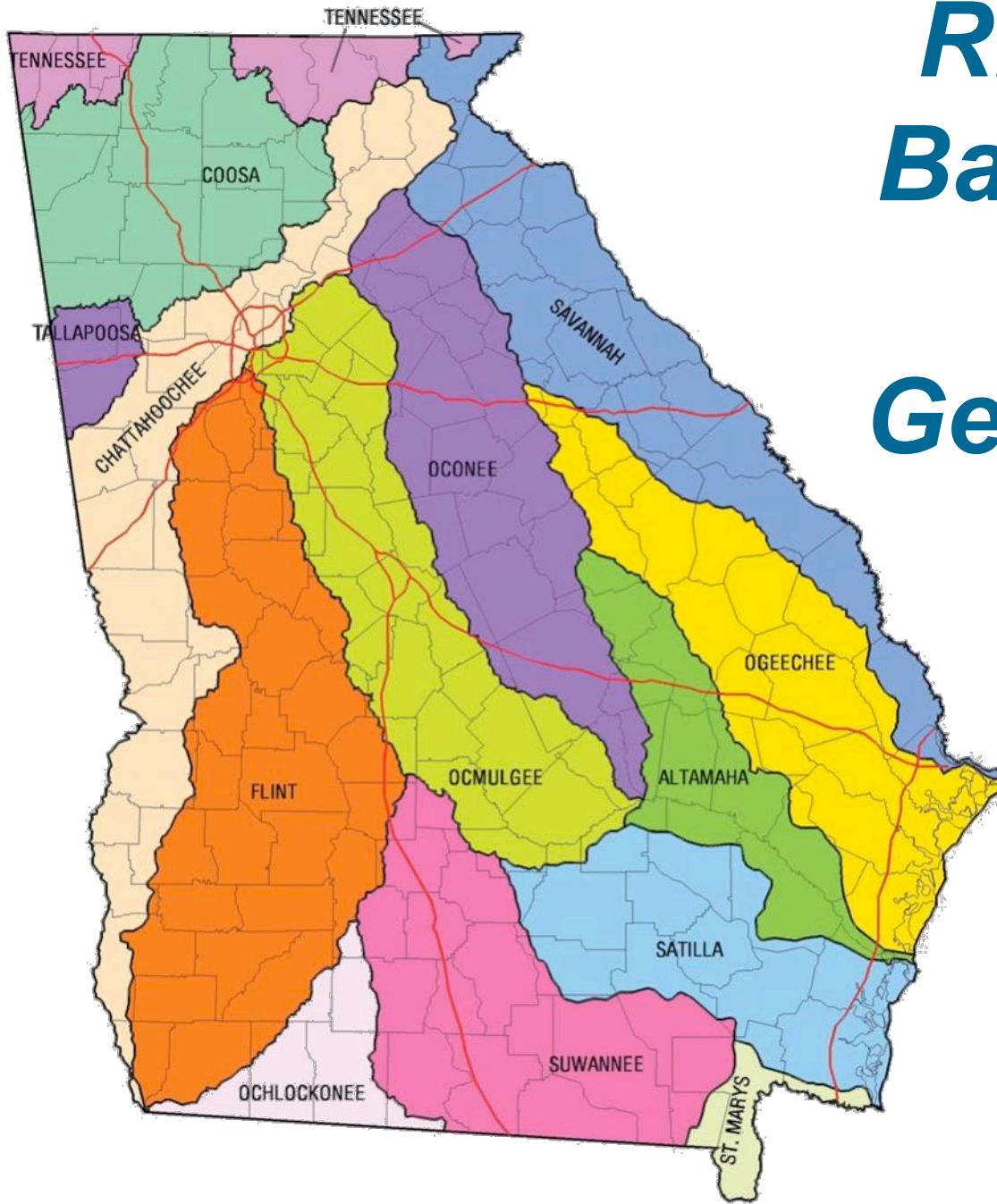
💧 1% is fresh water

- Drinking
- Bathing
- Cooking
- Industry
- Irrigation



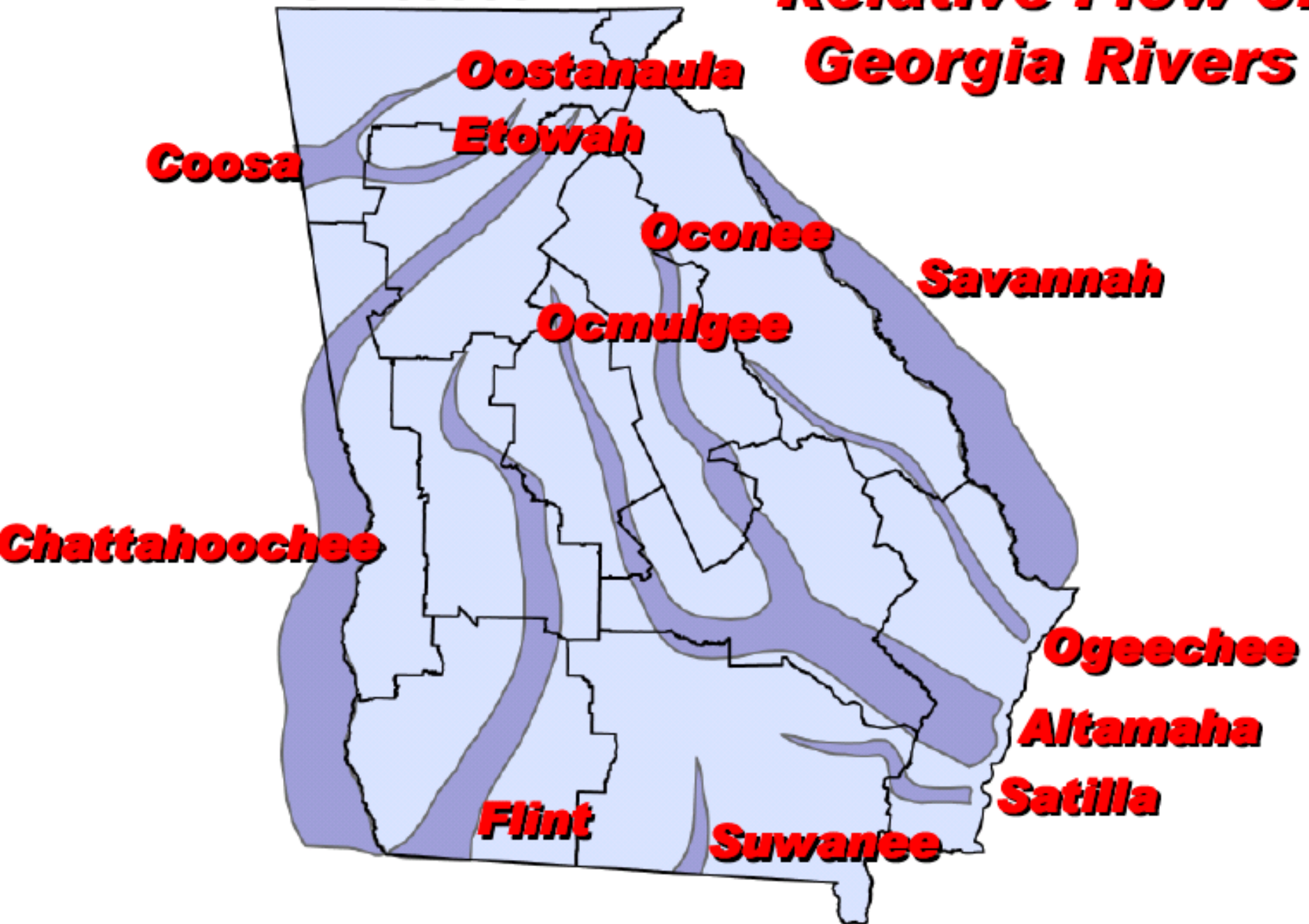
Background

River Basins of Georgia



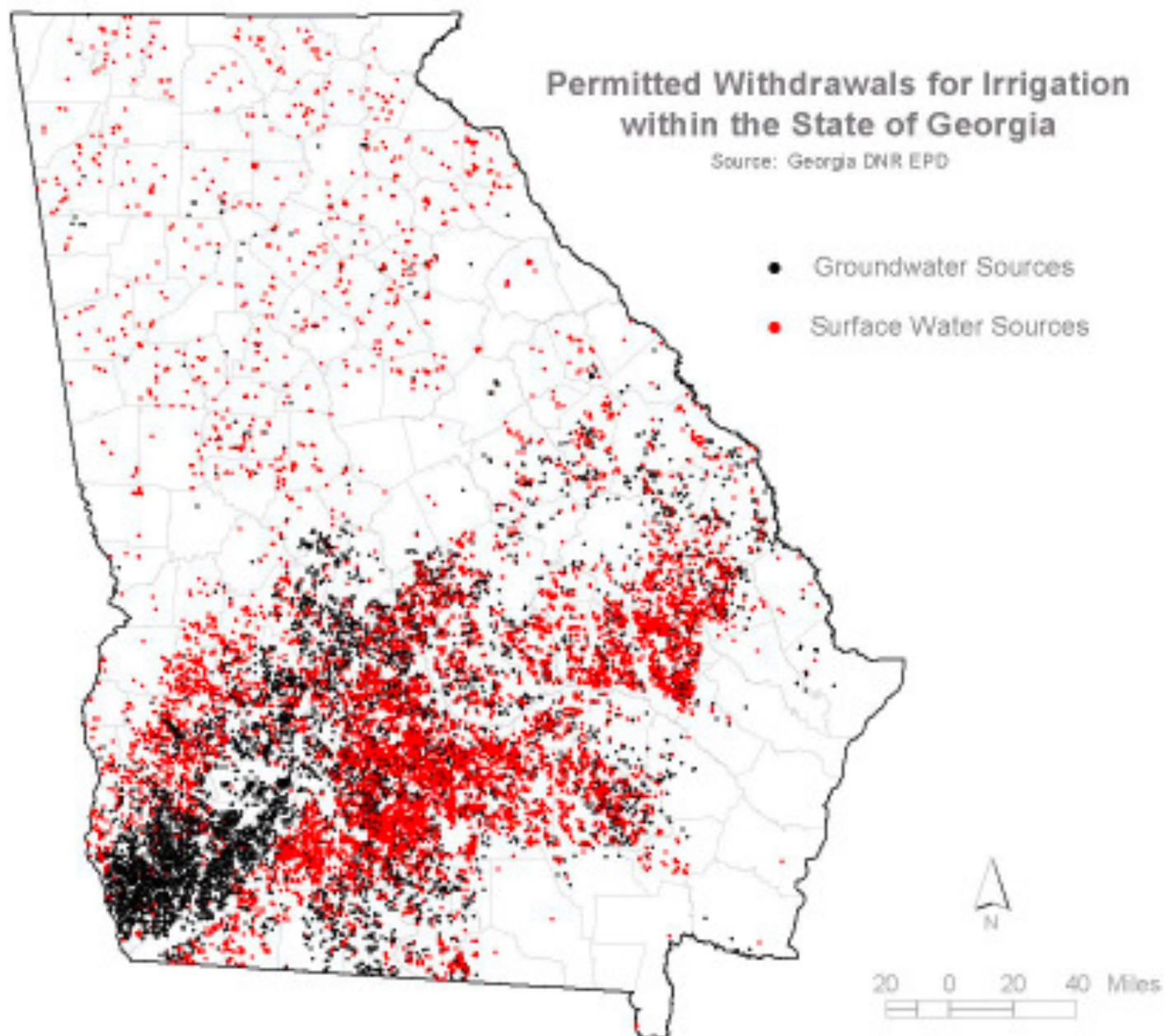
Tennessee

Relative Flow of Georgia Rivers



Permitted Withdrawals for Irrigation within the State of Georgia

Source: Georgia DNR EPD



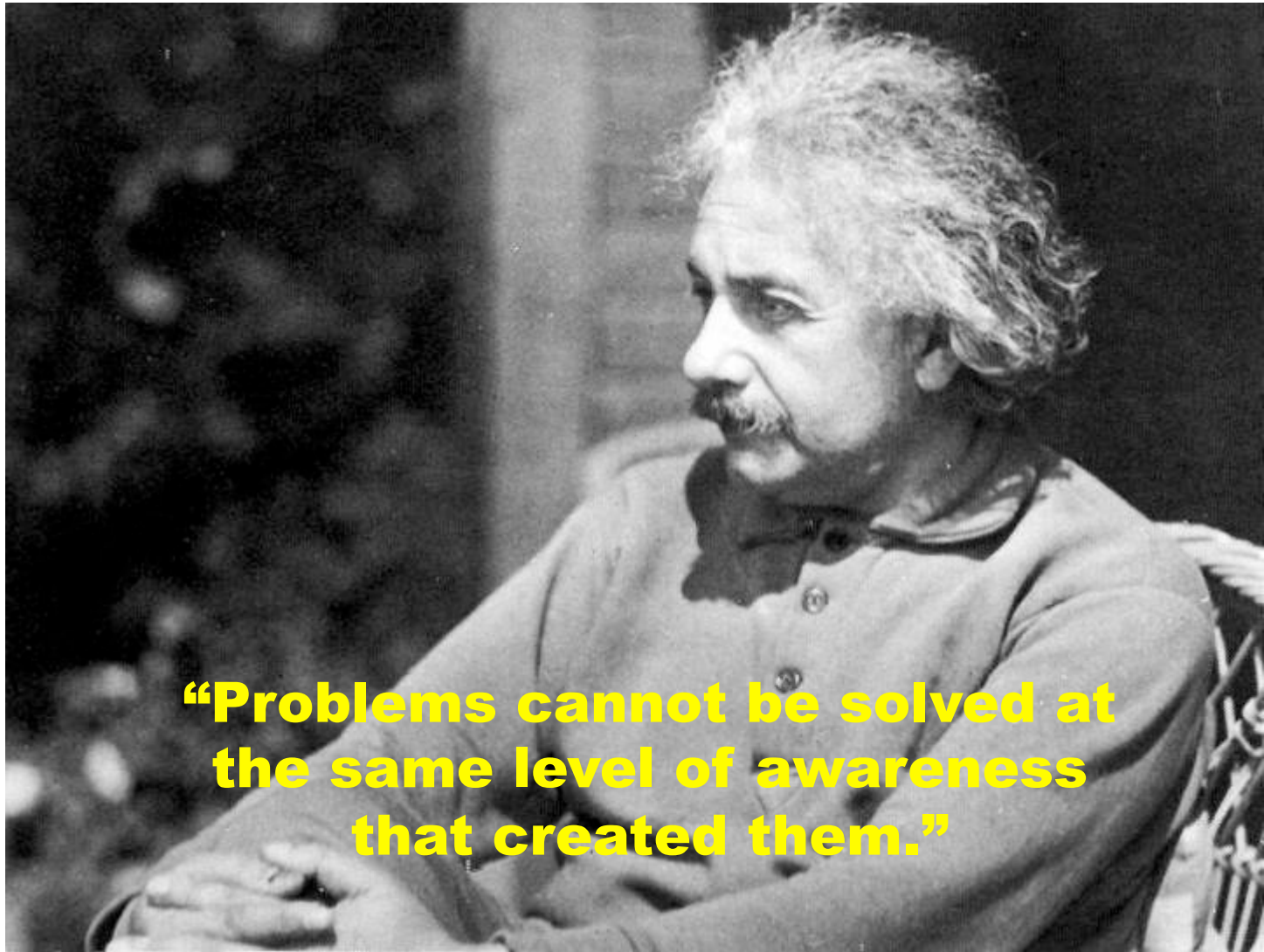
Water Supply and Usage (Georgia)

- Instream Uses
 - Navigation
 - Hydroelectric (power production)
 - Waste Assimilation
 - Recreation
 - Fish and Wildlife Habitat
- Offstream Uses
 - Public Supply
 - Self-Supplied Industry
 - Irrigation/Farm Uses
 - Thermoelectric Power

Water Supply and Usage (Metro Atlanta)

- Instream Uses
 - Navigation
 - Hydroelectric (power production)
 - Waste Assimilation
 - Recreation
 - Fish and Wildlife Habitat
- Offstream Uses
 - Public Supply
 - Self-Supplied Industry
 - Irrigation/Farm Uses
 - Thermoelectric Power

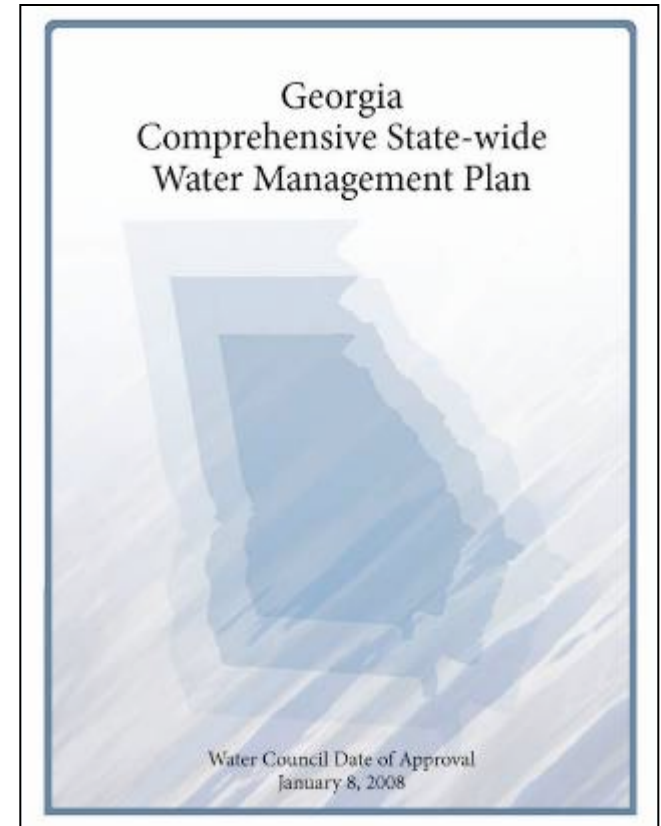
Water Planning History



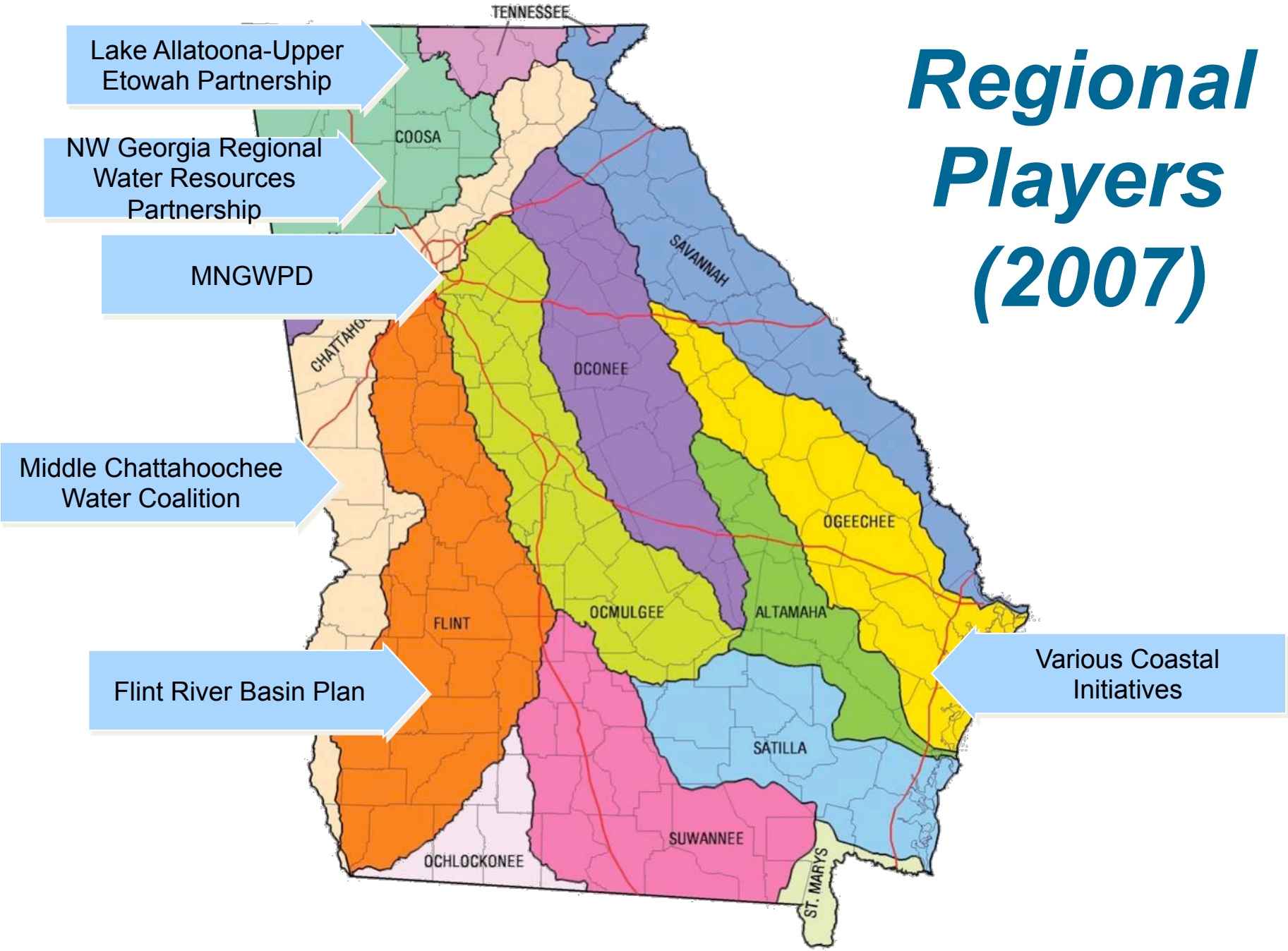
“Problems cannot be solved at the same level of awareness that created them.”

Recent Water Planning History

- 2001 SR 142 – creates legislative study committee
- 2001 SB 130 – creates first regional water planning agency (MNGWPD)
- 2003 HB 237 – initial efforts stall due to controversy surrounding the sale of water permits
- 2004 – Comprehensive State-wide Water Management Planning Act
- 2008 HR 1002 – Comprehensive State-Wide Water Management Plan



Regional Players (2007)



Lake Allatoona-Upper Etowah Partnership

NW Georgia Regional Water Resources Partnership

MNGWPD

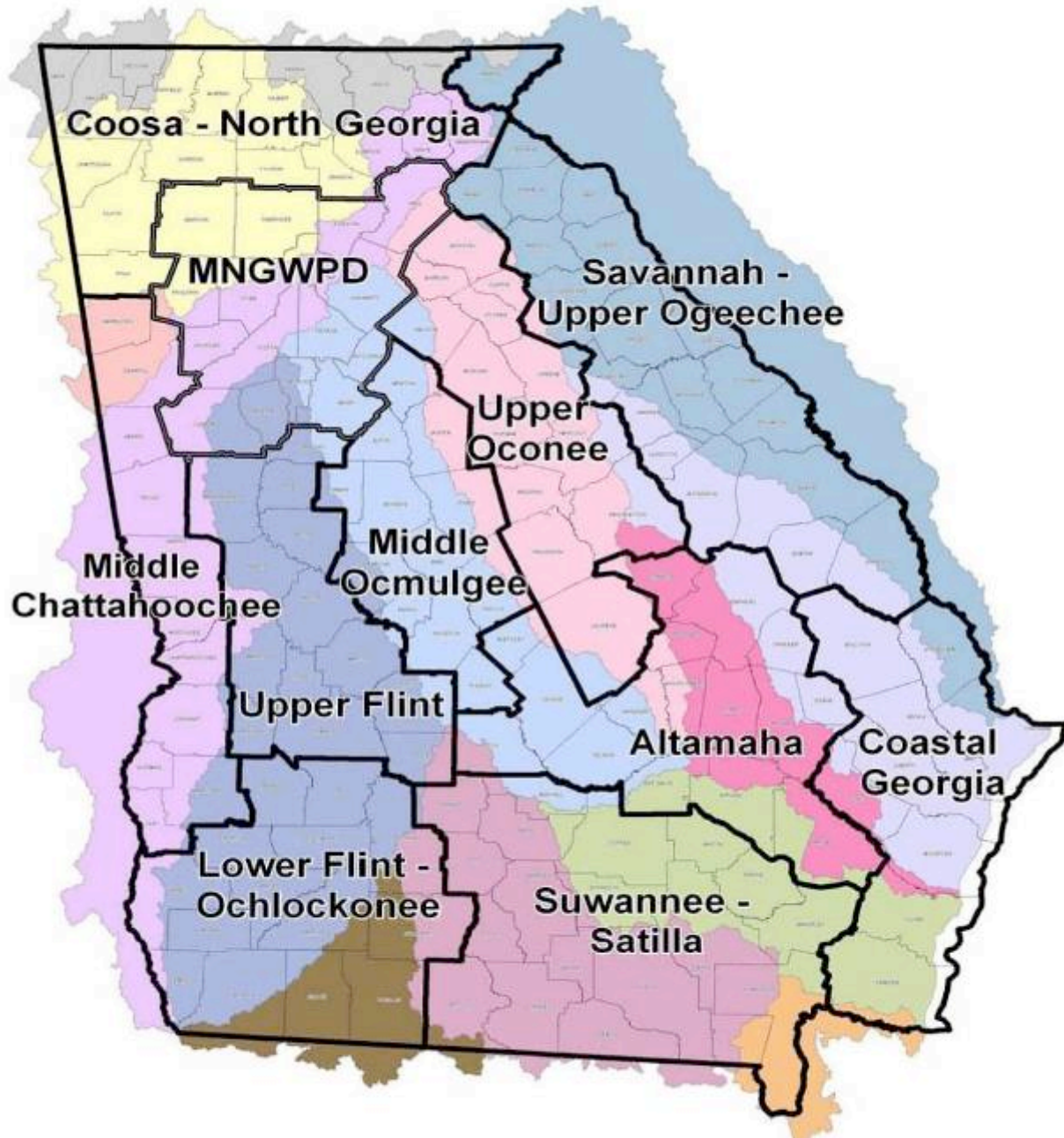
Middle Chattahoochee Water Coalition

Flint River Basin Plan

Various Coastal Initiatives

Final Delineation of Water Planning Regions

Regional Players (2009)



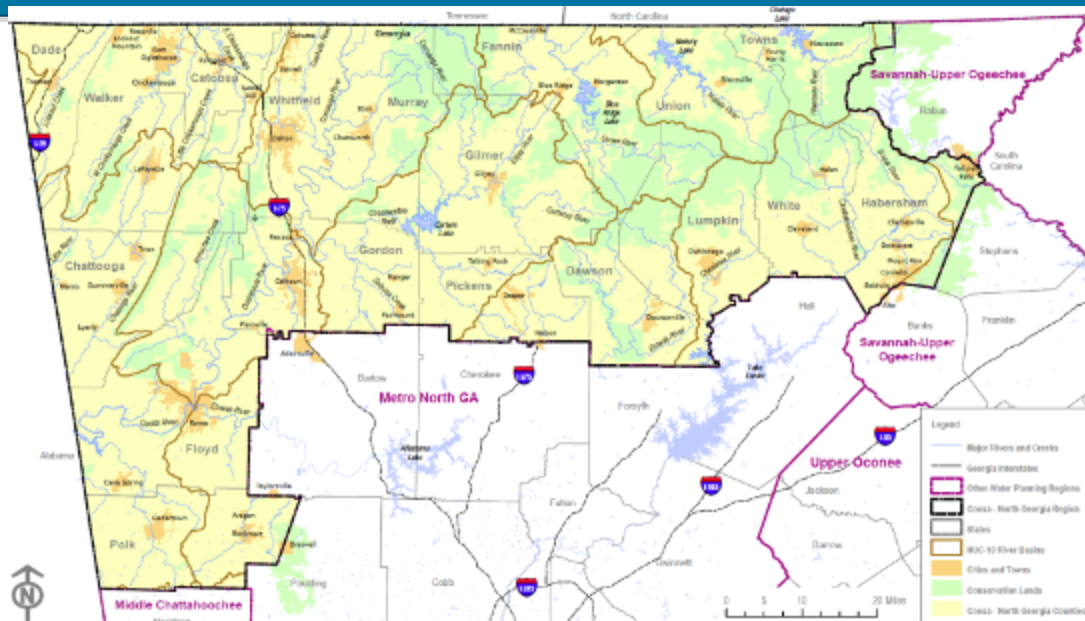
Metro District Comparison to Regional Water Councils

Topic	MNGWPD	Ten Water Planning Councils
Authority	Planning and enforcement requirements specified in legislation	Basic requirements in water plan, additional guidance provided by EPD
Governing Board	16 local elected officials, 10 Gov., Lt. Gov., Speaker appointees	25 Gov., Lt. Gov., Speaker appointees + 3 Alternates + 1 Senate & 1 House Rep (8 must be elected officials)
Funding	80% local government, 20% state	100% state
Demographics	15 counties, <u>4 million people</u>	144 counties, <u>4 million people</u>
Plan Development	2003 initial, 2009 revised	2011 initial
Primary Focus	Management Practice Development	Resource Assessment Modeling, Management Practice Development

Coosa – North Georgia Regional Water Plan



Coosa-North Georgia WPC



Doug Anderton
Dade County

Charles Bethel
Don Cope
David Pennington
Whitfield County

David Ashburn
Walker County

Irwin Bagwell
Tim Banks
John Bennett
Jerry Jennings
Floyd County

Richard Martin
Polk County
Jimmy Petty
Murray County

Kelly Cornwell
Sam Payne
Gordon County
Haynes Johnson
(alternate)
Pickens County

Keith Coffey
(alternate)
Catoosa County

Sherry Loudermilk
Tim Mercier
Fannin County

David Westmoreland
Gilmer County

Tom O'Bryant
White County

Lamar Paris
Union County

Frank Riley
Towns County

Kenneth Beasley
Tim Bowden
Lumpkin County

Gerald Dunham
Stephen Gray
Todd Pealock
Habersham County

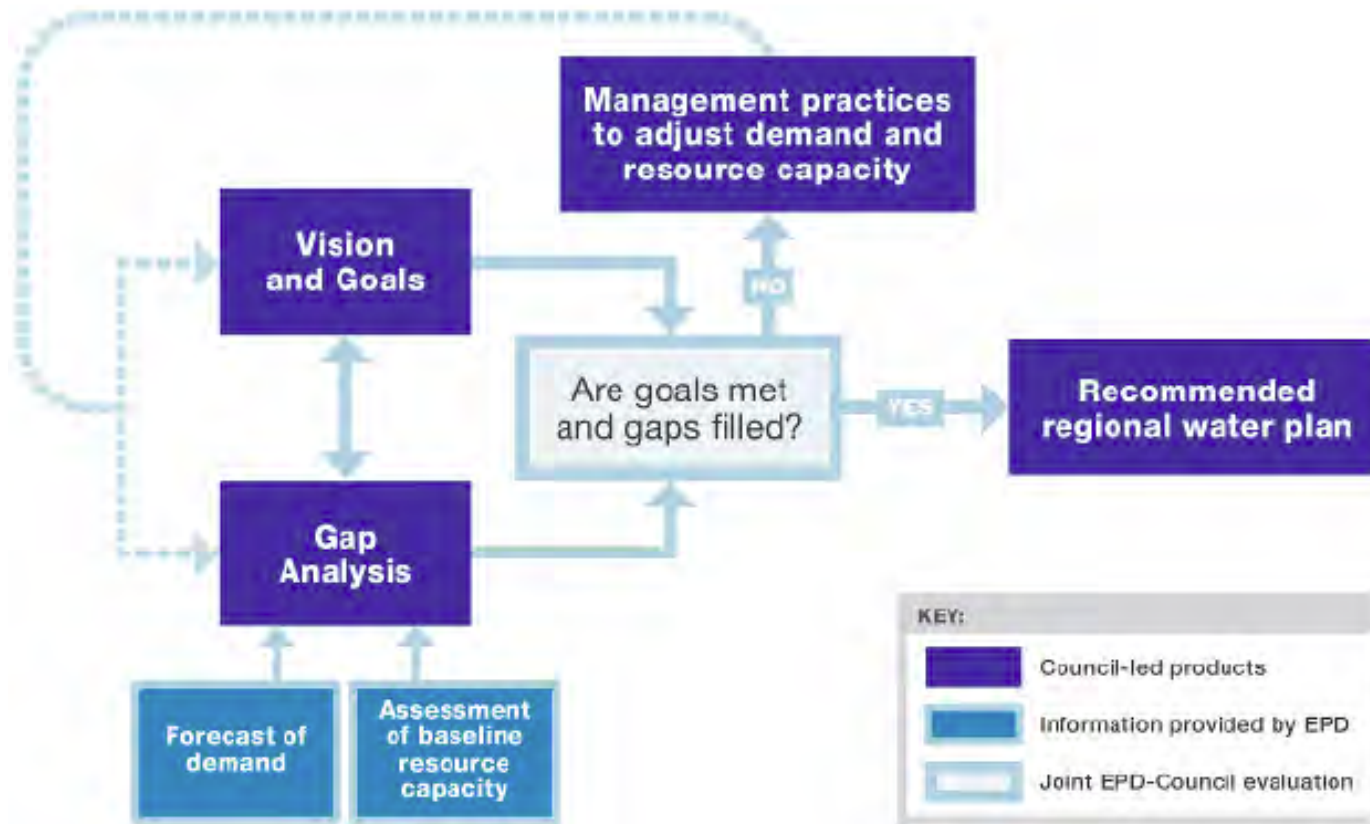
Mike Berg
Pat Gober
Dawson County

Rep. Katie Dempsey
Sen. Chip Pearson
(Ex-Officio)



***Overview of Regional
Planning Process***

Regional Planning Process Overview



Water Supply Demands

- Population
 - Municipal, Industrial, & Commercial
 - Thermo Power Generation
- Agricultural



Resource Assessments

Capacity of the Resource

- Ability of Water Resource to Support Defined Water Uses
- Determined through the Resource Assessments
 - Surface Water and Groundwater Availability
 - Water Quality/Assimilative Capacity

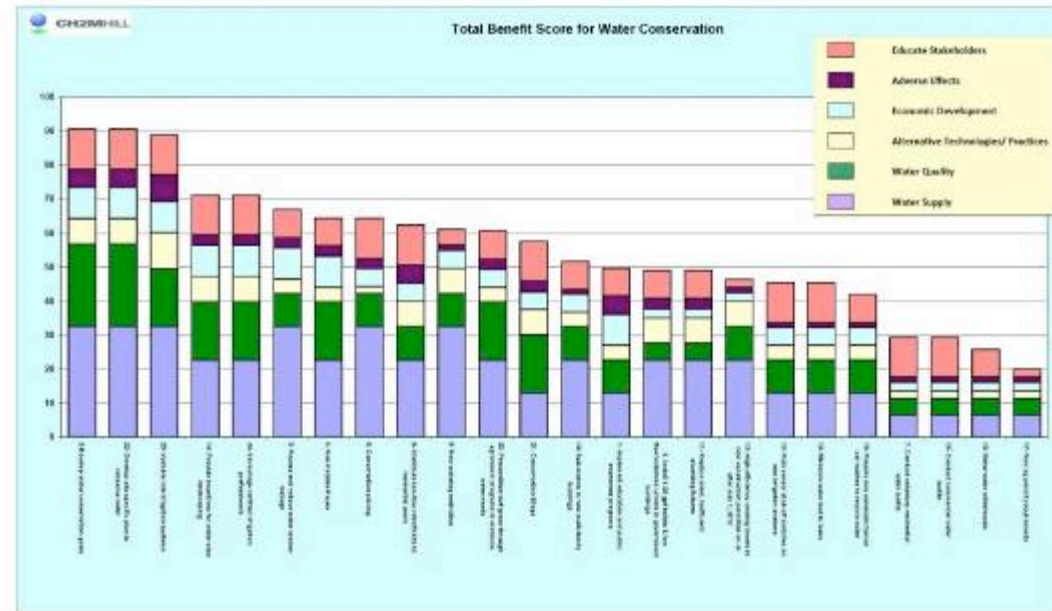


Management Practice Selection

- Potential practices grouped into four areas

- Water supply
- Wastewater
- Water quality
- Water conservation

- Educate Stakeholders
- Adverse effects
- Economic development
- Alternate technologies
- Water Quality
- Water Supply

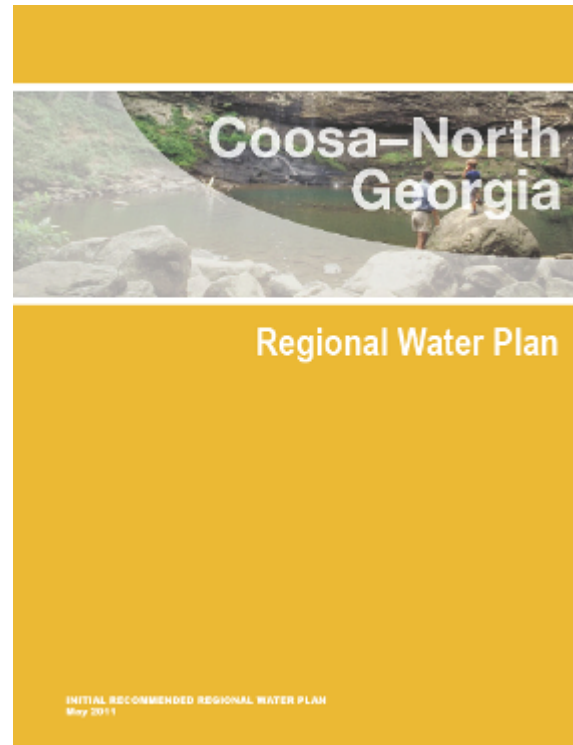


- Evaluated against council's goals and objectives
- Council members evaluated whether practices could be implemented at the local level

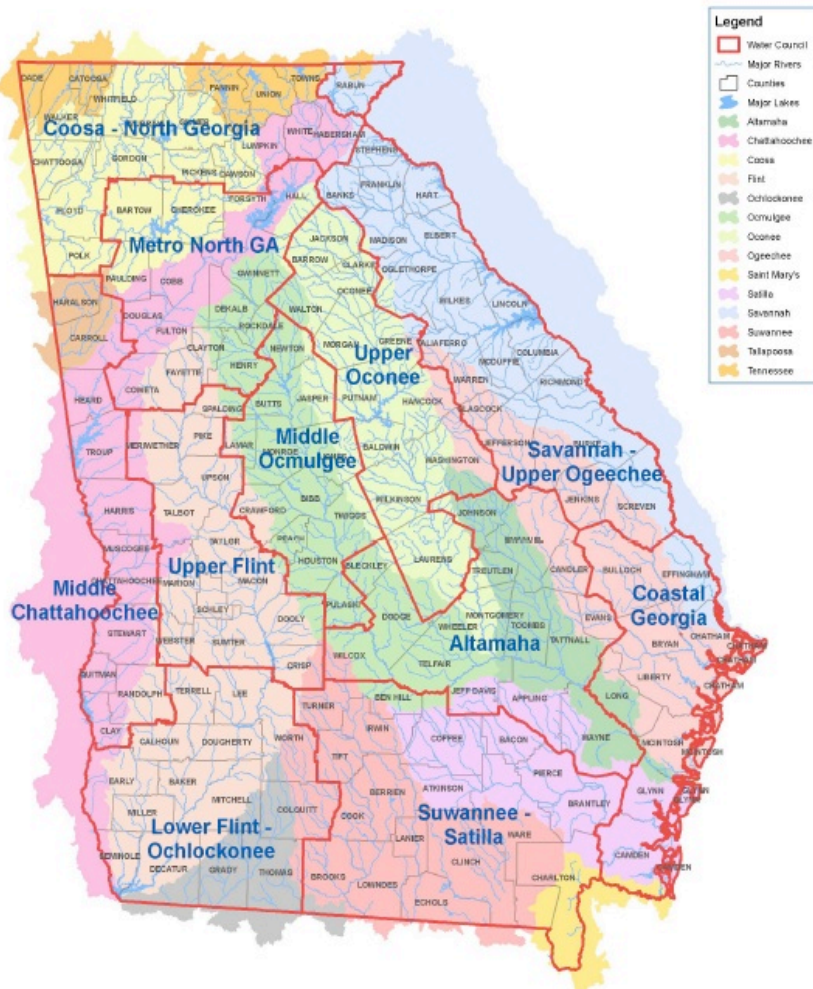
Timeline

DATE	2009												2010												2011								
	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9		
Planning Process	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Kickoff Meeting	█																																
Council Meetings (10)			█	█			█		█				█		█		█		█		█			█									
Resource Assessments										█																							
Water/Wastewater Forecasts													█	█	█	█																	
Management Practices															█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
Initial RWP																										█							
Public Review/ Revision																												█	█	█			
Final RWP																															█		

Overview of Draft Regional Water Plan



Section 1 - Introduction



- Brief overview of the Regional Water Planning Process and Councils
- Coosa-North Georgia Vision:
“Enhance the potential and quality of life for all communities through sustainable use of water resources in the region and state with partnerships among a broad spectrum of stakeholders.”
- Describes the 8 Coosa-North Georgia Regional Goals

Section 2 – Description of the CNG Region

- 5,500 square miles
- 18 counties and 52 municipalities
- Total population of 755,255 in 2010, projected to reach 1,551,894 in 2050.
- Northwest Georgia RC and the Georgia Mountains RC

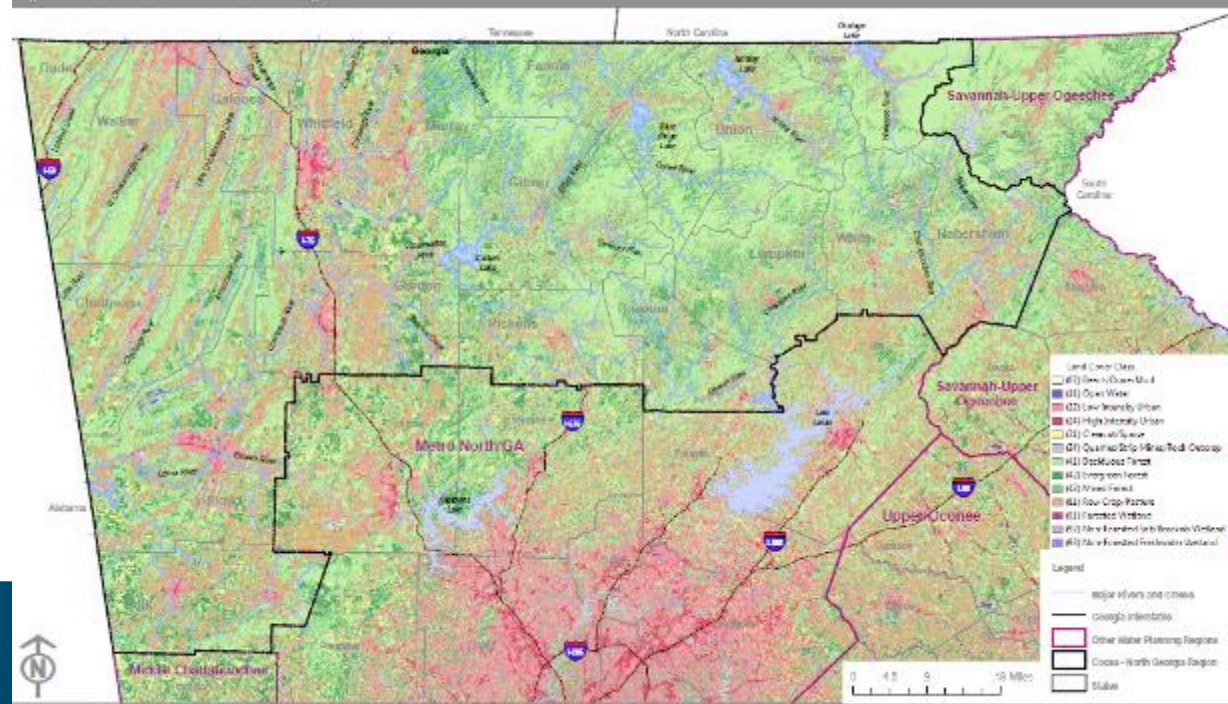
County	Municipalities
Catoosa County	Ringgold ^a , Fort Oglethorpe
Chattooga County	Lyerly, Menlo, Summerville ^a , Trion
Dade County	Trenton ^a
Dawson County	Dawsonville ^a
Fannin County	Blue Ridge ^a , McCaysville, Morganton
Floyd County	Cave Spring, Rome ^a
Gilmer County	Ellijay ^a , East Ellijay
Gordon County	Calhoun ^a , Fairmount, Plainville, Ranger, Resaca
Habersham County	Alto, Baldwin, Clarkesville ^a , Cornelia, Demorest, Mount Airy, Tallulah Falls
Lumpkin County	Dahlonega ^a
Murray County	Chatsworth ^a , Eton
Pickens County	Jasper ^a , Nelson, Talking Rock
Polk County	Aragon, Braswell, Cedartown ^a , Rockmart, Taylorsville
Towns County	Hiawassee ^a , Young Harris
Union County	Blairsville ^a
Walker County	LaFayette ^a , Chickamauga, Fort Oglethorpe, Lookout Mountain, Rossville
White County	Cleveland ^a , Helen
Whitfield County	Cohutta, Dalton ^a , Tunnel Hill, Varnell

^a Indicates County Seat

Section 2 – Description of the CNG Region

- Includes portions of the Coosa, Tennessee, Chattahoochee, Tallapoosa and Savannah river basins and two groundwater aquifer systems, the Crystalline rock and Paleozoic rock aquifer systems.
- In 2005, 63 percent of the total regional land cover was forested of which almost half, 47 percent, as deciduous forests.
- 16% was in low or high intensity urban development.
- 15 % was being used for pasture or row crops.

Figure 2-3. 2005 Land Cover in the CNG Region



Source: Georgia Land Use Trends, 2005 Land Cover, University of Georgia Natural Resources Spatial Analysis Laboratory (NARSAL).

Section 3 - Water Resources of the CNG Region

Section 3.1 – Major Water Uses

- Baseline 2005 water use data from the 2009 USGS Report
- 92 % supplied by surface water sources
- 78% of withdrawals are for energy generation (little consumptive use though)

Figure 3-1: 2005 Water Supply by Source Type ^a

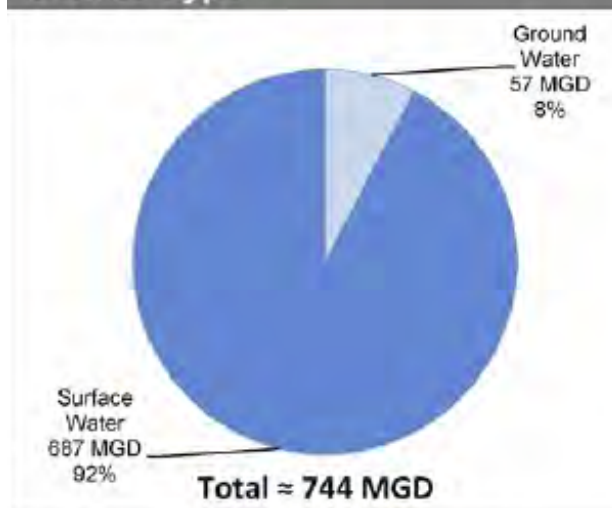


Figure 3-2: 2005 Surface Water Withdrawal by Category ^{a,b,d}

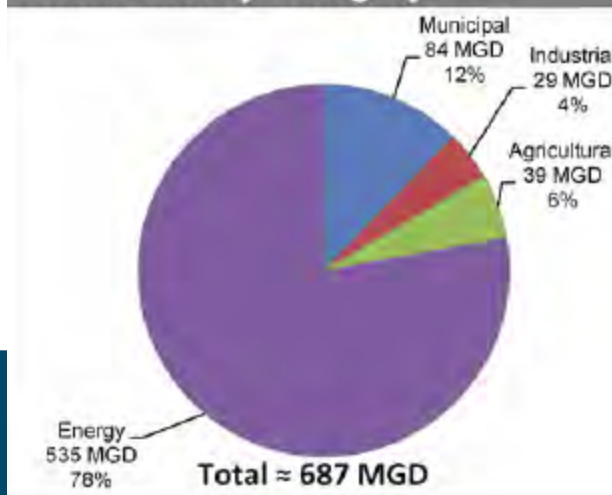


Figure 3-3: 2005 Groundwater Withdrawal by Category ^{a,d}

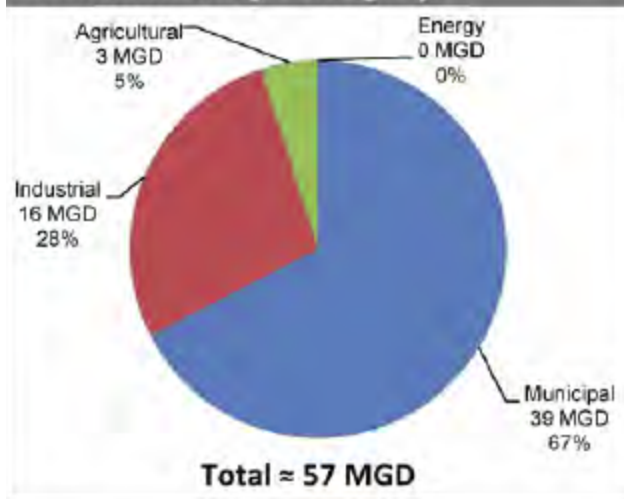
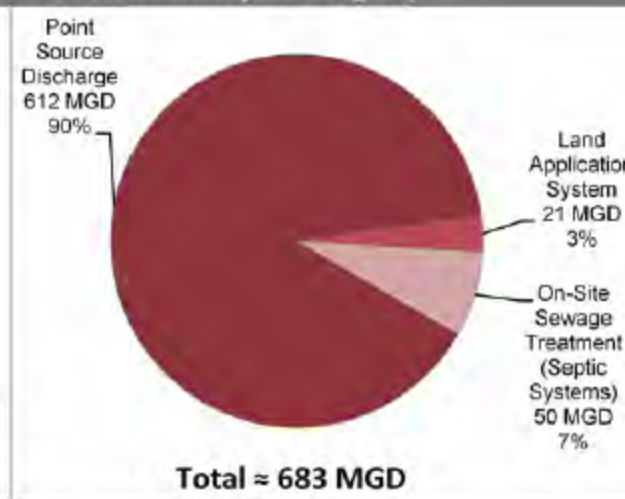


Figure 3-4: 2005 Wastewater Treatment by Category ^{c,e}



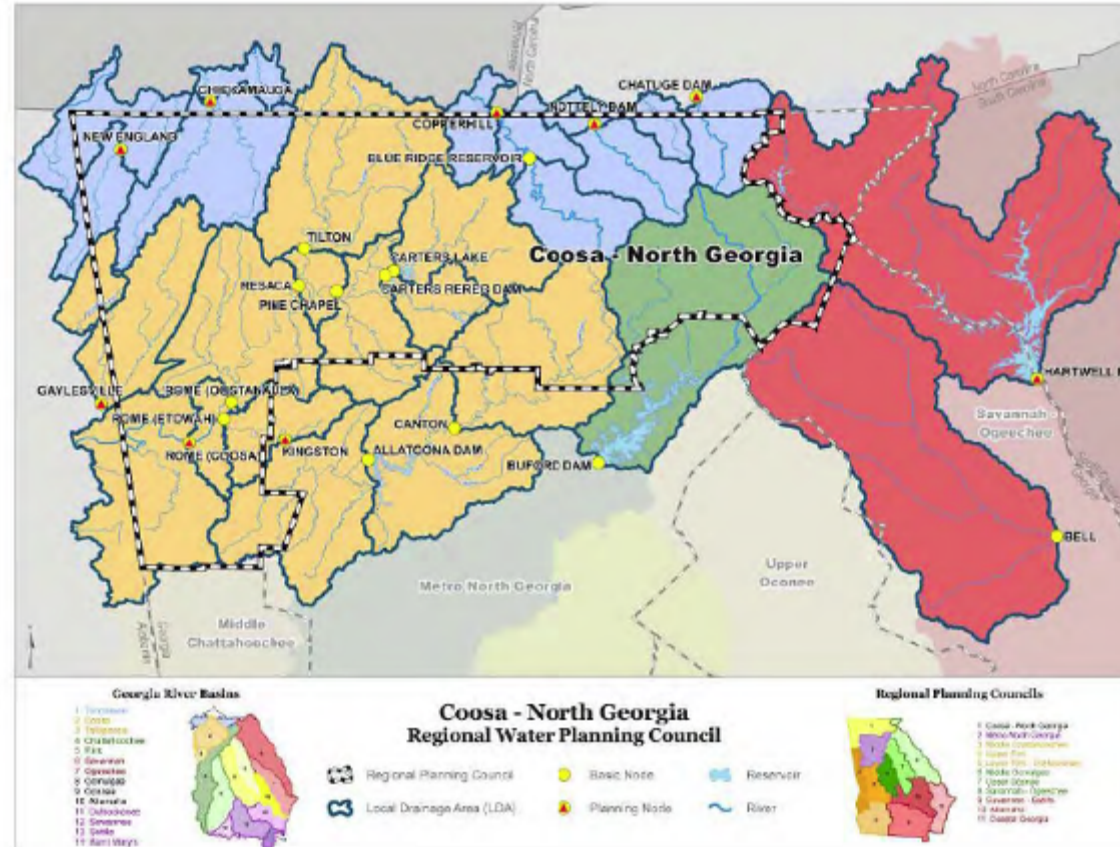
Section 3 - Water Resources of the CNG Region

Section 3.2 – Resource Assessments*

- (1) surface water quality, also known as assimilative capacity,
- (2) surface water availability also known as surface water quantity, and
- (3) groundwater availability

*Identify potential “gaps”, defined as a condition where the existing or future conditions exceed the Resource Assessment metric

Figure 3-5: Local Drainage Areas and Planning Nodes in the CNG Region



Source: GAEPD, 2009

Section 3 - Water Resources of the CNG Region

Section 3.3 – Ecosystem Conditions and In-Stream Use

- Includes information on stream classifications, impaired waters, priority watersheds, and fish and wildlife.
- 808,000 acres of land managed for conservation purposes, 23 % of the Region.
- 9 federally listed fish, 37 State rare or State threatened or endangered fish species, 9 State T or E crayfish species, 11 federally listed mussels, and 13 State T or E mussel species

Figure 3-8: Fish Diversity in the Etowah Watershed



Source: Etowah Aquatic Habitat Conservation Plan

Table 3-1: Special Stream Classifications

Stream	Reach	Classification
Chattahoochee River	GA Hwy. 17, Helen to SR255; Jassus Creek to GA Hwy. 17, Helen; Soque River to Mossy Creek; SR255 to Soque River	Recreation ^a
Conasauga River	Hwy. 286 to Holly Creek; State Line to Hwy 286	Drinking Water
Conasauga River	Headwaters in GA to TN State Line	Wild & Scenic ^b
Coosawattee River	U.S. Hwy. 411 to Noblet Creek, downstream from Carters Lake	Drinking Water
Coosa River	Beach Creek to State Line	Recreation ^a
Ellijay River	Headwaters to GA Hwy. 2, Ellijay	Drinking Water
Jacks River	West/South Forks to Rough Creek	Wild & Scenic ^b
Mill Creek	Haig Mill Creek to Coahulla Creek	Drinking Water
Nottely River	Downstream from Nottely Lake; Right/Left Forks to US Hwy 19; US Hwy 19 to Nottely Lake	Recreation
Oostanaula River	Hwy 140 to Coosa River	Drinking Water
Oostanaula River	Conasauga/Coosawattee to Oothkalooga Creek	Drinking Water
Toccoa River	Big Creek to Blue Ridge Lake; Downstream from Blue Ridge Lake; Headwaters to Big Creek; Hothouse Creek to State Line	Recreation ^a

Source: GAEPD Rule 391-3-6-.03 Water Use Classifications and Water Quality Standards.

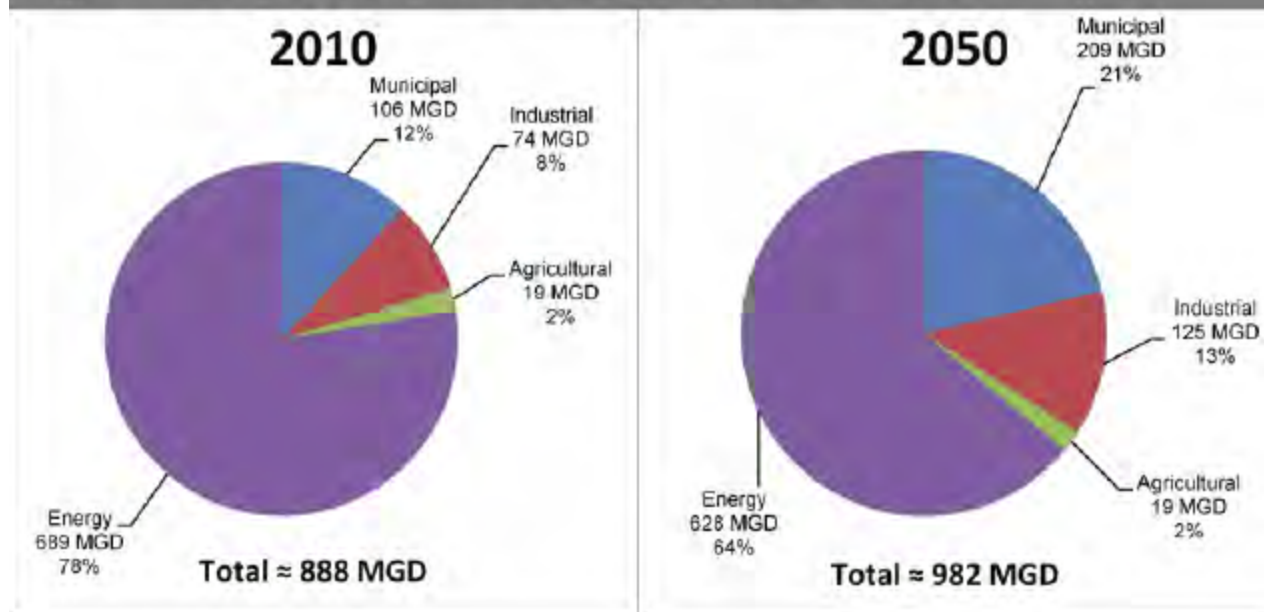
^a All waters classified to support recreational contact; these waters are used for activities such as water skiing, boating, swimming where risk of contact is greater than in most waters.

^b No alteration of natural water quality allowed; no wastewater and stormwater discharges permitted

Section 4 - Forecasting Future Water Resource Needs

- Presents the regional water demand and wastewater flow forecasts for 10-year intervals from 2010 through 2050 for the 4 major water use categories: municipal, industrial, agricultural, and energy.
- Energy and agricultural water demands are expected to remain relatively constant, while municipal and industrial water demands are projected to increase steadily.
- Total water demand is projected to increase from 888 MGD in 2010 to 927 MGD in 2050. Wastewater flows are anticipated to increase in a similar fashion.

Figure 4-5: Water Demand Forecast for 2010 and 2050



Notes:

a - Data Sources: Coosa-North Georgia Municipal and Industrial Forecasts (CH2M HILL, 2010), Energy Forecasts (CDM, 2010), and Agricultural Forecasts (UGA, 2010).

b - Energy water demand is the Alternative Energy Forecast (CDM, 2010).

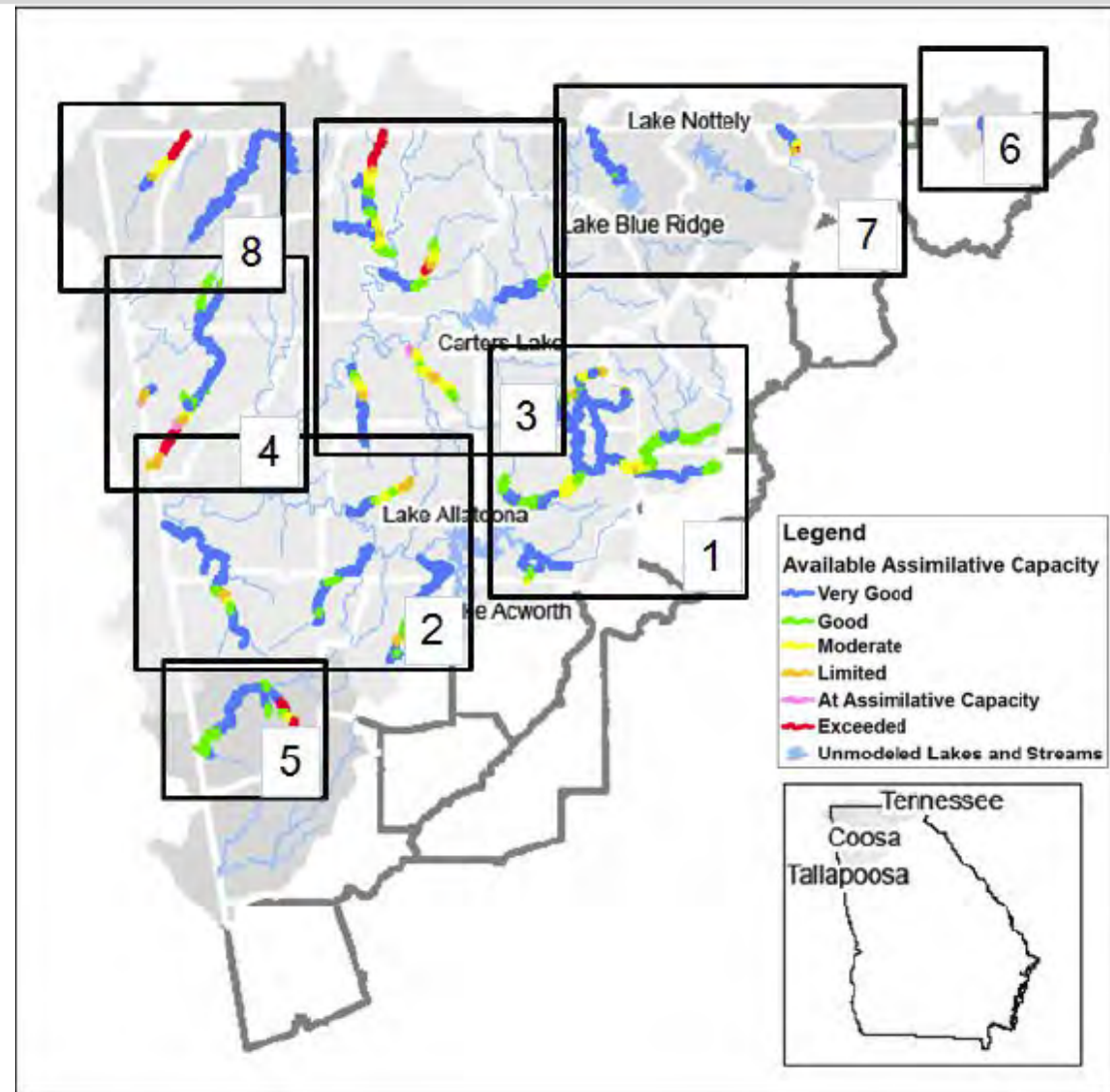
Section 5 - Comparison of Capacities and Future Needs

Summarizes the potential gaps, needs, or shortages (water resource management issues) for the CNG Region.

- **Groundwater:** Initial future assessments indicate that there is adequate yield to meet future demands from the modeled portion of the Paleozoic rock aquifers.
- **Surface Water:**
 - Potential water supply gaps in both duration and volume
 - Gaylesville (9 % of the time under 2050 conditions over the period of record; average gap is 9 MGD)
 - New England (7 percent and 1.9 MGD)
 - Chickamauga (10 percent and 11 MGD).

Section 5 - Comparison of Capacities and Future Needs

- **Water Quality:**
Available assimilative capacity
 - Most waterways are good
 - Need to reduce future nutrient loadings
 - Reductions from point and non point sources
 - Issues with existing standards
 - GA/AL border on the Coosa River
 - Carters Lake



Section 5 - Comparison of Capacities and Future Needs

Summary of potential water resource gaps or infrastructure needs/shortages by County

County	Surface Water Availability Gaps	Municipal Water Needs	Municipal Wastewater Shortages	Agricultural Water Shortages	Water Quality – Assimilative Capacity Gaps	Water Quality 303(d) Issues
Source	Table 5-1	Table 5-2	Table 5-4	Table 5-5	Figure 5-2	Sections 3.3.2 & 5.3
Catoosa	Yes	Yes	Yes			Yes
Chattooga	Yes	Yes			Yes	Yes
Dade	Yes			Yes	Yes	Yes
Dawson		Yes	Yes			Yes
Fannin		Yes	Yes			Yes
Floyd						Yes
Gilmer		Yes			Yes	Yes
Gordon					Yes	Yes
Habersham		Yes				Yes
Lumpkin		Yes	Yes			Yes
Murray		Yes			Yes	Yes
Pickens		Yes	Yes		Yes	Yes
Polk					Yes	Yes
Towns		Yes	Yes		Yes	Yes
Union		Yes	Yes			Yes
Walker	Yes					Yes
White		Yes	Yes			Yes
Whitfield		Yes	Yes		Yes	Yes
Total	4	13	9	1	9	18

Notes: "Yes" indicates that there is a potential gap or need/shortage in the indicated county.

"Gap" is defined as a condition where the existing or future conditions exceed the Resource Assessment metric.

"Need" and "Shortage" are defined as a condition where the current permitted capacity of water and wastewater treatment facilities, respectively, is less than the future forecast demands.

Implementation of Recommended Water Management Practices



Coosa-North Georgia RWP Management Practices

- Began with review of existing local and regional plans
 - Council prioritized, ranked & selected potential Management Practices
 - 14 Water Conservation Practices
 - 8 Water Supply Practices
 - 8 Wastewater Practices
 - 12 Water Quality Practices
- Three supplemental documents provide additional details on the development of Section 6:
 - Public Involvement and Outreach Technical Memorandum (TM)
 - Summary of Local and Regional Plan and Outreach TM
 - Management Practice Decision Making TM

Coosa-North Georgia RWP Management Practices

The 4 top ranked MPs for the CNG are:

Action Needed (MP)	Description of Activities	Relationship of Action or Issue to Goals (Section 1.3)
WC-1. Implement education and public awareness programs	<ul style="list-style-type: none"> • Develop and implement local public education programs. • Perform public education and outreach activities. • Perform public participation and involvement activities. 	Supports ES, ED, WQ, and WS goals ¹ .
WS-1. Encourage development of water master plans	<p>Create and utilize a local water master plan with a 30-year planning horizon that includes, as appropriate:</p> <ul style="list-style-type: none"> • Evaluate potential for partnerships in meeting future water supply needs, including sources such as the Tennessee River, which receives a significant flow originating in Georgia. • Evaluate cost-benefits of various water resources options and use Integrated Natural Resource Management Plan approach to assess relationships between water, wastewater, stormwater, and energy. • Adopt a written emergency water supply plan and assess the need for interconnections to meet reliability targets. • Evaluate potential to purchase from other water systems for short term. <p>Update local water master plan as needed.</p>	Supports ED, WQ, and WS goals ¹ .

Coosa-North Georgia RWP Management Practices

The 4 top ranked MPs for the CNG (continued):

Action Needed (MP)	Description of Activities	Relationship of Action or Issue to Goals (Section 1.3)
<p>WW-1. Consider development of local wastewater treatment master plans to evaluate wastewater treatment and disposal options to meet future demands</p>	<ul style="list-style-type: none"> Evaluate future wastewater capacity needs. Identify and evaluate options to treat and dispose of wastewater. Consider opportunities for reuse (indirect potable, non-potable, etc.). 	<p>Supports ES, ED, WQ, and WS goals¹.</p>
<p>WQ-1. Encourage implementation of nutrient management programs</p>	<p>As recommended by NRCS:</p> <ul style="list-style-type: none"> Apply fertilizer at rates that are used by plants to avoid excessive nutrient runoff. Use cropland MPs such as conservation tillage, cover crops, field buffers, riparian forested buffers, land conversion (crop to forest), strip cropping, and nutrient management. Use practices to reduce runoff carrying pollutants from animal waste; include practices to store/cover and compost manure. 	<p>Supports ES, WQ, and WS goals¹.</p>

Coosa-North Georgia RWP Implementation

- The RWP will be primarily implemented by the various water users in the CNG Region, i.e. local governments, utilities, industry and the agricultural community.
- It is anticipated that the Regional Commissions, with support from DCA and EPD, will provide general administration / coordination of the CNG RWP implementation.
- Once adopted, the CNG RWP will be used to:
 - Guide permitting decisions by GAEPD.
 - Guide the awarding of Section 319(h) Nonpoint Source Implementation Grant funds from GAEPD.
 - Guide the awarding of State grants and loans from the Georgia Environmental Finance Authority (GEFA) for water-related projects.

Table 2-4: CNG Counties by RC

RC	CNG Counties	Other Counties in this RC / Water Planning Region
Northwest Georgia	Dade, Walker, Catoosa, Chattooga, Gordon, Floyd, Polk, Whitfield, Murray, Gilmer, Pickens, Fannin	Haralson / Middle Chattahoochee Paulding and Bartow/Metro North Georgia
Georgia Mountains	Dawson, Lumpkin, Union, Towns, White, Habersham	Forsyth and Hall / Metro North Georgia Hart, Franklin, Banks, Stephens, Rabun / Savannah – Upper Ogeechee

Source: DCA, 2009

MP Implementation Responsibilities

- The RWP recommends continued support from the CNG Council in some capacity beyond its current 3-year appointment.
- The CNG Council and EPD expects all entities (Counties, Cities and Utilities) to demonstrate a basic level of implementation of those MPs for which they are responsible or to be able to document why local implementation is not warranted.
- Implementation by counties and utilities with potential gaps, needs / shortages will be emphasized.

Water Conservation and Water Supply Shortages

Of the 18 counties in the region, 4 have potential surface water supply shortages, 13 counties have municipal water supply needs and 1 county has potential agricultural water shortages.

County	Surface Water Availability Gaps	Municipal Water Needs	Agricultural Water Shortages
<i>Source</i>	<i>Table 5-1</i>	<i>Table 5-2</i>	<i>Table 5-5</i>
Catoosa	Yes	Yes	
Chattooga	Yes	Yes	
Dade	Yes		Yes
Dawson		Yes	
Fannin		Yes	
Gilmer		Yes	
Habersham		Yes	
Lumpkin		Yes	
Murray		Yes	
Pickens		Yes	
Towns		Yes	
Union		Yes	
Walker	Yes		
White		Yes	
Whitfield		Yes	
Total	4	13	1

Water Conservation and Water Supply MPs

- Section 6 outlines the 14 Water Conservation MPs and 8 Water Supply MPs targeted for implementation in the CNG Region to address these potential shortages
- Not all MPs will apply to every community but will need to be considered
 - For example, MP WS-8. “Encourage source water protection” would not apply to those areas without a source water watershed.

Coosa-North Georgia RWP Water Conservation MPs

Management Practice	Short-term Responsibility	Long-term Responsibility
WC-1. Implement education and public awareness programs	EPD, RCs	RCs
WC-2. Develop water conservation goals	EPD, RCs	RCs
WC-3. Stewardship Act Practices		
<i>(Assess and reduce water system leakage)</i>	LG	LG
<i>(Adopt outdoor watering schedule)</i>	LG	LG
<i>(Adopt new agricultural permit requirements)</i>	EPD, GSWCC	EPD
<i>(Require high-efficiency cooling towers in new construction)</i>	LG	LG
WC-4. Consider installation of 1.28-gpf toilets & low-flow / waterless urinals in government buildings	GBA and GEFA	RCs
WC-5. Encourage non-potable reuse	LG, Industry	LG, Industry
WC-6. Encourage conservation pricing for residential and urban irrigation (sprinkler systems)	LG	LG
WC-7. Encourage voluntary residential water audits	EPD, RCs	RCs, LG
WC-8. Consider distribution of low-flow retrofit kits to residential users	GEFA, RCs, LG	RCs, LG
WC-9. Encourage installation of rain sensor shut-off switches on new irrigation systems	EPD, RCs, LG	RCs, LG
WC-10. Provide incentives for water-wise landscaping	EPD, RCs, LG	RCs, LG
WC-11. Encourage variable rate agricultural irrigation systems	GSWCC, EPD	GSWCC, EPD
WC-12. Encourage conservation tillage	GSWCC, EPD	GSWCC, EPD
WC-13. Encourage development of course-specific water conservation plans	GGCSA, EPD	GGCSA, EPD
WC-14. Encourage use of certified irrigation professionals	EPD, RCs, LG	RCs, LG

AG: Agricultural Water Withdrawal
 CST: Construction Stormwater
 GC: Golf Course Water Withdrawal
 MS4: Municipal Separate Storm Sewer System
 MU: Municipal Water Withdrawal
 MUWW: Municipal Wastewater

EPD: Georgia Environmental Protection Division
 RCs: Regional Commissions
 LG: Local Governments and / or Utilities
 GBA: Georgia Building Authority
 GEFA: Georgia Environmental Finance Authority

GSWCC: Georgia Soil and Water Conservation Commission
 GGCSA: Georgia Golf Course Superintendents Association



Coosa-North Georgia RWP Water Supply MPs

Management Practice	Short-term Responsibility	Long-term Responsibility
WS-1. Encourage development of water master plans	LG	LG
WS-2. Consider expansion of existing reservoirs	EPD, GEFA, LG	LG
WS-3. Consider construction of new reservoirs to meet multiple purposes	EPD, GEFA, LG	LG
WS-4. Consider development of new groundwater wells	LG, IND	LG, IND
WS-5. Encourage indirect potable reuse	LG, IND	LG, IND
WS-6. Consider construction of new WTPs or expansion of existing WTPs	LG, IND, GEFA	LG, IND
WS-7. Encourage water system asset management	LG	LG
WS-8. Encourage source water protection	RCs, LG	RCs, LG

Wastewater Shortages and Water Quality Issues

Surface water quality resource assessments, described in Section 5.3, were performed to estimate the assimilative capacity, or the ability of Georgia’s surface waters to absorb pollutants from treated wastewater (WW) and stormwater without the unacceptable degradation of water quality.

Implementation of the 8 WW and 12 WQ MPs also build on the existing TMDL and stormwater management activities already being performed by the MS4 or NPDES communities within the CNG Region.

County	Municipal Wastewater Shortages	Water Quality – Assimilative Capacity Gaps	Water Quality 303(d) Issues
<i>Source</i>	<i>Table 5-4</i>	<i>Figure 5-2</i>	<i>Sections 3.3.2 & 5.3</i>
Catoosa	Yes		Yes
Chattooga		Yes	Yes
Dade		Yes	Yes
Dawson	Yes		Yes
Fannin	Yes		Yes
Floyd			Yes
Gilmer		Yes	Yes
Gordon		Yes	Yes
Habersham			Yes
Lumpkin	Yes		Yes
Murray		Yes	Yes
Pickens	Yes	Yes	Yes
Polk		Yes	Yes
Towns	Yes	Yes	Yes
Union	Yes		Yes
Walker			Yes
White	Yes		Yes
Whitfield	Yes	Yes	Yes
Total	9	9	18



Coosa-North Georgia RWP Wastewater MPs

Management Practice	Short-term Responsibility	Long-term Responsibility
WW-1. Consider development of local wastewater master plans to evaluate wastewater treatment and disposal options to meet future demands.	LG	LG
WW-2. Consider development and implementation of a local wastewater education and public awareness program	RCs, DCH	RCs, LG
WW-3. Promote septic system management	LG, RCs	LG, RCs
WW-4. Encourage sewer system inventory and mapping	LG, GEFA	LG
WW-5. Consider implementation of sewer system inspection, maintenance, and rehabilitation program	LG, GEFA	LG
WW-6. Consider developing a capacity certification program	LG	LG
WW-7. Consider implementation of a grease management program	RCs, LG	LG
WW-8. Consider development of sanitary sewer system overflow (SSO) emergency response program	RCs, EPD, LG	LG

Coosa-North Georgia RWP Water Quality MPs

Management Practice	Permit Category	Short-term Responsibility	Long-term Responsibility
WQ-1. Encourage implementation of nutrient management programs	AG, MS4	EPD, GSWCC	EPD, AG, LG
WQ-2 Promote use of forestry best management practices	None	GFC	GFC
WQ-3. Encourage local government participation in erosion and sediment control	CST	EPD, RCs	EPD, RCs
WQ-4. Consider development of post-development stormwater management and site design practices	MS4	RCs, LG	LG
WQ-5. Encourage pollution prevention/ good housekeeping practices for local operations and implementation of a illicit discharge detection and elimination program	MS4	RCs, LG	LG
WQ-6. Encourage implementation of local stormwater education and public awareness program	MS4	RCs, LG	LG
WQ-7. Encourage consideration of regional BMPs such as regional ponds and natural protection systems	MS4	RCs, LG	RCs, LG
WQ-8. Encourage stream buffer protection measures and stream restoration	MS4	EPD, RCs	RCs, LG
WQ-9. Encourage floodplain management/ flood damage prevention practices	MS4	GEMA, RCs	RCs, LG
WQ-10. Continue implementation of comprehensive land use planning and environmental planning criteria	MS4	RCs, LG	LG
WQ-11. Support TMDL Implementa-tion	MUWW and MS4	EPD, LG, RCs	EPD, RCs
WQ-12. Consider water quality credit trading	All	EPD	EPD, LG, IND

AG: Agricultural Water Withdrawal
 CST: Construction Stormwater
 GC: Golf Course Water Withdrawal
 MS4: Municipal Separate Storm Sewer System
 MU: Municipal Water Withdrawal
 MUWW: Municipal Wastewater

EPD: Georgia Environmental Protection Division
 RCs: Regional Commissions
 LG: Local Governments and / or Utilities
 GEMA: Georgia Emergency Management Agency
 GSWCC: Georgia Soil and Water Conservation Commission



Wrap Up



CL Garvin / The Register Herald

Implementation Challenges Remain

- Without historic drought in 2007, plan probably wouldn't have been adopted by General Assembly
- It took seven years to develop the “framework” . . . this was the easy part
 - Very complex work to come
 - Many hard decisions to be made
- Maintaining ongoing funding will be difficult

Coosa-North Georgia RWP Key Milestones to Completion

- Public notice for the comment period for the Final CNG RWP by GA EPD will be no later than May 9th, 2011.
- Review Final RWP at CM in September 2011 (proposed).
- Generate Final RWP for GA EPD adoption no later than September 30th, 2011.

Discussion

**Even the frog does not
drink his own pond dry.**

Native American Proverb

