

GEORGIA'S REGIONAL WATER PLANS – IMPLEMENTATION STATUS

Michelle Vincent,¹ Bennett Weinstein,² and Doug Baughman³

AUTHORS: ¹Coosa North GA Basin Liaison, Georgia Environmental Protection Division, Watershed Protection Branch, 4220 International Parkway, Suite 101, Atlanta, GA 30354, Michelle.Vincent@dnr.state.ga.us, ²Policy and Planning Advisor, Georgia Environmental Protection Division, Watershed Protection Branch, 2 Martin Luther King Jr. Dr., Suite 1058 East Floyd Tower, Atlanta, GA 30334, Bennett.Weinstein@dnr.state.ga.us, ³Senior Environmental Scientist, CH2M HILL, 1000 Abernathy Road, Suite 1600, Atlanta, GA 30328, doug.baughman@ch2m.com

REFERENCE: *Proceedings of the 2013 Georgia Water Resources Conference*, held April 10–11, 2013, at the University of Georgia

Abstract. In 2004, the Georgia General Assembly enacted the Comprehensive State-wide Water Management Planning Act, which led to the development of the State Water Plan in 2008. The Plan established a range of state-wide water efficiency, water supply, and water quality policies and actions. One of the most innovative and novel aspects of the Plan was the framework for development of regional water plans (RWPs), by local leaders, to address water quality and quantity issues, evaluate future forecasts for water supply and wastewater treatment needs, and identify potential measures to meet these needs in the future. All 10 RWPs were successfully completed and were adopted by the Director of the Georgia Environmental Protection Division (EPD) in November 2011. Each RWP lays out a roadmap for implementing integrated and specific management practices designed to ensure each Region's goals and visions are met over the next 40 years. The practices target four water resource areas (water conservation, water supply, wastewater, and water quality) based on the results of a series of in-depth, technical resource assessments (surface water, groundwater and assimilative capacity). Since their adoption, these RWPs have guided EPD's water permitting decisions.

Implementation strategies vary by region with several focused on utilizing the Regional Commissions (RCs), previously Regional Development Centers or RDCs to provide coordination assistance and resources to help facilitate implementation of the RWPs. To assist with initial implementation activities, each region was provided the opportunity to develop a Section 319(h) grant funded project to focus on issues identified in the RWPs, such as fecal coliform tracking investigations, water quality credit trading feasibility studies, and management practice demonstrations. This paper provides a summary of the implementation status for each RWP, including their 319(h) projects. In addition, the potential options to enhance implementation over the next 3 years are discussed.

INTRODUCTION

Georgia has increased its focus on improving water resource management across the state for the last decade. Georgia's regional water planning was initiated by the Metropolitan North Georgia Water Planning District Act in 2001, and expanded statewide with the Comprehensive Water Management Planning Act in 2004, which authorized the Water Council to develop a state-wide water plan, which in turn called for the preparation of 10 RWPs.¹ These RWPs identify future water supply and water quality needs and define region-specific strategies or management practices to ensure that these water needs are met over the next 30 years.

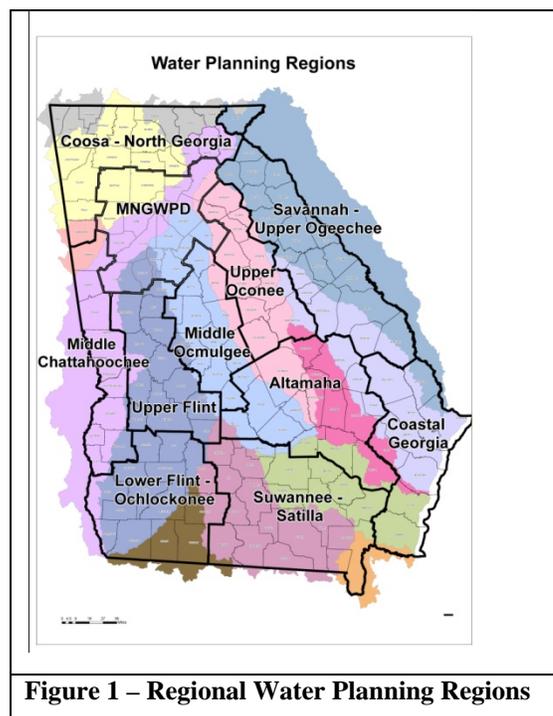


Figure 1 – Regional Water Planning Regions

Implementation of the recommended management practices in the RWPs is primarily the responsibility of local governments and water users within each of the

¹ The Metro North Georgia Water Planning District plans were first completed in 2003, and updated in 2009. Future rounds of planning will be on the same schedule for all 11 plans.

planning regions. The RWPs also guide EPD’s decisions on water-related permits. Recommendations in the RWPs include both short- and long-term management practices and are expected to be implemented over the 40-year planning horizon.

SUMMARY OF REGIONAL PLANS

During development of the RWPs, EPD outlined guidelines for development of management practices addressing water conservation, water supply, and wastewater and water quality. Each of the Regional Water Planning Councils was given the flexibility to define the management practices in each of these categories that best met their local needs and would be most accepted by stakeholders in their regions. Despite the geographic differences across the state, many of the Councils identified similar management practice recommendations. For example, three water conservation practices consistently recommended by all 10 Councils were improvements in municipal outdoor, municipal indoor, and irrigation practices. Water supply practices recommended by all Councils were to construct new water supply reservoirs, optimize existing reservoirs, and improve irrigation practices. Wastewater and water quality practice recommendations were not as consistent between regions but the majority of Councils recommended wastewater master planning, improved wastewater treatment, and improved stormwater management.

Each RWP also addresses the fiscal implications of selected water management practices, including preliminary cost estimates and proposed funding sources. The inclusion of this information provides a means of bridging the gap between the RWPs and implementation.

IMPLEMENTATION FRAMEWORK

In the case of the adopted RWPs, plan implementation is organized based on three broad groups of implementing actors. These actors are: (1) the Councils, (2) state agencies, and (3) water users in the region, represented primarily by local governments.² While implementation responsibilities somewhat overlap, each actor has distinct implementation roles as discussed below.

Regarding the Councils’ role in implementation, aside from the preparation and periodic review and RWP revisions, the Councils’ first and foremost serve as

² This group includes “others with the capacity to develop water infrastructure and apply for the required permits, grants, and loans.” Georgia State Water Plan Section 14, page 35.

regional leaders in the promotion and encouragement of management practice implementation by the local governments in their regions. The Councils are also critically placed to coordinate information with state agencies to improve the interface between the RWPs and agency resource management activities.

State agencies also have a critical implementation role. Specifically, the State Water Plan provides that EPD is to use the RWPs to “guide decisions regarding permitting.”³ Additionally, the RWPs identify a slate of “recommendations to the state” that were directed to a wide range of state agencies and universities.

Finally, local governments perhaps play the most crucial role in RWP implementation. The identification of regionally appropriate water management practices—actions which, by their very nature must be championed and undertaken at the local level—is one of the most innovative concepts introduced by the State Water Plan. The implementation of these practices by local governments and others with the capacity to develop water infrastructure and apply for the required permits, grants, and loans is the most effective way to ensure that current and future water needs are met sustainably, and in locally or regionally appropriate ways.

IMPLEMENTATION PROGRESS

Varied expectations for implementation complicate any assessment of progress on RWP implementation. An important source of clarification is the RWPs themselves. Each plan lays out a roadmap for implementing integrated and specific management practices consisting of both pre-existing and ongoing practices, as well as new practices and projects to be initiated. As noted above, the RWPs also identify the three main actors with varying roles in implementation (Councils, state agencies, water users). RWP implementation progress is briefly detailed below, summarized by actor, in the context of their corresponding implementation roles.

The implementation role the Councils are to play is the least defined aspect at this point in the evolution of Georgia’s regional water planning.

To better define their role and to address their desire for a continuing voice in the regional water planning dialogue, many of the Councils recommended some form of collaboration with the existing RCs or other existing organizations to provide support staff and technical resources to allow for the continuation of baseline activities. This recommendation was based

³ Georgia State Water Plan Section 14, page 38.

primarily on a joint desire to find sustainable funding for continued support of the Councils and to avoid the creation of additional bureaucracies.

In 2012, no state funding was allocated to support activities of the Councils. Not surprisingly, without the funding needed to continue to meet and host regular meetings, the Councils' ability to promote and encourage local government implementation of management practices has been limited.

Despite the lack of funding, some Council activities have continued. For example, in the Coosa North Georgia (CNG) planning region, the Northwest Georgia RC and the Georgia Mountains RC, with support from the North Georgia Water Resources Partnership, is supporting the implementation of recommendations in the CNG RWP. The RCs have provided assistance in coordinating Council update meetings as well as administrative support on a Section 319(h) grant-funded implementation project evaluating the feasibility of a water quality credit trading program in the Coosa basin.

The Lower Flint Ochlocknee Council met in April 2012 to receive information about a proposal for an Aquifer Storage and Recovery (ASR) pilot project to augment streamflows in southwest Georgia and to receive a briefing on topics specifically related to their adopted RWP. A joint meeting of the Coastal Georgia and Savannah-Upper Ogeechee Councils was also held in August 2012 to discuss Phase 2 of the Savannah River Basin Comprehensive Study. All of these Council activities have also served to ensure the coordination of the Councils and the state regarding the interface between plans and agency resource management activities, and have continued to cement the Councils' roles as regional leaders.

Perhaps ironically, slowed economic growth and the associated reduction of growth in water and wastewater demands have somewhat reduced the urgency of plan implementation, alleviating some pressure on the Councils to play an immediate role. As the economy continues to rebound, the Councils will likely be central in promoting and encouraging local government implementation in the near term. As all of the Councils recommended in their RWPs and continue to recommend, dedicated, sustainable long-term funding to support regional planning generally and the Councils specifically is an integral part of the RWP implementation equation.

The State Water Plan and the RWPs also identify State agencies, and specifically EPD, as partners in implementation. The State Water Plan and the RWPs base most state agency implementation action on existing on-going responsibilities.

The State Water Plan provides that the RWPs will guide EPD's decisions regarding permitting. When considering applications for water permits, EPD consults the RWPs at the outset, with the RWPs providing a framework for consideration throughout permit evaluation. Permit decisions continue to be based on the existing framework of laws, rules, and guidance and the RWPs serve as an important new source of information for EPD permitting programs.

In addition to guiding permitting, the RWPs identify a diverse and extensive suite of recommended state actions and activities, which various agencies will consider undertaking as corresponding priorities and resources allow.

For example, the Councils all strongly recommended that the State continue and expand water resource modeling, monitoring, and data collection. Over the past decade, the State has made significant investments in these areas to improve information and decision-making. EPD will continue to take the lead, coordinating with other state agencies, the Councils, and other interested parties, to improve the tools and information base for water planning and management.

While Council and state implementation are critical parts of overall implementation, the State Water Plan provides that local actors are responsible for implementing the management practices specified in the RWPs. Local governments properly share this role with water utilities, businesses, and industries, as well as land owners who use water and develop water infrastructure.

To assist local water managers, all of the Councils took a menu-oriented approach to management practices. The menu of practices in each plan will guide water managers in the region as they expand or develop new programs or facilities to address local conditions and needs. Shorter-term practices that address more immediate needs are emphasized, with more complex or expensive practices to be evaluated for subsequent implementation, if warranted.

As described for the implementation activities by the Councils, the slowdown in economic growth and the associated reduced growth in water and wastewater demands have also minimized some of the need and opportunities for local governments to begin implementation of infrastructure-related recommendations. Specifically, recommendations for water and wastewater improvements and master planning have been slow to get started. However, local governments are implementing aspects of their plans through their existing programs.

Statewide, the most substantial implementation to date has been seen on the projects undertaken by local water managers in partnership with the Councils and EPD is the initial suite of projects funded through Section 319(h) funds and local match.

To help support implementation, EPD allocated \$100,000 per water planning region through the federal Clean Water Act Section 319(h) Grant program. Each Council was provided the opportunity to identify a project that would help to address an existing water quality issue within their respective regions and identified in their RWPs. Grant applications had to be submitted by existing entities (local governments, utilities, or planning agencies) and had to meet the requirements of the grant program.

Project applications from the 10 planning Councils focused on a range of issues including studies to address fecal coliform bacteria contamination (from septic systems and agricultural runoff), sedimentation and erosion from roads (demonstration best management practices [BMPs]), and agricultural BMPs for water quality improvement (Table 1). These implementation projects are primarily being managed by either the RCs or the local resource conservation and development councils. In one case (Middle Ocmulgee Region) a local water and sewer authority (in Newton County) is managing project implementation. In each case, the projects include a significant public education component to solicit input from local stakeholders and to transfer results of localized studies to potential users of the technology in each region.

Table 1 – Regional Water Planning Council 319 Grant Topic Summary

Regions	319 Grant Topic Areas				
	Fecal Bacteria	TMDLs/Watershed Mgt.	Road Sediment BMPs	Ag BMPs	Education
ALT		X			
CGA	X	X			X
CNG		X			
LFO			X		X
MC				X	X
MOR	X	X		X	
SUO	X	X		X	X
SS	X				
UF			X		X
UO	X				X

ALT –Altamaha, CGA- Coastal Georgia, CNG – Coosa North GA, LFO- Lower Flint-Ochlocknee, MC – Mid-Chattahoochee, MOR – Middle Ocmulgee, SUO- Savannah Upper Ogeechee, SS – Suwanne Satilla, UF – Upper Flint UO – Upper Oconee; TMDL = total maximum daily load

All 10 projects are underway and proceeding on schedule. Many have begun implementing the proposed

practices while all are working closely with stakeholders to meet project milestones and ensure project success.

CONCLUSIONS

The regional water planning process was an unconditional success for the state of Georgia. Basin-specific recommendations for water supply and water quality improvement were identified and supported by local stakeholders. Perhaps most importantly, processes are now in place to address our future water and wastewater demands while protecting our water resources. As the economy improves and growth and demands increase, local governments and utilities have the framework for water planning in place to support economic development while maintaining water availability and water quality. However, implementation of the RWPs will of course, take time.

Georgia’s State Water Plan established a framework for long-term water resource planning and recognized the long-term nature of RWP implementation. The target planning horizon for regional water planning is 40 years. The RWPs reflect this long-view approach to implementation by identifying short, medium and long-term actions tied to the resource conditions, immediacy of needs, and complexity and expense of the recommended water management practices. Other states that have undertaken state and regional water planning mirror Georgia’s experience. Specifically, that RWP implementation proceeds in small steps, especially at the outset. For example, Texas (TWDB, 2012) found that it took three rounds of review and revision of their analog of Georgia’s RWPs for the momentum to build, the pace of implementation to pick up, and tangible results to “occur on the ground.”

The recent economic slowdown, and the corresponding lack of funding targeted for implementation have also played a role in the slow start of plan implementation. The notable exception is the Section 319(h) grant funded implementation projects. These projects, supported by EPD and managed by local water managers in each of the water planning regions, have provided initial incentive to begin implementation of specific projects.

As the Councils, the local governments in their regions, and the state come to better understand their (and each other’s) implementation responsibilities, the upcoming required review and revision of the RWPs will also begin to come into focus.

As progress is made toward preparing for this plan review, many will begin to inquire about implementation progress since adoption of the plans in 2011. To that end, near-term coordination among all of the implementing

actors will be necessary to formally inventory and assess continued implementation progress of the RWPs.

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