

# Georgia's Water Resources:

*A Blueprint for the Future*

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# Introduction to Statewide Water Planning

## The Vision for Comprehensive Statewide Water Planning

Of all Georgia's natural resources, water is the most vital to sustaining the lives, quality of life, and livelihoods of the state's citizens. This report, Georgia's Water Resources: A Blueprint for the Future, includes a plan to help guide Georgia's stewardship of its precious water resources so that they will sustain the state today and in the future. The Draft Comprehensive Statewide Water Plan will establish a set of policies to govern water management decisions and a set of management practices (i.e., actions and activities) that can be implemented to keep the use of water sustainable and protect water quality. Every Georgian has a stake in the successful adoption and implementation of the Water Plan.

The opportunity to comprehensively address Georgia's water planning and management needs began in 2001 when the Georgia General Assembly created the Joint Comprehensive Water Plan Study Committee and the Water Plan Advisory Committee (the "Joint Study Committee"). The Joint Study Committee articulated a far-reaching vision for Georgia's water resource management that was ultimately captured in the 2004 Comprehensive State-wide Water Management Planning Act:

**“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.”**

(O.C.G.A. 12-5-522(a))

The 2004 Comprehensive State-wide Water Management Planning Act also included nine principles to guide the water planning process:

- 1) Effective water resources management protects public health and the safety and welfare of Georgia's citizens;
- 2) Water resources are to be managed in a sustainable manner so that current and future generations have access to adequate supplies of quality water that support both human needs and natural systems;
- 3) All citizens have a stewardship responsibility to conserve and protect the water resources of Georgia;
- 4) Water resources management efforts must have a sound scientific foundation and recognize that economic prosperity and environmental quality are interdependent;
- 5) Water quality and quantity and surface and ground water are interrelated and require integrated planning as well as reasonable and efficient use;
- 6) A comprehensive and accessible data base must be developed to provide sound scientific and economic information upon which effective water resources management decisions can be based;
- 7) Water resources management encourages local and regional innovation, implementation, adaptability, and responsibility for watershed and river basin management;
- 8) 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; and
- 9) Periodic revisions of the comprehensive statewide water management plan may be required to accommodate new scientific and policy insights as well as changing social, economic, cultural, and environmental factors.

## Why does Georgia need a Comprehensive Statewide Water Management Plan?

Georgia's current approach to water management has largely resulted from efforts to address specific issues or needs as they have emerged over the past several decades. This approach used a variety of policies and management practices that reflect federal legislative mandates and, often, could best address relatively localized and near-term water management challenges. However, as demands on our resources continue to grow, it has become increasingly clear that meeting Georgia's future water challenges will require more comprehensive management approaches. Such approaches need to incorporate methods to assess and evaluate the cumulative effects of individual decisions. While it is important to continue some current policies and practices, it is clear that the current approach alone is inadequate to meet the statutory vision for Georgia's water management.

The water management approach employed to date has been inadequate, in part, because it lacks three critical elements:

- A framework for consistently assessing the sustainable yield (the amount of water that can be withdrawn from a water source without causing harm) and available assimilative capacity (the amount of pollution a water source can receive before water quality degrades) in different regions across the state; and a comprehensive set of data and information from which to establish a scientific understanding of the status and condition of Georgia's water resources;
- Mechanisms to compare present and future water demands with the sustainable yield and assimilative capacity of water resources;
- A comprehensive set of water management practices that can be implemented in region-specific ways to ensure that reasonable water needs are met without foreclosing opportunities for other reasonable uses of the water resources now or in the future.

To resolve these inadequacies, the state must build on current management approaches and address the following basic realities of water management:

- It is critical that Georgia continue to improve the information base used to make water management decisions. Georgia needs more and better data and information with which to assess water quantity and water quality conditions, and the capability of the state's waters to meet future needs in a sustainable manner.
- Because water resources, their condition, and their use all vary across the state, there must be flexibility in selecting the management approaches employed from one region to another. Further, given limitations on data and information, it is likely that management policies and practices will have to be adapted as new information becomes available. Rigid, one-size-fits-all approaches to water management challenges are not in Georgia's best interest.
- Some policies and management practices may apply statewide. Additional management practices will be needed if use of water resources approaches or exceeds their natural capacities.

Looking toward a future with increasing demands on water resources, it is clear that comprehensive water planning will be an on-going need.

### The Planning Process

The 2004 Comprehensive State-wide Water Management Planning Act charged the Environmental Protection Division of the Department of Natural Resources with developing a comprehensive statewide water management plan that would provide a structured yet flexible approach to water planning on the regional level, along with guidance and incentives for regional and local planning efforts. The Act also created the Water Council, a combination of elected and appointed officials and agency heads with water-related responsibilities, that is charged with:

- 1) Ensuring the coordination, cooperation and communication among state agencies and their water-related efforts in the development of a comprehensive statewide water management plan;
- 2) Providing input to the Environmental Protection Division during development of the draft comprehensive statewide water management plan;
- 3) Reviewing, modifying if necessary, and approving the final draft of the proposed comprehensive statewide water management plan; and
- 4) Recommending the plan to the General Assembly for consideration no later than the first day of the 2008 legislative session.

### Goals and Objectives of the Water Council

The concepts developed during the Joint Study Committee process and codified in the 2004 Comprehensive State-wide Water Management Planning Act are aligned with the

goals of statutes related to water resource management. Two overarching goals from these statutes helped direct the Water Council's deliberations on scope and objectives of this initial statewide water planning process:

- 1) To protect public health and environmental quality; and
- 2) To meet future water need while protecting aquifers, in-stream uses, and downstream users.

With these goals, and the vision and guiding principles of the 2004 Comprehensive State-wide Water Management Planning Act in mind, the Water Council developed four management objectives. These management objectives provided the framework for developing the statewide water plan:

- 1) Optimize withdrawals of water by increasing water conservation, efficiency and reuse;
- 2) Maximize water returns to the basin of origin by managing interbasin transfers, the use of on-site sewage disposal systems, and land application of treated wastewater where water quantity is limited;
- 3) Meet in-stream and off-stream demands for water through efficient surface storage, aquifer management and reducing water demands; and
- 4) Protect water quality by reducing pollutant loadings from discharges and runoff from the land to ensure the assimilative capacity of the streams is not exceeded and aquatic life is not impaired.

### Public Participation

The Act required the Environmental Protection Division to solicit extensive stakeholder involvement in the development of the proposed plan. The Act also declared that stakeholders should include, but would not be limited to, other state agencies, nonprofit advocacy groups, businesses, local government entities and associations of local government entities, and regional development centers.

To comply with that requirement, EPD created seven Basin Advisory Committees (BACs): Chattahoochee; Coosa-Tallapoosa-Tennessee; Flint-Ochlockonee; Oconee-Ocmulgee-Altamaha; Satilla-Suwannee-St. Marys; Savannah-Ogeechee; and an overlay that mirrored the boundaries of the Metropolitan North Georgia Water Planning District. The BACs, with 20 to 30 members per committee, represented a cross-section of entities with water resources management interests, including cities and counties, water providers, environmental groups, recreation interests, economic development groups, and representatives from the forestry, industrial, mining, and agricultural sectors. The committees were convened six times to review information developed by EPD and provide a regional perspective on proposed policy options and management practices. The names of those appointed to the BACs are shown in the acknowledgements at the end of this document.

In addition to the BACs, EPD also convened a State Advisory Committee (SAC) comprised of state-level representation of organizations on the BACs. Associations of local governments, agricultural interests, forestry and mining interests, along with

economic development representatives and recreation and environmental groups, for a total of 32 members, came together eight times to offer a state-level perspective on EPD's proposed policy options and management practices. The names of those appointed to the SAC are also included in the acknowledgements at the end of this document.

The general public was given multiple opportunities and means to engage in the comprehensive water planning process. In addition to the Basin and State Advisory Committee meetings, which were open to the public, the Water Council hosted 22 Town Hall meetings across the state to solicit input on the objectives of the comprehensive statewide water management plan. Hundreds attended these meetings and listened to EPD discuss the plan, and then provided input either through direct verbal comment, written comment, or email submission. A dedicated Web site, [www.georgiawaterplanning.org](http://www.georgiawaterplanning.org), included information related to each objective, reports from all meetings, and a web-cast of one town hall meeting from each of the three rounds; comments were also received through the Web site.

### **Description of Georgia's Water Resources: A Blueprint for the Future**

This document consists of three major sections:

- 1) "Overview of Georgia's Water Resources,"
- 2) "Draft Comprehensive Statewide Water Management Plan," and
- 3) "Implementation of Regional Water Planning"

The "Overview of Georgia's Water Resources" provides basic information and summary data on Georgia's surface water and

groundwater resources. It is intended solely to provide a brief factual water resources backdrop, and is organized to comport with hydrologic and hydrogeologic divisions as they exist in Georgia.

The "Draft Comprehensive Statewide Water Management Plan" describes the elements of the draft water plan. This section details the components of an integrated water policy that is the foundation of the plan. The section then outlines the recommended approaches to conducting the water resources assessments that will inform subsequent regional water planning efforts. The next two major elements in this section define a set of water quantity and water quality management practices (i.e., actions and activities) to be employed in building the regional components of the plan for future management of Georgia's water resources. The last element in the section describes the recommended approach to completing the regional water management plans. Each of the elements in this section is constructed in two sequential parts. The first part is a short narrative description of a subsequent 'rule'; and the second part is the 'rule' itself. This 'rule' language, once adopted by the Water Council, will then be presented to the Georgia Legislature for adoption as the Comprehensive Statewide Water Management Plan during the 2008 Legislative Session.

The final substantive section of the document is "Implementation of Regional Water Planning". This section describes the major steps in the processes recommended for completing regional water planning.

### **Public Input Process for Development of EPD Draft Water Plan**



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