

# THE NEXT WAVE OF REGIONAL WATER PLANNING: CASE STUDY ON THE NORTHWEST GEORGIA REGIONAL WATER RESOURCES PARTNERSHIP

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**Abstract.** The Northwest Georgia Regional Water Resources Partnership (Partnership) is a regional coalition of water permit holders and other interested parties located in and adjacent to the Coosa River Basin in northwest Georgia. The Partnership's area is defined by the 15 counties within the North Georgia and Coosa Valley RDC areas. The Partnership has taken a proactive stand in initiating regional or "sub-state" comprehensive water planning. Brown and Caldwell worked with the Partnership to outline the future scope and budget necessary to undertake water, wastewater, and watershed planning for the entire region.

The Partnership represents the "next wave" of regional planning that will involve non-metropolitan counties that do not necessarily share a central feature as did the Atlanta-focused Metropolitan North Georgia Regional Water Planning District.

This paper provides an overview of the Partnership, how it differs from other regional planning efforts, and the education, outreach, and planning activities conducted to date.

## ORIGIN OF THE PARTNERSHIP

Growth in northwest Georgia, combined with the need to preserve water quality in the region's streams and lakes, presents a challenge to local communities and water and wastewater providers. In addition to existing competing demands for water, recent drought years have emphasized the need for long-term regional planning for water supply, wastewater treatment and disposal, and stormwater management to optimize the available supplies.

The Georgia Environmental Protection Division (EPD) is requiring regional analysis and solutions prior to issuing updated and new water withdrawal and wastewater discharge permits, and is also beginning to develop long-term water withdrawal allocation limits for basins and individual communities. Permit holders must

also implement and demonstrate water conservation as a means of reducing per capita water demand. EPD expects water used by communities to be returned to streams and rivers without any adverse environmental impact. Stormwater is recognized as a limiting factor in many streams relative to achieving water quality standards, and must be addressed now through watershed assessments, watershed protection plans, and stormwater permits.

As a result of this increasing focus, the Coosa Valley Regional Development Center (CVRDC) and the North Georgia Regional Development Center (NGRDC) and their member communities have supported creation of the Northwest Georgia Regional Water Resources Partnership. As shown in Figure 1, the Partnership represents the 15 counties located in the areas of the CVRDC (comprised of Bartow, Catoosa, Chattooga,

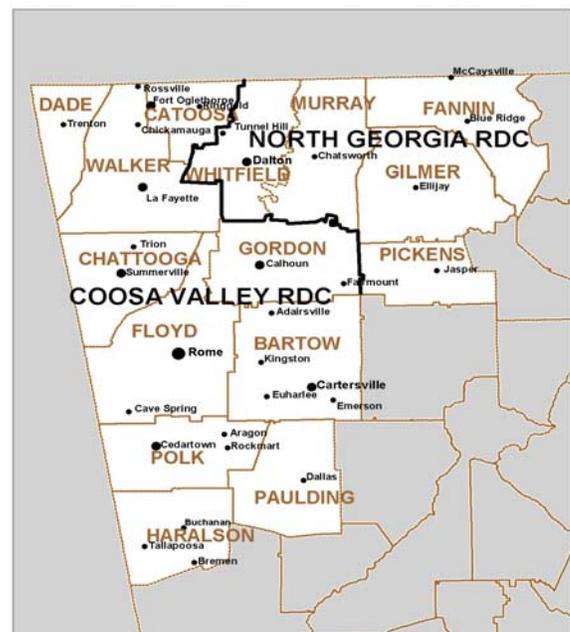


Figure 1. Northwest Georgia Partnership area

Dade, Floyd, Gordon, Haralson, Paulding, Polk, and Walker counties) and the NGRDC (comprised of Fannin, Gilmer, Murray, Pickens, and Whitfield counties). These counties are located in four major watershed basins, namely the Coosa, Chattahoochee, Tallapoosa, and Tennessee; however, as shown in Figure 2, the large majority of the region is in the Coosa River Basin.

### A UNIQUE REGIONAL PLANNING ENTITY

This proactive regional organization is unique in several ways:

- The group was not legislated; rather, it was formed voluntarily to facilitate regional coordination relative to water issues.
- It is self-funded, with the exception of limited allocations to the RDCs from the Georgia Department of Community Affairs (DCA) and recent support from the U.S. Army Corps of Engineers.
- The membership is more diverse than typical regional planning groups. Industries and community advocacy groups are involved as well as municipalities.

As such, the Partnership can be a model for other regions in the state to follow. The Partnership represents the “next wave” of regional planning that will involve non-metropolitan counties that do not necessarily share a central feature as did the Atlanta-focused Metropolitan North Georgia Water Planning District (MNGWPD). Uniting the diverse backgrounds and objectives of its membership, including water withdrawal permit holders, local governments, and other advocacy entities with an interest in water issues, organizations such as the Partnership can produce more neutral solutions that will benefit the region as a whole. The Partnership is unique because it includes all stakeholders rather than solely municipalities. Local industries, water and wastewater utilities, and environmental advocacy groups are all actively involved in the Partnership.

The Partnership is largely self-funded, with the majority of its funds coming from the dues paid by its membership. In the last year the Partnership has also received limited funding from the Georgia DCA, and the Corps of Engineers supported completion of the first four tasks of the Comprehensive Water Management Plan as described below.

Another important feature of the Partnership is that the geographic boundaries of the northwest Georgia study area almost entirely coincide with the Coosa River Basin in Georgia (Figure 2), which is recognized as one of the most biologically diverse ecosystems in the world (Johnson). As such, the members share this resource, and the goal of protecting and managing the Coosa Basin. Given this alignment within the Coosa River Basin in Georgia, the Partnership’s work will naturally fit with the EPD’s vision for completing a statewide water plan by river basin-based “Sub-State regions” if and when state-wide planning is implemented.

### OBJECTIVES OF THE PARTNERSHIP

- The Partnership’s objectives are to:
- Monitor and contribute to the development of federal, state, and local policy
  - Educate the citizenry on water-related issues
  - Fund and manage regional water-related activities
  - Coordinate the water-related activities of federal, state, and local entities.

A near-term specific goal is to develop a Comprehensive Water Management Plan for the 15 northwest Georgia counties. The Plan will guide and support future decision-making relative to northwest Georgia’s water resources. The plan will be the first regional water plan developed in the state outside of

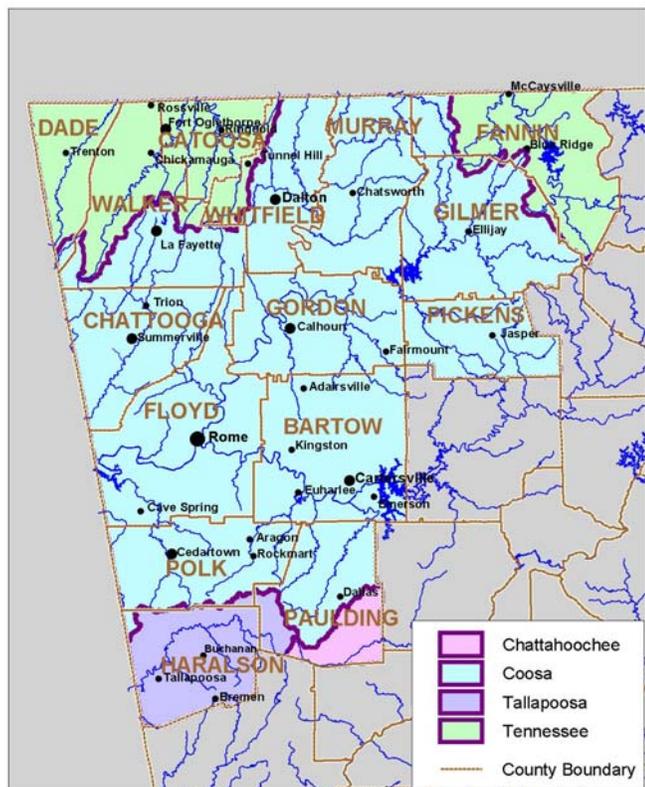


Figure 2. River basins in the Partnership area.

metropolitan Atlanta, and the first plan to directly analyze and evaluate the interrelationships between water use, wastewater, and stormwater on a regional or water basin basis. Such a road map is essential to properly manage the region's resources and to meet current and future EPD water planning requirements.

## OUTLINE OF THE COMPREHENSIVE WATER MANAGEMENT PLAN

To address the needs of northwest Georgia, Brown and Caldwell and Hightower Consulting Engineers outlined a proposed Scope of Services to conduct a Comprehensive Water Management Plan for the region.

Phase I of the plan will focus on determining and quantifying existing conditions in order to facilitate identification of future needs. Information will be gathered to determine regional water, wastewater, and watershed conditions; identify the work that has already been accomplished in the region; and describe what regional water resources facilities and coordination are needed. Municipal, industrial, and agricultural water and wastewater permit holders in the region will be inventoried. Stormwater management tools used by local governments will be summarized, including location and type of watershed assessments that have been completed. Areas where watershed assessments will be needed will be identified, with an eye toward opportunities for regional coordination.

In Phase II, long-term needs will be identified and quantified, water supply and wastewater management options will be identified and screened, and initial watershed assessment reviews for the region will be conducted. Long-term population projections and water and wastewater demand forecasts will be developed. Water supply and wastewater management options will be identified and subjected to preliminary evaluation, and initial watershed assessment reviews for the region will be conducted.

All or part of the Northwest Georgia Comprehensive Water Management Plan can be implemented as it has been to-date, as an independent project to serve the region similar to the MNGWPD work. Additionally, it can later feed into a future state-wide water management plan.

## INITIAL REGIONAL PLANNING EFFORTS

The Partnership recently collaborated with the Corps of Engineers (Corps) to begin implementing the Comprehensive Water Management Plan. With partial funding from the Corps, the first four tasks of the Plan were completed in the fall 2004, Tasks 1 and 2 by Brown

and Caldwell and MACTEC and Tasks 3 and 4 by the Coosa Valley and North Georgia RDCs. The tasks completed are as follows:

### **Task 1—Review Background Data and Reports**

In order to understand what studies, planning documents and assumptions have already been developed for the region, the Partnership reviewed dozens of documents. River Basin Plans, Local and City Comprehensive Plans, plans developed by the Regional Development Centers, lake management plans, MNGWPD plans, Interstate Compacts, and current legislative initiatives were all reviewed and summarized. Available water quality and ecological data and reports were also reviewed and summarized. In addition, demographic information was gathered, including population projections.

### **Task 2—Identify Study Area Characteristics**

GIS coverages and maps were created for a variety of different physical characteristics including topography, soils, geology, surface water flows, groundwater yields, flood-risk areas, water quality data, protected species, existing land use, and land use trends. This information helps characterize the study area and prioritize where sensitive areas and growth corridors are. Use of GIS format facilitated study and interpretation of the available data.

### **Tasks 3 and 4—Identify and Inventory Existing Water and Wastewater Permit Holders**

An inventory of all municipal, industrial and agricultural water and wastewater permit holders has been conducted. Questionnaires were developed and used to collect information from permit holders on their operations such as water withdrawals, wastewater discharge flows, and withdrawal and treatment capacity. Permit holders that are nearing their permit limits or capacity limits were identified.

## EDUCATION AND OUTREACH ACTIVITIES CONDUCTED TO DATE

In fulfillment of its goals to 1) monitor and contribute to the development of federal, state, and local policy, and 2) educate the citizenry on water-related issues, the Partnership has held numerous events for local legislators and the public. Specific activities have included:

Annual Meetings and Tours for Members:

- Anheuser-Busch Cartersville facility (June 2003)
- Lake Allatoona Dam (June 2004)

#### Workshops Open to the Public:

- *From the Forest to the Faucet* (Nov. 2002)
- *Economic Development, Quality Growth, and Water Resources* (Nov. 2003)

#### Legislative, Policy Meetings:

- Annual Legislative Reception (Nov. 2003)
- Meetings with individual legislators, the EPD, and the Department of Community Affairs (various dates)
- Legislative Update Session (Nov. 2004)

#### FUTURE WORK

Completing these first tasks provided a solid knowledge base on which to continue planning for the northwest Georgia region. Population growth and growth corridors along Interstate 75 and the existing cities are a reality now. The Partnership will continue with its planning efforts to provide adequate and efficient water and wastewater services while protecting the abundant natural resources in the area.

#### ACKNOWLEDGMENTS

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#### LITERATURE CITED

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