

WATER MANAGEMENT ACTIVITIES OF THE GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS

Joseph A. Krewer

AUTHOR: Program Coordinator, Georgia Department of Community Affairs, 60 Executive Park South, NE, Atlanta, GA 30329-2231.

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Abstract. The Georgia Department of Community Affairs (DCA) assists state agencies, regional development centers, and communities with growth, development, and quality of life issues. The DCA's Planning and Environmental Management Division (PEMD) specifically addresses environmental concerns through its coordinated planning, geographic information, and environmental management programs. Review of comprehensive land use plans and ordinances designed to protect water supply watersheds, groundwater recharge areas, wetlands, and protected rivers supports local government efforts to balance growth with environmental protection. Geographic information system (GIS) mapping and spatial analysis activities include the creation of a Regional Development Information System to support comprehensive planning, and the Division is funding and participating in several watershed protection projects. In addition, direct technical and financial support is provided for community and individual efforts to address environmental problems, including litter reduction, solid waste disposal, recycling, and water conservation and protection. The Division developed a Water Resources Toolkit to help Georgia's Keep America Beautiful affiliates increase public awareness of water issues and is the lead contact for "Earth's 911" Georgia web site. This paper describes some of DCA's current and upcoming water-related environmental management activities and efforts to integrate land use planning, water protection and local involvement.

INTRODUCTION

Water resources management in Georgia is entering a period of unprecedented activity in response to critical issues such as an ongoing drought, interstate water allocation disputes, nonpoint source pollution control, and total maximum daily load (TMDL) requirements. Many state departments and agencies are involved in addressing water issues, including the Department of Natural Resources, Department of Agriculture, Georgia

Forestry Commission, Georgia Soil and Water Conservation Commission and the Georgia Environmental Facilities Authority. Organizations such as the Association County Commissioners of Georgia, the Georgia Municipal Association and various professional trade associations also assist their members with water management activities.

In addition, the Georgia Department of Community Affairs (DCA) plays a significant role in assisting state agencies, regional development centers (RDCs), and communities with water management planning and implementation. The DCA Planning and Environmental Management Division (PEMD) specifically addresses water quality and quantity issues through its coordinated planning, geographic information, and environmental management programs. A better understanding of DCA's water management activities can lead to more effective planning and coordination with interested groups and individuals.

COORDINATED PLANNING

One widely discussed component of current environmental management theory is "smart growth" to avoid over-utilization of natural resources. This is not a new concept, however. A precursor to smart growth initiatives was the Georgia Planning Act of 1989 (O.C.G.A 12-2-8), enacted by the Georgia General Assembly to provide better management of growth in rapidly expanding areas of the state, while encouraging growth opportunities in less prosperous areas. PEMD's Office of Coordinated Planning has the responsibility for the overall management of the planning process created by the Georgia Planning Act. Coordinated planning has many benefits for local governments, including the promotion of orderly and rational development, while protecting important historic and natural resources.

The cornerstone of the coordinated planning program is the preparation of a long-range comprehensive plan by each local government in the state. This plan is intended to highlight community goals and objectives

and determine how the government proposes to achieve them. The comprehensive plan can be used to guide local government decision-making on a daily basis.

In order to maintain its Qualified Local Government status and be eligible to receive certain state funding, a local government must adopt, implement and regularly update its comprehensive plan and the necessary supporting regulations. The Office of Coordinated Planning provides a variety of assistance to local governments to strengthen their planning efforts, including guidance and technical support for developing local plans, assisting local officials in bringing them into compliance with state planning requirements, and providing technical and financial assistance for implementation. DCA also contracts with the 16 RDCs throughout the state to assist local governments and provide a regional planning perspective.

In developing and implementing its comprehensive plan, a local government must specifically address the applicable Department of Natural Resources (DNR) Rules for Environmental Planning Criteria (Chapter 391-3-16) for five natural resources: wetlands, groundwater recharge areas, water supply watersheds, protected river corridors and protected mountains. The emphasis on water resources highlights the importance of this planning process for protecting both surface water and groundwater quality. In addition, land use elements of local comprehensive plans in many areas of the state will be amended in response to the Georgia DNR Greenspace Program Rules (Chapter 391-1-4).

The Office of Coordinated Planning is involved in other activities that have an impact on water resources, including oversight of Service Delivery Strategies, procedures for review of Developments of Regional Impact, and identification and planning for Regionally Important Resources. The Office also funded and participated in the Broad River Community Watershed Project (Broad River Watershed Association and others, 2000), which employed an innovative, three-part approach to watershed protection planning.

GEOGRAPHIC INFORMATION

A critical component of any environmental management activity is accurate and up-to-date geographic information. This is particularly true for water management projects involving large watersheds, multiple government jurisdictions, land use issues, pollutant loading models and other complex elements. An important long-term initiative at DCA has been the application of mapping and geographic information to support state and local government decision-making.

The Georgia Planning Act directed DCA to develop the "Georgia Data Base and Network", a GIS-based information system to support the coordinated comprehensive planning programs of the state.

The PEMD Office of Decision Support Systems has coordinated the development of the Georgia Data Base and Network regionally through the support of GIS offices at all of the RDCs, which in turn provide mapping and planning services to local governments and the general public. The Office coordinates some RDC GIS data collection to assist local governments in meeting their Minimum Planning requirements for Local Comprehensive Planning. Consequently, DCA and the RDCs have compiled an extensive GIS database of over 7000 locations of 28 types of Community Facilities, including water systems, wastewater treatment plants, and active solid waste landfills. DCA and the RDCs have compiled land use maps for local and regional comprehensive plans and work with local governments to compile more accurate boundary maps. DCA and the RDCs render technical assistance to local governments participating in Community Green Space planning. DCA has also been integrally involved in interagency GIS planning by providing technical leadership to the State GIS Coordinating Committee (GISCC).

During the last four years, Georgia, in partnership with the US Geological Survey's National Mapping Division, has compiled 1:24,000-scale base maps for transportation and hydrography. Beginning in 2001 the Census Bureau and the GISCC will use these two fundamental base maps to compile a 1:24,000-scale version of the TIGER/Line map for Georgia. These maps will also serve as the basis for the new National Hydrographic Database to replace the Reach File-3 maps. The GISCC and DCA have also recently completed digital National Wetlands Inventory maps. During the years leading up to Census 2000 DCA served as the state coordinator for map updates. Local governments identified hundreds of thousands of new residential addresses and submitted thousands of other map corrections and updates through this program to improve the Census 2000 TIGER/Line maps. These map updates will provide better information for water resource planning.

All of these collaborative mapping efforts will soon converge into one the most detailed sets of base maps available for any state. Water resource management, planning, analysis and research will be greatly enhanced once there are matching 1:24,000-scale maps of Census 2000, National Wetlands Inventory, the National Hydrographic Database, and land use. These will also be supplemented by statewide coverage of

1:12,000 scale Digital Ortho Quarter Quadrangle airphotos, 1992-93 black-and-white and 1999-2000 color infrared images.

DCA has also worked in more specific ways to support interagency water resource planning in the state. During 1999-2000 the Office of Decision Support teamed with the EPA Office of Water to provide two BASINS training classes for state officials and RDC planners. BASINS is a GIS-based application and database for watershed and water quality-based assessment and integrated analysis of point and nonpoint pollution sources. DCA and the RDCs have also been compiling land use maps specifically for use in BASINS modeling. This Office will combine the products of all these initiatives in its Regional Development Information System (RDIS), a database designed to fulfill the requirements of the Georgia Data Base and Network. This Office is also working with the PEMD Office of Coordinated Planning to develop Plan Builder, a suite of Internet-based applications that will enable local governments to create, archive, publish and update their comprehensive plans via the web. Plan Builder will provide a planning knowledge base and will be linked to RDIS map views and data views.

ENVIRONMENTAL MANAGEMENT

The PEMD Office of Environmental Management provides technical and financial assistance for many environmental programs that directly or indirectly impact water resources management. Working closely with the Georgia Environmental Facilities Authority, Pollution Prevention Assistance Division and Environmental Protection Division, this Office helps plan the state's solid waste management efforts, provides technical assistance and training to local governments, and educates the public on the importance of solid waste management. The Home Composting Grant Program assists communities that promote home composting and DCA also distributes "Composting At Home In Georgia" brochures (DCA, 2000). Recycling is encouraged through Pay-As-You-Throw collection system programs, distribution of the "Georgia Directory of Recycling Coordinators" book (DCA, 2000) and "Tips on Electronics Recycling" brochure (DCA, 2000), as well as a "Georgia Recycling Markets Directory" on the DCA website. Businesses learn to conduct waste audits, identify recyclables, manage disposal costs and purchase recycled products at "Waste in the Workplace" workshops. The Office of Environmental Management also strives to identify funding resources local governments can use for their

environmental programs. Recently, the Office conducted two Environmental Grant Writing Workshops, with separate breakout sessions highlighting solid waste and water project grant and loan opportunities.

This Office also houses Keep Georgia Beautiful, the state affiliate of Keep America Beautiful (KAB). The 63 local KAB affiliates across the state build and sustain community environmental activities and behaviors. Although the KAB affiliates have traditionally concentrated on litter reduction and waste management activities, they are now expanding their efforts to increase public awareness of water conservation practices, watershed protection issues, and nonpoint source pollution control in their communities. The Office of Environmental Management and the Keep Georgia Beautiful Executive Directors Association have developed a Water Resources Toolkit to assist the affiliates with this initiative. The Toolkit contains presentations, videotapes, watershed maps, posters, brochures, teaching tools, contact lists and other items needed for community education. Many elements of the Toolkit are now accessible on the DCA website at www.dca.state.ga.us. The popularity of the Toolkit has also led to requests for similar toolkits for local government officials or other specific audiences.

Keep Georgia Beautiful also loans out Enviroscene models for educating students and the public on nonpoint source pollution, wetlands and landfills, and offers training in two school waste education curricula. Home water conservation is encouraged through distribution of DCA's "Every Drop Counts" brochure (DCA, 2000). Over 96,000 of these water brochures were provided to Georgia communities in 2000.

DCA and Keep Georgia Beautiful help sponsor and organize a number of annual statewide environmental events, including "Rivers Alive", Georgia's river cleanup event held throughout the month of October; "The Great American Cleanup" held in April to encourage communities to participate in litter prevention, beautification, and waste minimization activities; and "Bring One For The Chipper", Georgia's Christmas tree recycling program.

In 2000, DCA became the lead Georgia contact for the "Earth's 911" web site at www.1800cleanup.org and environmental hotline at 1-800-Cleanup. This internationally acclaimed program provides zip-code based community environmental information on waste disposal, recycling, air and water protection, water conservation, and more. The system also offers direct posting of local environmental events and is constantly being expanded to include new information.

Through a USEPA Wetlands Development Grant, this Office is also funding the development of an Ocmulgee River Watershed Management Plan to assess and maintain water quality in this basin and define priorities for future land protection measures, riparian restoration and wetlands enhancements.

FUTURE DIRECTIONS

DCA seeks to provide local governments and the public with timely and useful information on developing water issues. Three items of great concern to many communities are TMDLs, the Phase II Storm Water Permitting Program and funding sources for water-related projects.

The Georgia TMDL program requires the development of pollutant loading information and implementation plans to reduce point and nonpoint source water pollution in impaired water bodies across the state. A number of implementation plans are now being developed by the RDCs, but will depend heavily on local stakeholder involvement, public education and adequate funding to achieve success. Many of DCA's water-related activities can be applied to the TMDL implementation process on a local and regional basis, so DCA will play a role in this process.

The U.S. Environmental Protection Agency's Phase II Storm Water Rule requires the Georgia EPD to issue National Pollutant Discharge Elimination System (NPDES) storm water permits to many small cities and counties, certain federal and state facilities, industrial-type facilities owned or operated by municipalities, and construction sites disturbing 1 to 5 acres of land. EPD must issue these permits by December 9, 2002 and regulated entities must apply for permit coverage by March 10, 2003. However, many potential permittees, including small municipalities, lack the resources and expertise to apply for these permits and implement the required storm water management programs. In partnership with the Georgia Environmental Protection Division and other involved organizations, DCA plans to provide technical assistance and facilitate workshops to assist communities with the Phase II permitting process over the next several years.

Feedback from DCA's recent Environmental Grant Writing Workshops identified the need for additional information on funding sources for TMDL implementation, storm water management, and watershed protection. DCA plans to conduct workshops to specifically address water funding needs.

Other developing projects include expanded participation in water conservation and nonpoint source pollution education programs, and continuing additions

to the DCA and "Earth's 911" websites. The websites will include safety advisories for beaches, rivers and other recreational areas, as well as drinking water public notifications.

SUMMARY

DCA funds and implements a variety of programs that impact water resources management on the local, state and regional level. Comprehensive and environmental planning, geographic information services, community outreach, and public education provide valuable support for voluntary and regulatory water programs. The Department is able to direct its resources to participate in developing water initiatives statewide and help attain the goal of sustainable communities. Interested parties are encouraged to consult the DCA website for postings on current and developing environmental programs, resources and publications and to contact the author for additional information.

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