

WATER EDUCATION TOOLS FOR SPECIFIC AUDIENCES

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Abstract. Educating local government officials and staff, the general public, and students about water management issues is a continuous process very familiar to water management professionals. While there are innumerable printed and online resources available to everyone now, developing tools for a specific audience or project can help us focus our educational efforts on a user's real information needs.

In support of its own statewide planning and water education activities, as well as other ongoing environmental programs, the Georgia Department of Community Affairs (DCA) and its partners have created a number of innovative resources. These include program-specific publications, user-friendly GIS mapping systems for Georgia's large watersheds, various versions of a Water Resources Toolkit, and online tools. The use of these resources and developing tools for specific projects and audiences will be discussed, with the goal of helping other environmental educators improve their targeted education efforts.

INTRODUCTION

DCA is involved with a variety of environmental initiatives and education efforts. The Department's primary focus is working with Georgia's local governments and communities to help them address their problems, and it provides tools and resources on many different levels. To assist communities in a comprehensive manner, DCA's targeted audiences range from individual citizens, students and community groups all the way up to state and local government staff and elected officials. Realizing that various members of the community have different concerns and knowledge about environmental issues, resources have been developed which seek to match the user's level of understanding with their information needs. A discussion of how and why certain resources have been created can help other environmental educators facing similar challenges make informed decisions.

DCA's Planning and Environmental Management Division (PEMD) contains various functional groups with experience in statewide environmental planning and assistance, including the Office of Planning and

Quality Growth, Office of Decision Support Services, Office of Environmental Management and the Keep Georgia Beautiful Program. These groups work closely with each other to help communities address current and developing environmental issues, as well as applicable state laws, such as the Georgia Planning Act and Solid Waste Management Act.

In recent years, communities have focused increasing attention on critical aspects of water resources management in Georgia. The impacts of water pollution on aquatic habitat, recreation, drinking water sources and waste water management have been felt by local governments and industries across the state. Among the more obvious effects are expedited penalties for permit violations, increasingly stringent wastewater and storm water discharge limitations, and specific watershed protection requirements. The long-term drought of 1998-2002 also increased public awareness of the limitations of our water resources and helped foster the concept of individual responsibility for water management. These effects ultimately impact everyone, in both positive and negative ways. While the environment and consequently our quality of life are hopefully being improved, we may also feel the effects in our wallets as local governments struggle to meet their environmental responsibilities. It is therefore important that environmental education and assistance efforts be properly focused so that the community and its leaders will understand and support environmental initiatives.

PRINT MATERIALS

To help educate the general public and businesses about specific environmental issues, DCA has developed a number of brochures and posters, including:

- Every Drop Counts (water conservation guide)
- Backyard Buffers-Protecting Habitat and Water Quality
- Composting at Home in Georgia
- Tips on Electronic Recycling

- Daily Recycler Wheels
- Earth 911 Community-Specific Recycling & Environmental Information (brochure about this Web site and 24-hour telephone network)
- Littering and Illegal Dumping in Georgia
- Keep It In Your Bed - Secure Your Load (Pickup truck owners anti-litter brochure and poster)
- Commercial Waste Haulers Littering Prevention

DCA provides large quantities of these items at no cost to local governments and community organizations, as well as making some of them available on the DCA Web site. These resources have proven to be very popular. For example, over 200,000 of the Every Drop Counts and 49,000 of the Composting at Home brochures have been distributed across Georgia.

TARGETED AUDIENCES

How does DCA determine its target audiences and decide what resources to develop? This happens in a number of ways. Through its involvement with other state agencies and numerous environmental committees and workgroups, DCA staff members recognize an environmental issue that is not being fully addressed by another organization or which needs a broader (or narrower) focus. Often, a particular educational need is identified by local government officials or Regional Development Center staff, who contact DCA directly or discuss such issues at conferences and training sessions. The Association County Commissioners of Georgia and Georgia Municipal Association are also instrumental in communicating their members' needs to DCA.

Educational resources may also be developed to directly support DCA's ongoing programs, including quality growth initiatives, recycling and solid waste management, water resources management, WaterFirst, and the Keep Georgia Beautiful (KGB) Program. The latter program has been a particularly useful source of information on community resource needs. Over 60 local Keep America Beautiful Affiliates in Georgia take an active role in environmental activities and education, including litter control, recycling, tree planting and other beautification projects, stream cleanups, water conservation, nonpoint source pollution control and school environmental education. Well known events include Bring One for the Chipper and the Great American Cleanup, as well as active involvement in Rivers Alive. The Children's Water Festival is a large event sponsored by Keep Georgia Beautiful and many other partners. It is held in different river basins each year and will be discussed in detail in another presentation at this Conference. To support these and

other efforts by the Affiliates, DCA provides resource materials and training opportunities.

A good example of DCA's targeting of a specific audience in time of need involves the distribution of Every Drop Counts water conservation brochures during the last drought. The Georgia Environmental Protection Division's (EPD) 1998-2000 Drought Report identified twenty-eight Critical Water Supply Communities (those with less than one month's drinking water supply available in August 2000) and thirty-nine Watch Water Supply Communities (those with more than one month's supply available, but verging on critical levels). DCA contacted all the cities and counties on this list and offered to provide free Every Drop Counts brochures for their citizens. Over 99,000 of the brochures were distributed by the local governments that responded to the offer, making conservation information available when and where it could be most useful.

DCA has also responded to the educational needs of other state agencies. In 2002, Georgia EPD was in the process of issuing National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permits for the smaller Phase II communities in Georgia. To assist EPD, DCA organized and held a series of Phase II Storm Water Workshops around the state which reached 87% of the affected communities. The workshop participants received critical information and resources that allowed them to begin addressing the permit requirements in a cost-efficient and timely manner. The workshops also reduced the level of anxiety felt by many of the communities facing the new permitting requirements.

WATER RESOURCES TOOLKIT EVOLUTION

One interesting example of how a relatively small resource need grew into a much larger educational project is the Water Resources Toolkit. In recent years, the Keep America Beautiful Affiliates have taken an increasingly active role in water resources management, in some cases providing all or part of the public education component for a local storm water management program. In response to requests by the Affiliates for basic water management materials to educate citizens and elected officials, DCA initially developed a Water Resources Toolkit with about 30 educational items in a plastic file box.

The popularity of this Toolkit and requests for a similar unit to provide information directly to city and county officials led to the development of a more comprehensive Water Resources Toolkit for Local Governments, with over 100 items in the box. These

Toolkits were distributed to many local governments across the State, but were time-consuming and expensive to produce and ship. In addition, the regular turnover of elected officials means that there are always new people needing this information. With more than 2,500 local elected officials in the State serving 159 counties and 532 cities, keeping those officials informed and ensuring an understanding of issues affecting the management and protection of water resources in the State is a tremendous challenge.

In order to reach more local governments and other interested parties, DCA and various partners created a CD version of the Water Resources Toolkit for Local Governments with hundreds of useful items, which have been widely distributed by mail and at conferences and workshops. The Toolkit CD has also been packaged with two additional CDs providing user-friendly, interactive ArcExplorer® maps of Georgia's 52 large watersheds. These CDs provide graphic information on the location of impaired waters and a host of other watershed features not otherwise available to non-technical users. The Toolkit and Watershed Mapping CDs were also distributed as a local government and public education tool as part of DCA's Ocmulgee River Watershed Management Plan project several years ago.

In the latest move to make the Toolkit information accessible to anyone with Internet access, the Toolkit has been posted on the DCA Web site at www.dca.state.ga.us/environmental/. In this format, the Toolkit can be continuously updated and expanded to address new issues. DCA has also helped develop other water resource tools in partnership with the U.S. Environmental Protection Agency, Association County Commissioners of Georgia, Conference of Southern County Associations, and other organizations. The recently released Water Stewardship Toolkit for Local Governments is a four-CD package containing the Water Resources Toolkit for EPA Region 4 (Southeastern) Local Governments, as well as a Source Water Information Kit and Source Water Protection Plan template. Copies of this Toolkit can be obtained by contacting the Association County Commissioners of Georgia at 404-522-5022.

NEW ACTIVITIES

One of DCA's latest environmental education and assistance efforts is the Georgia Urban Nonpoint Source Reduction Program. The primary objective of this project is to develop the capacity of local governments and local government officials to address urban water quality issues on a watershed basis. To

accomplish this goal, existing and newly elected officials must have a reliable and creditable source to turn to for information, including water resource tools that are locally-based but have regional or watershed level impacts. In order to meet that need, three specific tasks are being addressed by this Program: creating an information clearinghouse; creating tools to link land-use and water quality; and providing local government training and assistance. This developing program is also the subject of another presentation at this Conference.

DCA and numerous other partners are also involved in an EPA grant-funded project entitled "Use of Engineered Soils and Landscape Systems (ES&LS) to Meet Storm Water Runoff Quality and Quantity Management Requirements". This project will examine the water quality and quantity benefits of compost-containing engineered soils, measured in both a controlled setting at the UGA Griffin Campus and a functional landscape system at Georgia Tech's new Christopher W. Klaus Advanced Computing Building. Findings will be used by EPA and an innovative group of project partners to educate the development community; architectural, engineering and landscape design firms; university researchers and educators; state agencies which establish best management practices; municipal and commercial compost producers; and other interested parties. The project will also encourage the use of recycled biomaterials to treat storm water runoff in urban environments. Workshops, videos and online resources will help extend the project results to interested parties across the state and other regions.

SUMMARY

DCA and its partners provide many water-related and other environmental education tools and resources to Georgia communities. An important component of this effort is identifying and responding to specific information needs for targeted audiences. This approach ensures the efficient use of available DCA resources and puts the information in the hands of those who can benefit the most from it.