

# DEVELOPMENT OF AN URBAN WATERBODY EDUCATION PLAN FOR GEORGIA

David B. Nichols

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*AUTHOR:* Assistant Professor of Landscape Architecture, School of Environmental Design, Caldwell Hall, The University of Georgia, Athens, Georgia 30602.

*REFERENCE:* *Proceedings of the 1995 Georgia Water Resources Conference*, held April 11 and 12, 1995, at The University of Georgia, Kathryn J. Hatcher, Editor, Carl Vinson Institute of Government, The University of Georgia, Athens, Georgia.

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**Abstract.** This paper describes the development of an education plan for instructing the populace of Georgia concerning the sources and effects of nonpoint pollutants upon urban streams of the state. Completed in early 1994, the project contained three major components: a series of public service announcements for distribution to radio and television stations across the state, a short videotape for use in presentations before a variety of groups; and a document providing a strategy and process for informing the population of Georgia about the sources and effects of nonpoint pollutants and soliciting citizen responses to help address the problem.

## INTRODUCTION

The continuing degradation of streams in urban and urbanizing watersheds remains as one of the most serious environmental problems that Georgia faces now and in the years ahead. The tragic treatment of urban streams has not only affected the water quality of the streams, but has also adversely influenced the quality of human life. While stream degradation is a result of complex, interrelated processes, one of the primary sources of the degradation is from nonpoint pollutants generated by citizens as they undertake their daily activities.

Unlike point sources of pollution which have been regulated and controlled by federal and state legislation, nonpoint sources have proven to be far more difficult to regulate by legislative mandates. Because the activities and land management practices of virtually all citizens contribute in some way to nonpoint stream pollution, solutions to the problem must also involve all citizens. The U.S. Environmental Protection Agency noted that effective solutions to nonpoint pollution must affect the public at large, and require an informed public to succeed (EPA, 1989). Education, then, becomes a key component of any strategy aimed at controlling and reducing this problem.

This paper describes the development of an education plan and program that focused upon urban streams in Georgia. The project was completed in early 1994 by a team of consultants working through the Office of the Vice President for Services at the University of Georgia. The plan was prepared under a

contract with the Environmental Protection Division (EPD) of the Georgia Department of Natural Resources. The EPD is responsible for water quality levels in Georgia's streams, and will be responsible for implementing the plan and distributing the educational materials.

## BACKGROUND

In the late 1960s and early 1970s, state and federal governments began to recognize and actively address the impacts that pollutant discharges were having upon stream water quality. By the early 1980s, many streams in Georgia saw significant improvements in water quality due to the regulation of point sources of pollution (Georgia EPD, 1992). Nonpoint sources, however, continued to contribute to stream degradation and water quality problems. The impacts of nonpoint pollution sources became more apparent as point sources began to be controlled.

Studies found that the impacts were particularly severe in urban and urbanizing watersheds (Georgia EPD, 1985; Georgia EPD, 1986). A 1992 report revealed that of the surface streams in Georgia which did not support their designated beneficial use, nearly two-thirds were as a result of urban runoff and urban nonpoint sources of pollution (Georgia EPD, 1992).

### We All Live Downstream

In 1988, the Commissioner of the Department of Natural Resources appointed a Community Stream Management Task Force to make recommendations to the Department regarding courses of action the DNR should undertake to protect and reclaim streams in urban and urbanizing areas of the state. The task force, composed of representatives of state and local government, private industry, various interest groups, and professions, published a report entitled, "We All Live Downstream," (Georgia EPD, 1990). In that report, the task force developed a set of master strategies designed to ". . . foster a cooperative partnership between levels of government, business and industry, and the general public. The task force went on to place its highest priority on educational efforts, declaring education to be ". . . the common denominator of all master strategies." (Georgia EPD,

1990).

The report went on to recommend that educational programs be developed for major target groups—government officials, schools, and the general public—with the program, message, and delivery medium being tailored for each target group. Finally, the task force recommended that the Environmental Protection Division, "...retain a qualified contractor to develop a comprehensive community and citizen education plan and program."

### **Project History**

In May of 1992, the Environmental Protection Division prepared and advertised a Request for Proposals. The Request for Proposals, advertised in the Atlanta Journal/Constitution, stated that the Environmental Protection Division required four tasks to be performed under the contract: (1) an education plan and program, (2) a series of public service announcements for radio and television stations, (3) an educational videotape with an accompanying brochure, and (4) a formal presentation of approximately twenty minutes in length for use by the EPD.

A team of consultants composed of faculty members from The School of Environmental Design and The College of Journalism and Mass Communication at The University of Georgia, as well as a private film production company in Athens, was formed to respond to the Request for Proposals. In July of 1992, the consultants were notified of their selection for the project. After initial meetings with representatives of the Environmental Protection Division, the consultants notified the EPD that budgetary constraints would not allow the completion of all of the requested tasks. The consultants recommended elimination of the formal presentation, and proposed adding a special ending onto the videotape for presentations to certain target groups. This proposal was accepted.

### **Education Plan and Program**

Following the recommendations proposed by the Community Stream Management Task Force, the consultants divided the population of Georgia into major target groups. The consultants proposed that the population of the state be divided into seven target groups: (1) the general public, (2) environmental-interest groups, (3) civic associations, (4) business associations, (5) educators, (6) local government officials, and (7) state government officials. The program for each target group was then divided into eight sections: (1) objectives, (2) strategy of approach, (3) specific issues, (4) incentives, (5) educational needs, (6) educational materials needed, (7) suggested resource materials, and (8) staff activities. The consultants also provided an extensive appendix to the final report which listed the names, addresses, and phone numbers of all of the organizations within each target group that were located within urban areas of the state (The University of Georgia, 1994). The appendix was also provided to the Environmental Protection Division on a

computer disc to facilitate periodic updates of the lists.

The consultants also produced four public service announcements as part of the contract. Two announcements—one of 30 seconds length, and another of 60 seconds length—were prepared for radio use. Two other announcements—ten seconds and thirty seconds in length—were prepared for television use. A professional voice was employed for all of the public service announcements. The television announcements utilized the latest computer-enhanced technology called morphing to catch the attention of broadcasters who receive numerous public service announcements each year.

To fulfill the final task in the contract, the consultants produced a twelve minute videotape entitled, "Pointless Pollution in Georgia," which was suitable for use before a wide range of audiences. A special ending, approximately ten minutes in length, was added to all copies of the tape. The additional segment was intended primarily for viewing by local governmental officials. The segment featured Gainesville City Manager Al Crace discussing methods that local governments could use to protect their community's streams. It was separated from the earlier segment of the tape by a short pause to allow the tape to be stopped when played before other target groups. A pamphlet, designed to accompany the videotape, provides basic information about the sources and effects of nonpoint pollutants in the community.

All of the educational materials for the public have Environmental Protection Division phone numbers prominently displayed. The consultants and the EPD staff both felt that it was critical to the success of the effort that phone numbers where the public could reach the EPD about concerns or questions should appear prominently, and that the materials would not be released until the phone line was available for use by the EPD staff. The EPD phone number for nonpoint source pollution is (404) 656-4934. The phone line is dedicated for exclusive use of the EPD's Nonpoint Source Pollution Program, and is monitored continuously by EPD staff.

### **SUMMARY**

The project was completed in early 1994. Since completion, the Environmental Protection Division has twice had to order additional copies of the educational materials due to their popularity. EPD staff have been actively performing many of the recommendations proposed in the plan.

Since its completion, the project has been recognized for its quality and creativity by several professional organizations. The public service announcements won First Place Honors in 1995 in the Commercial / Public Service Announcement Category from the Broadcast Education Association. The entire project received a Merit Award in Communication from

the Georgia Chapter of the American Society of Landscape Architects in 1994.

#### PROJECT FOLLOW-UP

One of the courses of action the consultants recommended the DNR to pursue in this project was the development of a set of model land development code guidelines for incorporation by local municipalities. The recommended guidelines for land planning and land development activities would be designed to provide better protection of surface stream water quality in urban and urbanizing areas of Georgia. Funding for this project has been approved by the U.S. E.P.A. through a Section 319 Grant. A contract for this project is expected to be signed in 1995.

#### ACKNOWLEDGMENTS

The author gratefully acknowledges the contributions of the following persons who served on the consultant team for this project: Professor Bruce Ferguson, School of Environmental Design, The University of Georgia; Associate Professor Allan MacLeod, College of Journalism and Mass Communication, The University of Georgia; Aguar Brothers Film Production, Athens, Georgia.

The efforts, patience, and contributions of Ted Mikalsen and Susan Hendricks of the Georgia Environmental Protection Division are also appreciated.

#### LITERATURE CITED

- Georgia Environmental Protection Division. "Nonpoint Source Impact Assessment Study." Atlanta, GA. 1985.
- Georgia Environmental Protection Division. "Georgia Urban Stream Studies." Atlanta, GA. 1986.
- Georgia Environmental Protection Division. "We All Live Downstream: Recommendations of the Community Stream Management Task Force for a Cooperative Partnership to Manage the Effects of Nonpoint Source Pollution on Urban Streams." Atlanta, GA. 1990.
- Georgia Environmental Protection Division. "Water Quality in Georgia 1990-91." Atlanta, GA. 1992.
- U.S. Environmental Protection Agency. "Nonpoint Sources: Agenda for the Future." Washington, D.C. 1989.
- The University of Georgia. "Georgia Urban Waterbody Education Plan and Program." 1994.