

S O U T H E A S T W A T E R S H E D FORUM

To foster and enhance cooperative local watershed initiatives through education, training, and regional dialogue

Ordinance Ties Development to Water Supplies

FIRST OF ITS KIND IN THE EAST

It was not totally unanticipated. In the late 1990s, engineers in Frederick, Maryland calculated that the city could run out of water if it kept growing so rapidly. But like so many other communities, the idea of running out of water was unthinkable in a water-rich region. The community lies adjacent to the Monocacy River. But in ten years, the city grew from a population of 40,000 in 1990 to 52,767 in 2000. Now, nearly 18 months after imposing a ban on new development, Frederick County, Maryland is experiencing a **water shortage brought on by rapid growth and bad planning**. It could become a portent of things to come for communities throughout the Southeast.

To avoid such problems in the future, the community has passed a **water allocation ordinance**, the first of its kind in the East. It could become a national model for cities facing similar threats from rapid development. The ordinance will limit developer's access to water once Frederick has enough surplus to warrant lifting the current **construction moratorium**. The ordinance establishes a panel of city officials, the Water Service Committee, which will review every proposed development and determine if the city can allocate water for it.

What makes the ordinance unique is the way the allocation has been determined. Under the ordinance, 45 percent of surplus water will be allocated for new residential developments, 30 percent for commercial and industrial projects, and 25 percent for other uses, like hospitals and government buildings. The law is designed as a temporary measure to remain in effect until a pipeline from the Potomac River is completed in approximately three years.

The concept that a city cannot approve developments for which it cannot provide water is not new. Maryland law requires local governments to demonstrate that they have sufficient water for each development approved. But the law does not specify how to predict water use or allocate limited supplies. In Virginia, the state's Department of Environmental Quality does not mandate that local governments prove they have sufficient supplies for new developments. Those decisions are left to the discretion of local governments. But as can be seen in Frederick, the pressures of development often make "building moratoriums" a difficult and politically sensitive decision to make at the local level, and one that may only be made when water shortages reach crisis proportions. At least now, Southeast communities have a template for allocating limited water supplies when the water crisis comes to them.

Contact: Nancy Poss, City of Frederick Public Information 301-360-3842

Information for this article was taken from a September 23, 2002 article by David Snyder in the Washington Post.



Frederick, Maryland

SOUTHEAST WATERSHED FORUM

BOARD OF DIRECTORS

Jenifer Christman, Chair
International Paper (TN)

Gary Boring
New River Highlands RC&D (VA)

Chip Bentley, Treasurer
Appalachian Council of Gov. (SC)

Allison Newell, Secretary
Alabama Clean Water Partnership

Noreen Clough, Vice Chair
NKC Consulting, Inc. (GA)

Don Freeman
Cape Fear River Assembly (NC)

Ross King
Assoc. of County Com. of GA

Richard Ludington
The Conservation Fund (NC)

Gale Martin
MS Soil & Water Conservation Com.

Gene Medley,
City of Lakeland, Florida

Judith Petersen
Kentucky Waterways Alliance

Christine Olsenius
Forum Executive Director
Newsletter Editor
(410) 849-2975
(410) 849-2976 Fax
cholsenius@aol.com

Funding for this issue from:
Tennessee Valley Authority
U.S. Fish & Wildlife Service



30th Anniversary of the Clean Water Act

All during October, organizations and agencies across the country are planning activities to celebrate the 30th Anniversary of the Clean Water Act, the nation's historic legislation to keep rivers and streams swimmable and fishable. October 18 is the official date. Check out the website at www.yearofcleanwater.org. Citizens across the country will participate in a National Monitoring Day and register their local data in a national data base. A World Watershed Summit is scheduled on Oct. 30-Nov. 1 in Washington, D.C.

Contact: www.yearofcleanwater.org

AWRA Urges Water Dialogue

On September 17-18, 2002, the American Water Resources Association hosted a **National Water Resources Policy Dialogue** in Washington, D.C. to seek input from a broad diversity of stakeholders on the issues that should shape our national water resources policy for the 21st century. Speakers reviewed existing federal policies and their impact on state and local entities, while others identified future issues of concern. The Southeast Watershed forum was invited to represent local and regional issues. Presentations were followed by discussions and priority setting captured by facilitators who compiled all the feedback for a final report.

Contact: info@awra.org/540-687-8390

Watershed Initiative Due Nov. 21

In his 2003 budget, President Bush proposed \$21 million to encourage successful community-based approaches and techniques to protect water resources throughout the country. EPA is conducting a national competition to select up to 20 watersheds for grants to support watershed-based approaches to clean water. Awards will range from \$300,000 to \$1.3 million. Each Governor or Tribal Leader is invited to nominate two intra-

"This program " recognizes the important role that states and local communities have in helping to achieve our common goals, by giving them the power to do what works."

CHRISTINE TODD WHITMAN, EPA Administrator

state or intra-tribal watersheds. But there is no limit to the number of interstate or joint state-tribal watershed projects that can be nominated. **Nominations must be received by November 21.** Electronic copies of the full



package can be submitted to EPA via initiative.watershed@epa.gov. Two paper copies must be sent (via Courier service) to the office of Robert Wayland, Director, Office of Wetlands, Oceans & Watersheds, USEPA; Room 7130, 1301 Constitution Avenue, NW, Washington, DC 20004. **Mark all submissions: ATTN: EPA Watershed Initiative.** Nominations will be reviewed at the regional and national level. All appropriate information is available at www.epa.gov/owow/watershed/initiative.

REGIONAL NEWS

New ACT-ACF Commissioners Appointed

President Bush announced his intention to appoint agribusinessman **Alec Poitevint** as Federal Commissioner of the Apalachicola-Chattahoochee-Flint River Basin Compact Commission. Poitevint will also serve as alternate Federal Commissioner of the Alabama-Coosa-Tallapoosa River Basin Compact Commission. **Drayton Nabers** of Alabama was appointed by Bush to be the ACT Federal Commissioner.

Poitevint will replace former U.S. Rep. Lindsey Thomas as the ACF Commissioner. Thomas, who served as commissioner for both the ACF and ACT negotiations. As commissioner, Poitevint will serve as the representative for all federal agencies with an interest in the ACF Basin Compact. Before any tentative agreement among the states can be approved, he will have to determine if it meets federal laws and the regulations of all federal agencies involved or impacted by such an agreement.

2002 Southeast Watershed Roundtable Continues Regional Dialogue & Awards

SURVEY ON INTERBASIN WATER TRANSFERS TAKEN

Watershed leaders from across the Southeast attended the **2002 Southeast Watershed Forum Roundtable** in Tampa, Florida on July 12. This year's roundtable was hosted by the Florida Department of Environmental Protection and the Tampa Bay Estuary Program and focused on "**Building Regional Partnerships for Watershed Protection.**" Speakers highlighted efforts at balancing water supplies and water quality, a hallmark of the Tampa Bay area. The Savannah River Compact and Lake Gaston-Virginia Beach Interbasin transfer dispute were analyzed for future directions in inter-state water management. And innovative local initiatives, like pollution trading, Growth Readiness, Clean Marina Programs, riparian restoration efforts and state-based roundtables provided



"My own dream is that we will have our federal agencies meet in watershed regions around the country not only to discuss their priorities for the region, but to meet with watershed groups like yours in that region and partner on projects."

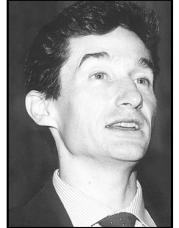
WILLIAM LEARY, Council on Environmental Quality

numerous replicable programs for attendees to take back to their communities. Dr. Bill Graham from NASA's Earth Science Applications Directorate at Stennis Space Center, rounded out the day with a presentation of new remote sensing

tools that can assist in local, as well as regional water management. One of the exciting outcomes from the regional Roundtable has been the development of state and basin-based roundtables in Mississippi, Tennessee and Kentucky (in 2003).

"Since 1998, (the Southeast Watershed Forum) has played a leading role in insuring that the 'local voice' is heard at the national level."

BEN GRUMBLES, EPA Office of Water



Facilitated discussions elicited feedback from attendees on ways to increase interstate and intra-state watershed cooperation and the need for a national versus regional watershed strategy. In addition, attendees were surveyed for their attitudes on **interbasin water transfers**.

Three outstanding success stories were honored with **Watershed Leadership Awards** from the **Southeast Natural Resource Leaders Group** at the Roundtable luncheon. The Leaders Group is made up of the regional directors of all federal agencies located in the Southeast region. They have a commitment to foster closer cooperation and collaboration among their agencies on natural resource management. In addition, they have an interest in promoting public-private initiatives that improve the health and quality of watersheds throughout the region.

The Watershed Leadership awards were presented by **Benjamin Grumbles, Deputy Assistant Administrator for the Office of Water, U.S. EPA. William Leary, from the White House Council on Environmental Quality**, also attended to address the Roundtable audience on the importance of public-private watershed partnerships. This year's Watershed Leadership Awards included a \$500 check for the Local and Community award winners.

- **Robert Wright, Executive Director of the Upper Cullasaja Watershed Association** – (Highlands, NC) accepted the **Local Watershed Leadership Award**. The Association has developed an impressive array of rainfall and the watershed runoff measurements, which will help develop a water budget which will be used to develop a five-year water management plan.
- **Billy Turner, President & Cliff Arnett, Manager of Columbus, Georgia Water Works** accepted the **Community Watershed Leadership Award**. Columbus Water Works completed three programs that led to cost effective treatment technology which ensures that combined sewer overflows do not contribute to water quality standards violations.
- **Peggy Weaver, Manager of Ditto Landing Marina** accepted the **Corporate Watershed Leadership Award**. The marina is one of the first to receive "Clean Marina" designation from the Tennessee Valley Authority and the national Marine Environmental Education

Foundation. To receive such designation, a marina must institute a number of best management practices, as well as adhere to all local, state and federal laws.



Above: Watershed Leadership Award winners: (L to R) Robert Wright, Upper Cullasaja Watershed Assoc.; Peggy Weaver, Ditto Landing Marina; Cliff Arnett and Billy Turner, Columbus, GA Water Works.

Two workshops were held prior to the Roundtable. One titled “How to Make Regional Planning Work” focused on the successful partnerships and water quality improvements created by the Tampa Bay Nitrogen Management Consortium and the Suwannee River Water Quality Partnership. The Institute for Conservation Leadership led an organizational development workshop on “Benchmarking For Success.” In addition, a field trip to view restoration activities at Fort De Soto Park was led by Jake Stower, Pinellas County Administrator.

Contact: Christine Olsenius, 410-849-2975 cholsenius@aol.com

Would you agree to diverting water supplies from your community to another state?

33% YES 55% NO 10% UNDECIDED

Source: 2002 SE Roundtable Survey

Experts Warn Water is Not Infinite

With water consumption in the South rising six-fold – more than twice the national rate — since 1990, scientists, regional leaders and environmental organizations from the Southeast came together in New Orleans in early-September to discuss their concerns for the region. The Gulf Restoration Network hosted the conference, “When the Water Runs Dry: Maintaining a Balance Between Human Water Use and Environmental Needs.”

The South is also experiencing the second-fastest growth rate in the country, with coastal residency predicted to reach nearly 18 million people by 2010, according to one of the conference panels. The South’s skyrocketing water usage and exploding coastal population prompted James Smoot, an assistant hydrologist with the U.S. Geological Survey’s Southeastern Region, to issue a warning. Smoot said that continuing population growth, population shifts to the coastal areas and to the Southeast and increased urbanization of

agricultural and forested areas are stressing water availability. Jams Palmer, Jr., Region 4 administrator for EPA said that water quantity has taken a back seat to water quality. “Sooner or later we’re going to have to manage water,” he said. “It all comes back to water resources planning.”

To read the entire story please point your Web browser to: www.theadvocate.com/stories/091002/new_water001.shtml

Watershed Leadership Academy Trains 33

Thirty-three carefully chosen watershed leaders participated in the Southeast Watershed Forum’s Watershed Leadership Train-the-Trainer Academy at Emerald Point Conference Center on Lake Lanier in late July. The tree-day workshop featured staff from the Center for Watershed Protection, as well as a community facilitation trainer who assisted Chattanooga, TN with their visioning process. Intensive sessions were offered on tools and techniques to assist local community leaders in choosing wiser land use practices which protect watersheds while allowing for growth and development. Additional training was offered in collaborative problem-solving skills, group facilitation and coalition building.

The objective of the Academy is to build the capacity of local watershed organizations to protect their land and water resources by providing them the tools and training to influence local land use-planning, site design practices and open space protection. Each trainer has committed to training four other organizations in their communities on land use and water quality issues over the next year. The Forum will continue to provide assistance and monitor their progress. Funding was provided by the Turner Foundation, Merck Family Fund, Environmental Support Center, TVA, Office of Surface Mining and National Fish & Wildlife Foundation.

Contact: cholsenius@aol.com for a trainer near you.



Academy Trainers at work. (L to R) Jamie Higgins, Dept of Army; Randy Haddock, Cahaba River Society; Kristan Taylor, Coosa Valley RDC; Eleanor Godwin, West FL Reg. Planning Council, and Danielle Droitsch, TN Clean Water Network.

SAMAB 13th Annual Fall Conference

Nov. 5-7, 2002, Holiday Inn Sunspree, Gatlinburg, TN

THEME: Measuring, Mitigating, and Managing Human Impacts in the Southern Appalachians

LOCAL WATERSHED INITIATIVES

Council Develops Watershed Ordinance

The Macon County Watershed Council has been successful in recently extending the state and county's public water supply watershed protection ordinance to a stretch of the Little Tennessee River in Macon County, NC. The ordinance limits development density (maximum of 2 houses per acre), built-upon area limits (18%), and a prohibition on point source discharges. The Council consists of members from the **Little Tennessee Watershed Association** and the **Upper Cullasaja Watershed Association**. It is a citizen-based advisory group that was formed by resolution of the Board of County Commissioners to advise them on watershed and water resource issues.

While not called "zoning," the ordinance provides a protection zone that extends 1,000 ft on either side of the Little Tennessee River and 500 ft on either side of all tributaries identified on the USGS 1:24,000 scale quad maps. The watershed protection "zone" overlays are on the county's GIS system and used in conjunction with the property parcel and stream layers. The ordinance was only passed Sept 9th after six months of preparation, debate, and public hearings.

Contact: Bob Wright, UCWA (828) 526-9938, Ext 23

NGOs Form GA Water Coalition

The **Georgia Water Coalition (GWC)** has been organized to make recommendations and comments to the Governor and other decision-makers in the implementation of a comprehensive water policy for the State of Georgia. Major water resource legislation is expected to be introduced in the 2003 General Assembly, and it is imperative that concerned Georgians are ready with innovative statewide alternatives for water resource conservation and management policy.

The Georgia Wildlife Federation, The Georgia Conservancy, Upper Chattahoochee Riverkeeper, and Southern Environmental Law Center are the founding members of the coalition. There are now almost 50 organizations that have officially joined the coalition effort. While the coalition has looked at an array of water issues, members quickly agreed that the overarching need is to maintain water as a public resource in Georgia. Without that, coalition members assert, any recommendations with regard to conservation, biodiversity, groundwater, or enforcement become much more difficult to implement. The coalition will forward recommendations to the Governor by the end of October. The coalition's goal is to help find an environmentally sustainable solution to Georgia's water crisis.

Contact: 1-866-88-WATER

Public Ownership of KY Water Pushed

Public Citizen, a national consumer advocacy organization, filed a motion to intervene in proceedings by the Kentucky Public Service Commission (PSC) on the future of Lexington's water system. If granted, the motion would allow Public Citizen to speak before the PSC in a case prompted by the acquisition of the company that currently operates Lexington's water system by a large German energy conglomerate. The motion is the latest move in an ongoing battle by citizen groups, including Bluegrass FLOW, to persuade the Lexington-Fayette Urban County Government to gain control of the city's water system. Both public interest groups advocate that a municipal buyout of the privately owned company, Kentucky-American, would stabilize rates and provide more reliable service. The county is considering pursuing a buyout.

"Cities across America are reclaiming their water systems because they are fed up with broken promises from corporations who report to their shareholders instead of to their customers," said Wenonah Hauter, director of Public Citizen's Critical Mass Energy and Environment Program. "**When you treat water as a common resource for all, as it should be, public ownership makes sense.** The citizens of Lexington will benefit from owning their water system, and we support their efforts." The county's decision to investigate a public buyout stems from concerns that began in 2001 when American Water Works Company, the largest U.S. water company and the parent of Kentucky-American, agreed to be purchased by RWEAG, a German energy conglomerate. RWE has also acquired Thames Water, a large private water company in England. Under the conditions of the acquisition, executives of American Water Works would report to Thames officials in England.

Contact: Public Citizen: 202-546-4996 or www.bluegrassflow.org

MS Holds 2nd Basin Roundtable

Nearly 178 people attended the **North MS Watershed Forum Roundtable** held at the University of Mississippi Field Station - Center For Water & Wetland Resources in Abbeville on August 28. Stakeholders from industry, agriculture, local governments, regional planning councils, environmental and conservation groups and watershed organizations and academic institutions met to discuss resource issues and possible solutions in the North Mississippi region. Local watershed success stories were highlighted, along with education on TMDLs, adopt-a-stream programs, starting watershed organizations and the State River Basin plans. A final report will be available.

Contact: Chris Patton, 662-915-5479 or cjpatton@olemiss.edu

LOCAL INITIATIVES *Continued*

TN Drinking Water Protection Workshops

The Tennessee Department of Environment and Conservation (TDEC) will be holding nine public workshops on drinking water protection throughout the state this fall. Community leaders, certain business owners and operators as well as public water system personnel should plan to attend. The workshops are designed to raise awareness about the issues involved in protecting drinking water in Tennessee. At the workshops, attendees will learn more about how many human activities can pose a threat to drinking water sources and how Tennessee's geology adds to their vulnerability.

For business owners and operators, new requirements of the Safe Drinking Water Act, and the federally mandated Underground Injection Control program, will be covered.

For the schedule of Drinking Water Protection Workshops call 1-888-891-TDEC, 1-888-891-8332, or amanda.sluss@state.tn.us.

NW Georgia Partnership Meeting

On November 19, 2002 the Northwest Georgia Regional Water Resources Partnership is inviting stakeholders from throughout the region to attend a meeting at the Forum Civic Center in Rome. "From the Forest to the Faucet" will provide information on watershed protection and development and an opportunity to actively participate in identifying problems and solutions to water quality issues in Northwest Georgia. The Partnership contributes to water education and the development of federal, state and local water policy.

Contact: Kristan Taylor, Coosa Valley RDC - 706-295-6485

Veterinary Voices for Healthy Water

The outstanding aquatic biodiversity of the Southeast USA is severely threatened by many types of water pollution and habitat degradation, including that caused by the poor animal care practices of livestock and pet owners of all types. To capitalize on the fact that veterinarians are one of the most trusted advisors to the American public, a nonprofit group, the **Alliance of Veterinarians for the Environment (AVE)**, is launching **Veterinary Voices for Healthy Waters**. The overall goal of the Veterinary Voices Program is to improve water quality and riparian habitat protection by empowering veterinary professionals as trusted advisors to educate livestock and pet owners and motivate them to use voluntary BMPs to improve animal health, save money and protect local water quality. For example, keeping livestock away from stream banks not only prevents sediment and waste pollution into waterways but it can also increase rate of gain and reduce cases of mastitis and foot rot in the livestock population. Recent research also shows that one of the main sources of pathogens in urban waterways are waste dropping from dogs, cats and birds. The program will create a cadre of veterinarians with an awareness of the animal - water quality connections and the importance of best management practices used by animal owners.

Contact: Gwen Griffith, DVM, MS, 615-353-0272

Taking Wing Award Due Dec. 31

Nomination needed for outstanding work in habitat conservation www.fs.fed.us/biology/wildlife/takewing/htm.

STATE AGENCY NEWS

On October 1, States sent EPA their updated 303d list of impaired waters. These lists determine much of the focus for TMDLs and watershed improvement programs within each state. Could you please describe how your State 303d list has changed since the list was initially developed?

ALABAMA

Alabama's 2000 list was compiled from the 1998 303(d) list with modifications to account for new data and information. Congress waived the requirement to submit the 2000 303(d) list pending resolution of proposed TMDL regulations affecting reporting requirements. But many states,

including Alabama, chose to submit a list anyway. AL delisted 15 segments, removed 24 causes of impairment from other segments, added 10 new segments, added 2 causes of impairment to existing segments. The 2002 list was compiled from the 2000 303(d) list with additional modifications to account for new data and information. This year, Alabama delisted 9 segments, removed 13 causes of impairment from other segments, added 4 new segments, and added 2 causes of impairment to existing segments.

Contact: Lynn Sisk, ls@adem.state.al.us

FLORIDA

The Florida Department of Environmental Protection used a new assessment methodology, a new list development approach, and EPA's new integrated reporting format to prepare its 2002 update to Florida's 303(d) list of impaired surface waters recently submitted to EPA. With all of these changes (described below), many assumed that the state's list would change dramatically. However, the net change in the total number of parameter/water segment listings was relatively minor, with new listings nearly balancing out delistings.

The new assessment methodology, commonly known as the Impaired Waters Rule

(IWR), establishes a more science-based approach to identifying impaired waters. The rule establishes minimum sample sizes, minimum confidence levels for impairment decisions, data age and data quality requirements, and temporal and spatial independence requirements for data. It also establishes a two-step listing process by which waters are first identified as potentially impaired and listed on a "planning list," targeted for additional monitoring, and then listed on a "verified list" of impaired waters. The verified lists were adopted by Secretarial Order and then submitted to EPA.

This 2-step listing process is integrated into the Department's Watershed Management Approach, which rotates through all of the state's basins over a five-year cycle. The Department developed planning lists of potentially impaired waters for each Group 1 Basin in early 2001, monitored Group 1 waters from July 2001 through March 2002, and then prepared verified lists of impaired waters for the Group 1 Basins this summer.

For the 2002 303(d) list submittal to EPA, the Department limited the scope of the update to adding Group 1 waters that had been verified as impaired using the IWR or delisting previously listed Group 1 waters where we had good cause justification. Previously listed Group 1 waters with insufficient information and previously listed waters in Groups 2-5 remained on the 303(d) list maintained by EPA.

Contact: Thomas.Singleton@dep.state.fl.us

GEORGIA

Initially, impaired stream reaches were identified where any data was available. Unfortunately, stream reaches were determined to be impaired with as little as one data point. The extent of stream reaches impacted was determined using a mapping wheel and county road maps and a best guess of impairment.

Now in each listing cycle, the Georgia EPD continues to develop methods to assure that the 303(d) lists are based on more accurate assessments of the water bodies. This includes using data that is more representative of stream conditions through both quantity and quality of data, using more accurate tools of measuring extents of stream reaches impacted,

and using a rotating river basin approach to monitoring which allows a more concentrated effort within a single river basin to determine water quality conditions.

**Contact: Kathy Methier: GA EPD
Kathy_Methier@dnr.state.ga.us**

KENTUCKY

The major difference between the 1998 303(d) Report and the 2002 Report with respect to listing is that because of increased monitoring and assessment through our watershed Framework process, the number of waterbody/pollutant combinations has increased from 367 to 949.

Contact: Kevin.Ruhl@mail.state.ky.us

MISSISSIPPI

Mississippi's 1998 Section 303(d) List of Water Bodies, based almost exclusively on the State's 1996 Section 303(d) List of Impaired Water Bodies, included not only monitored segments but also evaluated segments for which MDEQ lacked monitoring data. For evaluated segments, MDEQ obtained some form of information, usually anecdotal information, not of water quality impairment, but of predominant land-use activities in an area from organizations and groups actively solicited for research they may be conducting. This information previously had been used to compile Mississippi's Clean Water Act 319 assessment. These segments were not known at the time to be impaired, but were placed on the 303(d) list based upon the information gleaned from the surveys and questionnaires completed in 1984.

Since 1998, the State has undertaken an extensive monitoring effort to determine the water quality condition of the many evaluated segments in order to develop a more accurate Section 303(d) list for 2002. For the most part, the State's monitoring used biological indicators to focus on stream health and the attainment of aquatic life use support for each previously evaluated stream segment.

Monitored and evaluated segments are now shown on two separate lists. Although not required by Section 303(d), two additional lists have been developed: one showing TMDLs already completed and the other giving modifications made to listings on previous

Section 303(d) lists.

For 2002 the MS Department of Environmental Quality (MDEQ) has prepared a separate Section 303(d) document for each of the State's major river basins. MDEQ has taken this approach so that local stakeholders and other interested parties can readily identify and more easily understand the condition of nearby streams and so that the State's River Basin Teams can more effectively focus on water bodies in their assigned basins.

Contact: Greg.Jackson@deq.state.ms.us

NORTH CAROLINA

North Carolina's 303(d) list has undergone several significant changes since 1998. The most significant is that North Carolina has integrated its 305(b) report and 303(d) list into a single document. This combined document has undergone public review, and a draft was submitted to EPA on October 2. North Carolina has also established multiple use support categories for listing rather than providing an overall use support rating for individual waterbodies. The list has also changed as a result of better monitoring data. Some freshwater streams have been delisted that were originally included based on inadequate or erroneous data. Not only has monitoring been improved, but the state has established more formal biological listing criteria for small headwater streams and coldwater (e.g., trout) streams. Biological listing criteria are also being developed for swamp waters. Finally, the acreage of shellfish waters on the 303(d) list has increased substantially as a result of revising the listing criteria based on the "time of closure". That is, if waters are closed for certain percentage of the time over a given year, then they will be listed.

Contact: Alan Clarke, NC DENR – 919-733-5083, xt. 570

SOUTH CAROLINA

South Carolina's 2002 303(d) list was approved by EPA on August 7, 2002. We submitted our first list in 1990, and have updated the list every two years since then. That first list was short and contained only those waters with well-known water quality problems. At that time, before we adopted a watershed approach and before GIS was widely used, data

analysis and reporting were still rather cumbersome.

By the 1998 list, our listing methodology was clear and well-documented. From that year forward, we have been able to track listings and de-listings well, and to target waters appropriately for TMDL development. A complete statewide data assessment is conducted for each list, and only sites for which reliable data indicate water quality standards violations are listed. It was our adoption of a watershed approach to water quality assessment and reporting in 1992 that led to the uniform methodology we use today. GIS is also an integral part of our watershed approach.

**Contact: Kathy Stecker/
steckemk@dhec.state.sc.us**

TENNESSEE

INCREASED COVERAGE. In 1996, the Division began the watershed approach, a significant departure from how assessments had been done in the past. Instead of attempting to maintain a statewide coverage of monitoring stations in order to generate assessment reports, we began concentrating efforts into specific watersheds each year based on a prearranged schedule. In the previous 303(d) List generated in 1998, we had only intensively studied watershed Groups 1 and 2.

By 2001, we had completed intensive monitoring statewide. Additionally, we were much more successful in obtaining water quality information from other agencies this time, making the 2002 303(d) List the most comprehensive water quality inventories ever accomplished in Tennessee.

MORE PRECISION. In previous 303(d) Lists, the Division lacked the ability to segment waterbodies into smaller sections. As a result, large watersheds containing significant numbers of stream miles were frequently lumped together. While this approach was necessary at the time, EPA's Assessment Database and Reach Indexing Tool software, plus new powerful computers and databases, have allowed existing waterbodies to be segmented into an almost infinite number of sections. Each section can have its own identifier and assessment information.

When these tools are combined with more comprehensive monitoring under the watershed approach, we can provide the type of precision necessary to more accurately document water quality status, facilitate development of control strategies, and measure progress towards clean water goals. In 1996, the Division identified approximately 850 individual stream segments. In 2002, these existing waterbodies have been divided into over 4,000 segments.

However, it is important to note that this higher degree of precision will mean that the 2002 303(d) List will contain more individual segments. The higher number of individual entries on the 2002 List should in no way lead the reader to conclude that more miles of stream are now impacted. In fact, on average, individual segments will have fewer miles than before.

HIGHER DEGREE OF CONFIDENCE. Simply put, the 2002 303(d) List contains very few assessments based on anything other than recently collected data. Streams where we might have made a call in the past based on judgment or old data, will be called "not assessed" in this cycle. While this will lead to a dramatic increase in the number of unassessed stream miles in Tennessee, the public will know that the existing assessments are supported with data.

Information About Endangered Species Within Listed Segments. In order to assist the public and other agencies in their use of the 2002 303(d) List, the Division has added information about endangered species. The comment field presents the name of any aquatic species designated as endangered that has been documented within the stream in the last twenty-five years.

Contact: Garland.Wiggins@state.tn.us

INSIDE THIS ISSUE

EPA Watershed Award Notice	Insert
Watershed Award Winners	Pg 3
Academy Trains Watershed Trainers	Pg 4
Local Watershed Initiatives	Pg 5
State 303(d) Updates	Pg 6

SOUTHEAST WATERSHED FORUM

4007 Wood Acres Court
Duluth, Georgia 30096

Non-Profit
Organization
U.S. Postage
PAID
Permit #883
Annapolis, MD