

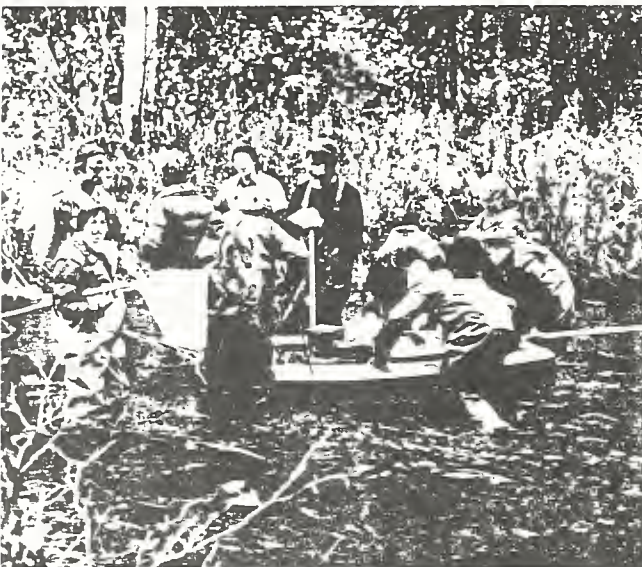
# North Carolina's Stream Watch Program

## Citizen Involvement in Water Protection

North Carolina's Department of Natural Resources and Community Development (NRCD), under the leadership of Secretary Joe Grimsley, has placed a high priority on increasing citizen involvement in the department's programs. The Stream Watch program, launched in March 1983, was developed to encourage citizens to become actively involved in local water resource management and protection. The program's three primary goals are:

1. To encourage North Carolina's citizens to "adopt" watersheds near their homes and make a long-range commitment to watch over and care for those areas
2. To increase citizens' awareness of and involvement in water resource management and protection
3. To establish a working partnership among North Carolina's citizens, industries and state and local governments

Citizen groups interested in participating in Stream Watch are asked to identify a local creek, river, lake or estuary that they are particularly concerned about. They agree to adopt that area, and register it with the central Stream Watch Coordinator in Raleigh. In return, they receive a folder of information on the Stream Watch program and related water resource issues. The groups are asked to inventory their adopted areas, learning about their history, land uses and natural assets. They should evaluate the areas' potentials and take stock of their present needs and problems.



The seven NRCD regional offices provide staff support for Stream Watch activities, but groups must take the initiative for planning appropriate projects. Financial support has been made available through a \$30,000 grant from the Z. Smith Reynolds Foundation. This money has been allocated to many groups throughout the state in the form of grants ranging from \$200 to \$1000.

### Stream Watch Groups Adopt Entire Watersheds

Stream Watch groups are encouraged to adopt not only a creek or lake but also the tributaries and surrounding land areas that drain into their adopted water body. By learning about the entire watershed, groups learn to ignore political boundaries and appreciate the complexities and interrelationships of an aquatic system. They can plan activities and set goals and ob-

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MORE THAN 2000 MILES OF MARYLAND STREAMS ARE  
CARED FOR BY PARTICIPANTS IN THAT PROGRAM

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jectives for an entire watershed, knowing that land and water uses in headwater areas affect the water body along its entire length. The central coordinator will keep Stream Watch groups informed about other groups in the river basin containing their adopted watersheds. These groups can then work together on issues pertinent to the entire area.

A Stream Watch group should stay informed about local, state, and federal plans that could affect its watershed. It should monitor planned development in its area and watch for adverse effects on streams and tributaries of its water body.

Public education is the key to informed decision-making. Stream Watch groups should learn as much as they can about technical, legal, and political water issues, then spread their knowledge to the surrounding community. If they nurture a positive public image, Stream Watch groups can become the local focal point for citizen participation in water resource issues.

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### How Successful is Stream Watch?

Announced in March of 1983, Stream Watch is less than a year old. More than fifty groups are already participating in the program, providing interest and protection for many miles of the state's streams, lakes and rivers. The participating groups constitute a diverse collection, including schools, community clubs, fishermen's clubs, Sierra and Audubon clubs, previously existing river basin associations and newly formed citizens groups. Groups exist in fourteen of the state's seventeen major river basins. No groups have adopted creeks in the Broad, Catawba or Savannah river basins at this time.

The majority of these groups has received some funding from the Z. Smith Reynolds foundation grant. Projects are underway to clean and restore creeks, monitor water quality, publish newsletters and educational materials, and develop slide shows. Several groups have already become strong, viable forces in their communities and are beginning to have an impact on decisions that affect their adopted areas.

### Is Stream Watch a New Idea?

The concept of a network of volunteer river basin groups organized by a central coordinator is not unique to North Carolina. More than thirteen years ago, a national conservation organization, the Izaak Walton League, started a "Save Our Streams" program. It encouraged its chapters throughout the country to adopt a river and work to improve and protect it. The program was coordinated by the Izaak Walton League's central office, and continues today.

In 1970, the State of Maryland incorporated the Izaak Walton League's program into its state government. The rapid suburbanization of many areas in Maryland was producing tremendous siltation and other water quality problems in the

state's creeks and streams. Public education was seen as the key to controlling this nonpoint source pollution. A central "Save Our Streams" coordinator was hired and active grassroots organizing was begun. The program emphasized urban housekeeping by teaching people how their activities affected water quality of the streams near their homes. The program has been widely accepted. According to an October 1981 publication, "Accomplishments of Save Our Streams", more than 2000 miles of Maryland streams are cared for by participants in the program. The program has organized more than sixty one-day stream studies and trained more than one thousand citizens to collect chemical and biological water quality data. The state has used studies performed by "Save Our Streams" volunteers to pinpoint water quality problems.

In Bellevue, Washington, concern over declining salmon populations in local streams provided the impetus for a citizen action program. Federal funds supported a four-year demonstration Salmon Enhancement program. Citizen groups adopted streams that were in need of restoration. They developed long-range restoration plans and applied for grants to fund their projects. Volunteers cleared streams of debris, constructed fish ladders, and raised and released salmon fingerlings to their restored creeks. The program heightened citizen awareness of the area's water quality needs and created an active constituency supporting the city's environmental programs.

### Where Will Stream Watch Go From Here?

Stream Watch is still in its infant stages, groups throughout the state are working on a wide spectrum of exciting and challenging projects. In the future, it would also be possible to use the Stream Watch network to promote specific stream programs. The following list includes just a few of the water resource issues that could be emphasized by Stream Watch.





#### Public School Water Resource Education.

Many of the materials prepared for Stream Watch could be adapted for classroom curriculums. Students at many grade levels would benefit from learning about aquatic habitats, water and wastewater management, water cycles in nature, and land uses affecting water quality. High school science clubs could participate by developing and executing water quality studies. Since public education is one of the program's primary goals, an effort should be made to reach the state's public school systems.

Control of Urban Runoff. Runoff from urban areas carries sediment, heavy metals, oils and numerous other pollutants to our streams, creeks and lakes. The control of this pollution is expensive and difficult to implement. Individual homeowners and small businessmen could do a great deal to minimize the runoff pollution from their properties. Stream Watch could be used to launch a statewide campaign to educate citizens about this problem.

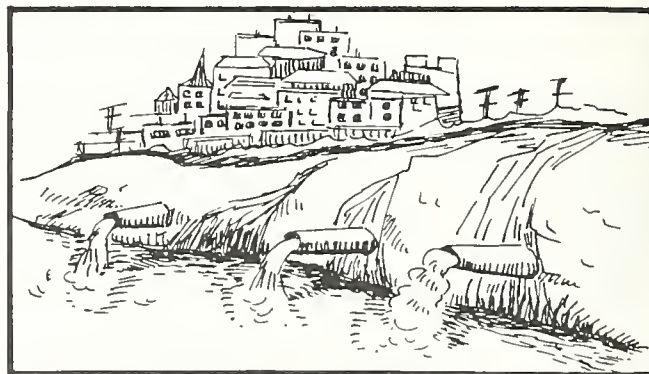
Water Conservation Education. North Carolina is blessed by a rich and plentiful supply of water. However, demands on this supply increase daily and measures should be taken to educate citizens about water conservation. Gerald Meral, Deputy Director of California's Department of Water Resources, describes in "California's Lead in Promoting Water Conservation" (1982) how California used a residential bathroom retrofit project to both increase citizen awareness of water conservation and implement conservation measures. Water conservation kits containing toilet dams and shower restrictors were distributed in southern California neighborhoods. He estimated that over a million toilets were retrofitted and 560,000 showers were adapted. The water savings were estimated to be 24,000 acre-feet of water per year. A similar project could be planned and executed through the Stream Watch network.

#### Summary and Conclusions

The Stream Watch concept has been rapidly accepted by the citizens of North Carolina. The ideal of resource management through education, participation and cooperation appeals to a broad range of interest groups. The Stream Watch program can build a powerful constituency supporting North Carolina's water resource programs.

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In August of 1983, Governor Bob Graham announced Florida's "Save Our Everglades" program, stating that this natural system should function the same way in the year 2000 as it did in 1900. One component of the program is to remove water control structures and return sheet flow to the Everglades. The South Florida Management District is also considering restoring the channelized Kissimmee River to improve water quality. To the north, the Saint John's Water Management District is spending \$12 million to purchase flood-prone land to avoid constructing flood control structures.



Aggressive action is needed if North Carolina is to avoid the same water resource crises now experienced by Florida and other more populated states. The first step would be for state government to adopt an attitude more farsighted and more selective as to the types of growth recruited and permitted.

The state must identify existing and imminent water resource problems. Critical watersheds and groundwater systems must be identified and protected. And, regulatory and assistance programs have to be instituted to include unregulated land disturbing activities.

"We've reached the point in North Carolina where we can't let everyone do what he or she pleases with our resources," Henri Johnson, attorney for the North Carolina Fisheries Association, said in a recent television interview about the peat mining project. She believes that hard decisions have to be made about how much impact from new growth is acceptable while still protecting water resources.

"With the conversion of freshwater wetlands," Johnson said in a later interview, "we have 24,000 people who depend upon commercial fishing that may lose their way of life. But what is really disturbing is that the same decision-making process that got us in this mess on the coast also applies statewide. People inland are going to have a lot more to worry about than the plight of our coastal fisheries if runoff and chemical pollution is not adequately regulated -- and sometime soon."