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# WATERSHED PROGRESS: Massachusetts' Approach

A black and white photograph of a person in a canoe on a river. The person is wearing a light-colored shirt and dark pants, and is looking through binoculars. The background shows a river with trees on the banks.

*"Government's jobs to serve the watershed."*

- Tracy Coxe, Secretary, Environmental Affairs, Massachusetts

*Since 1991, the U.S. EPA has been promoting the watershed approach as a mechanism to achieve the next generation of water protection. The focus on watersheds, or drainage areas, provides people living there a meaningful context in which to identify problems and solutions. Below is a description of the reorientation that is underway in the State of Massachusetts where its focus on watersheds is making a difference.*

## **BACKGROUND**

In December 1993, Massachusetts' Executive Office of Environmental Affairs (EOEA) joined with private conservation organizations to design a strategy to institute the watershed approach in the Commonwealth. Past legislative actions, agency restructuring, and innovation by watershed associations set the stage for Massachusetts to build on successes seen in the Merrimack River Initiative and Stony Brook Watershed to become a national leader in applying the watershed approach. These initiatives demonstrated the power of building teams of citizens, business, and government officials to set priorities and manage shared natural resources. The boundaries of these initiatives were defined by a new ecological address: watersheds.

The new partners agreed to develop and test a community-based watershed approach to strengthen local decision making and stewardship without lessening standards. This will include the following actions:

- Improve coordination among state agencies.
- Reorient the Massachusetts Water Resources Commission to watersheds.
- Establish the Watershed Initiative Steering Committee (WISC) to develop a Massachusetts watershed methodology.
- Conduct a pilot project to test the watershed approach.
- Secure passage of the Rivers Protection Act.
- Pursue wetlands mitigation banking based upon watershed ecosystems.
- Focus land acquisition on a watershed basis.
- Convene a Governor's Task Force to recommend Clean Water Act changes that advance the watershed approach.
- Provide grant funding to watershed associations and other groups and regional agencies conducting watershed protection.

A key step forward was the reorganization of

the Department of Environmental Protection (DEP), establishing an Division of Watershed Management (DWM) to synchronize environmental programs formerly performed in isolation. Another major impetus was the success that watershed associations had working with their communities to address local problems and priorities. Massachusetts is distinguished in having at least one citizen watershed group active in each of its 27 state-designated basins.

## **NEPONSET RIVER WATERSHED PILOT**

The Neponset River Watershed was chosen as the pilot project area. In this basin, agencies from Massachusetts joined with federal agencies, citizen organizations, municipalities, and businesses to explore the power of working in watershed partnerships. Through public meetings and a strong partnership with the Neponset River Watershed Association, the state Basin Team assessed priority resource areas and threats to those resources. This assessment was depicted on a computer-generated (GIS) map identifying "hot spots" where improvement was needed. Volunteer Stream Teams helped monitor the conditions of rivers and streams in the Neponset, and teachers developed science studies for students. The Massachusetts Department of Transportation placed signs in this highly urban watershed stating "Entering Neponset River Watershed Communities Connected by Water" to raise awareness among citizens.

This partnership helped improve the Neponset. For example, a legal agreement was reached to clean up a hazardous waste site and to remove an illegal stormwater discharge which threatened important headwaters. Owners of the site also donated a pond to the Neponset River Watershed Association. In Norwood, local officials identified a hot spot where bacteria counts exceeded 200,000ppm (the standard is

200), and immediately took action to fix sewer leaks that caused the problem. In addition, owners of a race track agreed to control erosion identified as a major source of sedimentation; several polluted septic systems were repaired; a landfill capped; a plan was adopted to control sewer overflows at a cost of more than \$10 million; and the city of Boston issued a contract to eliminate hundreds of illegal sewer connections that caused over 50 direct discharges into the Neponset estuary.

## **FRAMEWORK**

Based on the success of partnership pilots including the Neponset Project, Merrimack River Initiative, and other efforts in watersheds across the state, partners expanded the use of the watershed approach statewide. The State policy adopts the methodology designed by a Watershed Initiative Steering Committee (WISC) that includes representatives of agencies, businesses, watershed associations and environmental organizations. The centerpiece of this methodology is the eventual formation of watershed community councils (WCC), groups of stakeholders creating a forum for discussion, priority setting, and decision making in each of the 27 state-designated watersheds. The WCC works closely with the EOE A Basin Team for their watershed. The Secretary of EOE A established these Teams for each watershed to better coordinate agency activities and maximize resources. These teams are made up of at least one representative from each of the agencies of EOE A, federal agencies, and other interests.

The four key elements of the Massachusetts Watershed Initiative are:

- 1) Collaboration and shared responsibility by state and federal agencies, watershed groups and other conservation organizations, businesses and municipalities.
- 2) Watershed assessment and problem solving by watershed stakeholders with assistance from state and federal agencies.
- 3) Subwatershed focus on problem identification and action planning/implementation.
- 4) Integration of local, state, and federal resources to address priorities of watershed stakeholders.

## **GOALS OF THE MASSACHUSETTS WATERSHED INITIATIVE**

The Massachusetts Watershed Initiative seeks to achieve the following goals:

- 1) Measurable improvements in water quality/ environmental conditions.
- 2) Protection and restoration of habitats.
- 3) Improved public access to, and balanced use of, waterways.
- 4) Improved local capacity to protect water resources.
- 5) Shared responsibility for sustainable watershed protection and management.

The following describes the kinds of organizations involved and their typical roles.

- A. Environmental and other agencies -Perform watershed-wide water quality and habitat assessments and assist Watershed Technical Advisory Committees and Stream Teams in their data and information gathering.
- B. Citizen Stream Teams-Gather information, energize links among citizens, agencies, and watershed groups, identify natural resources management issues, and take action to resolve problems and protect local water ways.
- C. Municipal Officials (designated by city or town)-Serve on the Watershed Community Council, cooperate with Stream Teams and agencies to align municipal efforts with watershed problems and priorities, and stimulate resource protective local decision making.
- D. Businesses-Serve on the Watershed Community Council, participate in watershed management decisions and Stream Team activities, and provide sponsorship, resources and technical assistance.
- E. EOEA Basin Teams-These teams, in collaboration with the Watershed Community Council, work toward integrating action planning, public outreach, permitting and management decision making on the following five year cycle.

- Year 1** Initial outreach, including determining what information is available and what is needed, and initiate outreach to stakeholders.
- Year 2** Research including reviewing information filling data gaps. Begin environmental monitoring.
- Year 3** Assessment, determining current conditions, causes and sources of pollution, develop solutions to immediate problems.
- Year 4** Planning and implementation including compliance and enforcement, and project funding.
- Year 5** Evaluation, analyzing program effectiveness, update information, and renew cycle.

### **NEXT STEPS**

State and federal agencies, watershed associations and other groups are excited about this new approach that not only better engages watershed stakeholders, but also redefines the role of government to support and guide watershed interests. The process will assist agencies to do an even better job with increased constituency support for their efforts and with additional resources from the private and nonprofit sectors that will be contributed to support watershed-based activities.

There are many challenges to complete the testing and implementation of the Massachusetts Watershed Initiative. The following are some of the challenges and the next steps:

- 1) A manual is being developed to guide watershed management and to further define the environmental programs that will be integrated into the five-year watershed schedule.
- 2) Basin Teams are expanding to involve all environmental programs and other stakeholders.
- 3) To carry out the Initiative, Massachusetts Legislators approved \$2.5 million in the recently enacted Open Space Bond. A competitive process led to the award of \$530,000 in challenge grants for comprehensive planning and capacity building projects proposed by collaborations of local watershed groups, regional planning agencies and other partners.
- 4) Computer mapping and modeling is under development to enable identification of low

cost highly effective measures to control pollution.

- 5) State agencies and watershed groups will collaborate to help local boards administer the Massachusetts Rivers Protection Act, which establishes 200 foot buffers on 9,000 miles of rivers and streams, and requires that nine stormwater performance standards be met

For more information, contact the Massachusetts Executive Office of Environmental Affairs (EOEA), Massachusetts Watershed Initiative at 617-727-9800, ext. 227, or the Massachusetts Watershed Coalition at 508-534-0379.

### **EPA's ROLE**

EPA participates on the Watershed Initiative Steering Committee (WISC), an advisory panel that oversees watershed management throughout Massachusetts. EPA has supported sustainable watershed efforts in the Massachusetts Bays and Buzzards Bay National Estuary Programs, the Merrimack River Initiative, and in other designated watersheds. In addition, EPA regional staff serve on the EOEA Basin Teams and are providing technical and financial assistance and flexibility as the state converts to a rotating basin approach in the NPDES program. For more information, contact Trish Garrigan, EPA Region 1, at 617-565-4728.

Nationally, EPA has been reorienting its programs and developing tools to facilitate the watershed approach since 1991. For more information on the watershed approach, please contact the EPA at Office of Wetlands, Oceans and Watersheds, 401 M Street, S.W. 4501F, Washington, DC 20460 ( Attention: Watershed Outreach Coordinator) or visit us on the world wide web at URL:<http://www.epa.gov/owow>