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Watershed Events



**A Bulletin on Sustaining Aquatic Ecosystems
Spring 1995**

In This Issue...

A special focus on reinvention and the watershed approach, and a different format...

Note from the Editors

As the Federal government is moving into the second phase of 'reinvention', we thought it would be a good idea to look back and take stock at what and how phase one of the reinvention has changed the agencies. The feature article of this issue is our attempt to describe the changes that have occurred at several agencies. We are sure that changes are taking place in many other agencies as well at the federal, state or local level.

For many of us, reinvention has changed the business we are in and the way we do it. It means we need to learn new skills and acquire new knowledge. This change requires training. Our next issue of Watershed Events will focus on watershed training programs being contemplated or offered by different agencies. Please share with us information concerning your training programs as well as your ideas for integrating training and information sharing.

We are also inviting your contribution on any information that may relate to the watershed approach.

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The Watershed Approach and Reinvention - How Different Agencies Are Charting Their Course

As Government Agencies take steps to respond to Vice President Gore's National Performance Review, i.e., to "reinvent" themselves, they are rediscovering the American public's expectations for government service. For example, the public wants clean water for swimming, fishing, and drinking. They are not as concerned about whether an agency meets its inspection or permitting goals unless the link of these activities to a cleaner environment is clear. In his recent State of the Union address, President Clinton characterized the reinvention effort as a way to get "government closer to the people it is meant to serve." Accordingly, to meet public demands, agencies are changing the way they do business and the watershed approach is providing an important vehicle for making that change.

Following Administrator Browner's lead, [EPA](#) is moving toward a community-oriented approach to environmental protection. The watershed approach is a prime example.

The watershed approach-sometimes called a community-based approach-is based on sound science, and integrates goals for long term ecosystem health with those for economic sustainability. It provides that stakeholders help define the problems, set priorities, and implement solutions. The watershed approach is already in use in many of the nationally known and treasured watersheds like the Chesapeake Bay, the San Francisco Bay/Delta, the Everglades, and the Great Lakes.

EPA leaders met in February to discuss community-based environmental protection. They launched a plan to identify and address the fundamental changes that EPA must make to promote the success of community-based management. For example, in recognition of the contribution by non-EPA organizations, the Administrator suggested that EPA can lead or participate in local watershed or community approaches in only a fraction of all communities nationwide. So for 80% of the landscape, EPA should take the role of enabler. This enabling role will create a framework within which community-based efforts can be led by others, but assisted or promoted by EPA.

The [U.S. Army Corps of Engineers](#) is also "reinventing" and moving toward the ecosystem approach. The approach, with a watershed focus, restores the structure or function of an ecosystem, recognizing that all components are interrelated. The watershed approach remedies the problems created by past habitat fragmentation and piece-meal restoration and mitigation.

Given the Corps' presence in most major watersheds throughout the nation, the ecosystem restoration program has the potential to significantly contribute to the comprehensive watershed management objectives of the states and other federal agencies.

For many years, the [Tennessee Valley Authority](#) (TVA) approached river cleanup through demonstration projects. Without the resources to replicate the demonstration everywhere, however, the agency couldn't make much headway from a Valleywide perspective. That's all changed. TVA has adopted a watershed approach that is greatly accelerating its progress and expanding the scale of improvement in cleanup along the Tennessee

River.

Reinvented, TVA plans to make the Tennessee River the cleanest and most productive commercial river system in the United States. Self-directed, multi-disciplinary River Action Teams work together to solve problems. Teams are already at work in six of the Valley's twelve watersheds.

River Action Teams work with landowners, local businesses, and government officials- often across political boundaries-to find ways to protect water quality and aquatic life without limiting the river's use. Team members learn new skills, focus on common goals, and see results first-hand.

The [National Oceanic and Atmospheric Administration](#) (NOAA) plans to continue its focus on ecosystem management into the next century. The NOAA 10-year strategic plan includes an ecosystem health initiative.

NOAA offices are working with state partners and the U.S. Environmental Protection Agency to ensure state coastal programs consider watershed-scale effects. To increase effectiveness, these state partners are combining two existing programs-inland nonpoint source pollution programs and coastal programs-to better address coastal nonpoint source pollution problems.

The [U.S. Geological Survey's](#) National Water-Quality Assessment (NAWQA) Program helps answer critical questions about the quality of the Nation's water resources. The NAWQA program assesses historic, current, and future water quality conditions in representative watersheds and aquifers nationwide. Together, the basins and aquifers NAWQA studies account for 60 to 70 percent of the Nation's water use and cover one-half of the land area of the Nation. Investigations of these 60 areas focus on priority national issues, including non-point source pollution, sedimentation, and acidification. In the spirit of inclusion and teamwork, each investigation now underway has a local liaison committee consisting of representatives from federal, state, and local agencies, universities, and the private sector.

The USDA's [Natural Resources Conservation Service](#) (NRCS), formerly the Soil Conservation Service (SCS), has administered the Small Watershed Program since its enactment in 1954. The program has aided many rural communities, improved soil conservation, and reduced upstream flood damages. But the early focus on structural measures, such as dams and channels for flood prevention, tended to be high in cost and environmental impact.

Under reinvention, the Small Watershed Program is moving to an ecosystem-based approach. The Program is now reviewing 393 projects under construction or approved for future construction. As NRCS Chief Paul Johnson says "We will only construct dams and channels when there is no other way to get the job done." The newly invented program will give priority to watersheds where local people have identified the need for environmental restoration, water quality and riparian zone improvement, restoration of fish and wildlife habitat, and flood damage reduction.

The [Bureau of Reclamation](#) (BuRec) is in transition too. Reinventing is imperative in the climate of declining staff and budget and increasing workload. BuRec is changing from a water development agency to a water resources manager.

BuRec is emphasizing restoring and protecting our watershed ecosystem-protecting threatened and endangered species and environmentally sensitive areas, such as wetlands and riparian habitat.

BuRec policy makers realize that they can't protect endangered species on a piece-meal, species-by-species basis. Instead, they must set goals to restore whole watersheds. To do this, BuRec is concentrating efforts on improving water quality and instream flows. The agency has established partnerships with other agencies, the public, and private groups to address resource management issues on many of the major river basins of the West, including the Columbia River, Colorado River, and San Francisco Bay-San Joaquin Delta.

In summary, for many agencies, reinvention has changed the business they are in and the way they do it. While it is too early to see the full effect of reinvention, this much can be said: serving people is in vogue again.

Agencies will continue to find innovative ways to deliver their services. EPA's watershed approach, TVA's River Action Team, USDA's reinvented Small Watershed Program, BuRec's, the Corps' and NOAA's new emphasis on water resources management and ecosystem health are just a few examples of the new approaches.

Reinvention has set government agencies at Federal, State and local levels free to work together. Although the approaches are different, all agencies are moving away from a narrow focus on individual program goals. The new goal is on a cleaner environment. For reinventing government, the best is yet to come.

List of Contacts for more information:

- EPA - Louise P. Wise (202)-260-2007
- U.S. Army Corps of Engineers - Leigh Skaggs (703)-355-3091
- TVA - Chris Ungate (615)-632-8502
- NOAA - Elleen Kane (301)-713-3087 ext 100
- USGS - Terry Thompson (703)-648-6859
- NRCS - Scott Hoag (202)-720-3527
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Look at What's Been Done !

Across the Tennessee Valley, TVA's River Action Teams are having success in working with stakeholders to clean up streams and lakes and protect water quality.

- In upper east Tennessee, for example, the Holston River Action Team worked with the Natural Resources Conservation Service (NRCS), formerly the Soil Conservation Service, to educate local residents and other river users and to help farmers in the area implement best management practices to reduce nonpoint source pollution. As a result, many farmers have fenced their creeks, installed new handling systems for dairy wastes, and planted buffer strips between their fields and streams.
- TVA constructed a weir below South Holston Dam in 1991 which has gradually reduced the oxygen deficit by over 60 percent and enhanced the fishery in the water. This, in turn, has sparked an increase in recreational use.
- In northwest Alabama, TVA teamed with local farmers to reduce the runoff from the nearby farms into the Bear Creek Recreational Waterway. As a result, the bacteria contamination has been significantly reduced. The waterway has been reopened for recreation.
- In the Copper Basin in southeast Tennessee, the area is turning green again after years of copper mining and processing left the land barren. Cooperative efforts involving TVA, the NRCS, and local manufacturers made this possible.

Findings of the U.S. Geological Survey's National Water Quality Assessment Program in the Chattahoochee River watershed helped the Georgia Department of Natural Resources and U.S. Army Corps of Engineers implement a restriction on the use of phosphate detergent and to upgrade the wastewater treatment facilities (WWTF's) along the River. As a result, phosphorus loads from the major WWTF's in the Atlanta area decreased by about 83 percent during the period 1988-93, even though the volume of effluent increased by about 9 percent. The phosphorus load to the Chattahoochee River down stream of Atlanta was reduced by about 54 percent during the period 1988-93.

Reduced loads of phosphorus to downstream reservoirs are benefiting the Corps, fishermen, and the general public who use downstream reservoirs extensively for recreational purposes. For further information contact Dave Wangsness, Appalachian Chattahoochee Basin Study Chief, USGS, Suite 130, 3039 Amwiler Road, Atlanta, GA 30360; phone (404) 903-9100.

In directing the Public Law 83-566 Small Watershed Program toward a more ecosystem- based approach, USDA's Natural Resources Conservation Service (NRCS) has nearly completed a review of 393 small watershed projects either under construction or approved for future construction. As a result of this review, sponsors and NRCS have agreed to forego 2,305 miles of channel work and 605 floodwater retarding dams. Of 89 small watershed projects NRCS currently has in the planning stage, 45 have water quality improvement or protection as the main purpose, 33 of which are solely for land treatment. The structural features of the other 12 water quality projects are sediment basins or grade stabilization structures. For more information on the small watershed project review, contact Ron Page, Watershed Planning and Restoration Division, NRCS. Phone: (202)- 720-3527. Fax: (202)-690-1462

EPA's Strategy for implementing the watershed approach focuses on 5 elements: try it, advertise it, integrate it, develop tools for it and measure it. Accomplishments highlights include:

- EPA is committed to trying the watershed approach in order to gain experience that can guide future policy. It also encourages states and other stakeholders to try this approach as well. EPA is now participating in well over 100 watershed projects around the country. A summary of these watershed projects is available.
- To promote a broad and common understanding, EPA joined USDA, TVA, CTIC, and others to launch the "Know Your Watershed" Campaign. This outreach effort has resulted in a national partnership of agricultural commodity groups, farm organizations, farm managers, agricultural retailers, industry, government, and others to address the conservation of natural resources, watershed protection, and nonpoint source pollution.
- EPA is building on its experience with its geographically targeted initiatives to integrate program activities nationwide using a watershed framework. The NPDES Watershed Strategy is one example. The Strategy outlines national objectives and implementation activities to support the reorientation of all NPDES permits so that they are considered within the context of comprehensive watershed planning.
- The U.S. Army Corps of Engineers has elevated its ecosystem restoration activities to priority status within the Corps' Civil Works Program. This policy decision enables the Corps to focus more on watershed and ecosystem protection and restoration. For example, the Corps has developed with several other federal, state and local agencies a draft plan called "A Non-Regulatory Wetland Restoration Plan for Puget Sound River Basins" to restore the biological health and diversity of Puget Sound wetlands. It also plans to initiate similar effort in FY96 at the Green-Duwamish and Stillaguamish River Basins in Washington State.

Wish I said that:

"The ecological perspective begins with a view of the whole, an understanding of how the various parts of nature interact in patterns that tend toward balance and persist over time"

- Al Gore in "Earth in the Balance", 1992

There ought be a Law:

"And let this be the law: If anyone intentionally pollutes the water of another, whether the water of a spring, or collected in reservoirs, either by poisonous substances, or by digging, or by theft, let the injured party bring the cause before the warden of the city"

- Plato in "Laws"

Did you know:

The term ecology comes from the Greek word OIKOS, and means "the household?"

New in Print

OCRM - The National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management has streamlined several office publications to create one bi-weekly news bulletin on coastal and ocean management issues under the Coastal Zone Management Act and the Marine Protection, Research and Sanctuaries Act. This new bulletin is available by calling Kathy Hill at (301) 713-3086, ext. 122.

Chesapeake Bay Attitude Survey - The Maryland Coastal Management Office recently released findings measuring citizen awareness of watershed issues in the Chesapeake Bay. To obtain an executive summary, contact the Chesapeake Bay Program Communication Office at (410) 267-5758.

Review and Evaluation of Programs for Determining Significance and Prioritization of Environmental Resources (IWR Report 94-R-7) - The report summarizes 95 federal, regional, state, and non-profit organization programs for determining the "significance" of environmental resources, and which resources deserve a level of priority for mitigation, protection, or restoration efforts. Contact Darrell Nolton, Institute for Water Resources, U.S. Army Corps of Engineers, 7701 Telegraph Rd., Alexandria, VA 22315, (703) 355-3084.

Cost Effectiveness Analysis for Environmental Planning: Nine EASY Steps (IWR Report 94-PS-2) - The report describes step-by-step instructions about how to conduct cost effectiveness and incremental cost analysis in planning for environmental restoration and mitigation. Contact Ken Orth, Institute for Water Resources, U.S. Army Corps of Engineers, 7701 Telegraph Rd., Alexandria, VA 22315, (703) 355-0054.

Environmental Activities in Corps of Engineers Water Resources Programs - Charting a New Direction (IWR Report 93-PS-1) - The report describes the Corps of Engineers new environmental restoration authorities. Many projects, which now may be formulated exclusively to protect or restore natural conditions in a watershed, emphasize management of watershed hydrology to restore hydrologic variability. Contact Arlene Nurthen, Institute for Water Resources, U.S. Army Corps of Engineers, 7701 Telegraph Rd., Alexandria, VA 22315, (703) 355-3042.

1992 National Resources Inventory (NRI) - The database includes data from 1982, 1987, and 1992. Its focus is on soil, water, and related resources on our nation's farms and nonfederal forests and grazing lands. To obtain the NRI database, call the USDA Natural Resources Conservation Services at 817-334-5559 ext. 3135. For NRI program information, call (202)-720-4530.

Watershed Partnership Guides - The Conservation Technology Information Center (CTIC), a non-profit technology transfer center, has released five guides to help people develop watershed partnerships in their communities. The guides are part of CTIC's national Know Your Watershed campaign, which is being carried out in partnership with the USDA Natural Resources Conservation Service, the U.S. Environmental Protection Agency, The Tennessee Valley Authority and other agencies and groups. The campaign is designed to promote an understanding of watersheds and encourage people to form local voluntary watershed partnerships to address natural resource concerns. Watershed partnership guides available include:

- Getting to Know Your Local Watershed
- Leading and Communicating
- Building Local Partnerships
- Managing Conflict
- Putting Together a Watershed Management Plan

For copies of one or more of the guides call (317)-494-9555. There is a \$2.00 charge to cover postage and handling.

Best Management Practices for Wheat: A Guide to Profitable and Environmentally Sound Production - This manual is recently released by the National Association of Wheat Growers Foundation and the Cooperative Extension Service. This BMP manual provides information on wheat growth, economics of BMPs, erosion, and nutrient and pesticide management. It includes one- and two-page fact sheets on 39 BMPs that prevent or reduce pollutant entry into surface or groundwater. For more information on the BMP manual and associated educational programs, contact the National Association of Wheat Growers Foundation, 415 Second Street, N.E., Suite 300, Washington, DC 20002-4993.

The Conservation of Biodiversity in the Great Lakes Ecosystem: Issues and Opportunities - This report was prepared by the Nature Conservancy. It identifies nonpoint source pollution from agricultural activities as a major stress on the Lakes' biodiversity. The report also includes recommendations on strategic protection activities. To obtain a free copy, please call U.S. EPA, Great Lakes National Program Office at (312)-353-8034.

The Watershed Protection Approach, 1993/94 Activity Report (EPA 840-S-94-001, November 1994) - This report provides a summary of activities EPA has carried out in 1993 and 1994 to support the watershed approach and a short discussion on anticipated future directions. In addition, summaries of watershed projects in which EPA is a stakeholder are included. For a free copy, please call NCEPI at (513)-489-8695.

EPA Wetlands Fact Sheets Update - This 32 page document provides basic information on wetlands issues. For a free copy, call EPA Wetlands Hotline (contractor operated), (800)-832-7828.

EPA Wetlands Reading List - This list is an annotated list of reading material to supplement lesson plans for students K-12 and to provide a list of suggested material for independent reading. For a free copy, call the EPA Wetlands Hotline listed above.

A Phase I Inventory of Current EPA Efforts to Protect Ecosystem - A summary of projects involving EPA and its partners in place-based management and ecosystem protection. The projects highlighted the positive correlations between economic prosperity and environmental well-being. For a free copy, call NCEPI at (513)-489-8695.

USGS Fact Sheet Series - The USGS has recently published a Fact Sheet for each of the states and its Special Program Areas. They describe earth-science activities including investigations and assessments of known and potential new resources. Topics include earthquake and floods, water and mineral resource assessments, and mapping activities in the state. Free copies for your state are available by calling 1-800-USA- MAPS, or, access through Internet at Revised: undefined

News Bits

The California Coastal Commission, a state partner in NOAA's coastal management program, will sponsor a Kids Challenge to celebrate Earth Day. Students in the Los Angeles area will clean up local beaches and challenge the rest of the state to participate in other Earth Day activities.

Two NOAA research vessels, the FARRELL and the WHITING, will be open for public tours in Georgia as part of NOAA's Earth Day activities. The ships will also take local leaders on sample cruises while in the area. The ships are collecting data to create commemorative charts for the 1996 Olympic Games.

The Hawaii Coastal Program recently created an interactive multi-media program on coastal watershed issues in conjunction with a local foundation. The program is commercially available through a national textbook company and will be available as a public service to local schools.

What do "Cheers", American Oceans Campaign and the National Oceanic and Atmospheric Administration have in common? Ted Dansen! Dansen recently completed a set of Public Service Announcements for the agency that depict the tremendous stresses people have placed on the coastal and marine environment and urge viewers to call a toll-free number to learn what they can do to help improve the state of the coast.

Twelve Chattanooga, Tennessee area teachers will spend ten days on the Tennessee River this summer as guests of TVA's Clean Water Initiative. The program, made possible through a grant from the Chattanooga Public Education Foundation, will give the teachers a chance to learn more about water quality problems and actually take part in projects currently underway to solve them. The program is designed to motivate participants to act on water-related issues in their communities. For more information, contact Linda Harris, Tennessee Valley Authority, 1101 Market Street, CST 17D, Chattanooga, TN 37402.

In March, the United States District Court for the District of Columbia reversed a lower court decision that the National Oceanic and Atmospheric Administration (NOAA) had arbitrarily regulated small personal watercraft within the boundaries of the Monterey Bay National Marine Sanctuary. The court determined that restricting the use of motorized personal watercraft, such as jet skis, to selected areas of the sanctuary was not arbitrary, as the plaintiff claimed.

EPA will sponsor activities around the country during the month of April in celebration of Earth Day 25. To join this celebration, please call the office closest to you:

EPA has made the following phone numbers available for some of its specific programs:

- Headquarters Public Information Center (General EPA publication) - (202)- 260-2080
- National Center for Environmental Publications and Information - (513)-489 - 8190
- Safe Drinking Water Hotline - (800)-426-4791, or, (202)-260-7942
- Wetlands Protection Hotline - (800)-832-7828
- Emergency Planning and Community Right-to-Know (What chemical are in your community?) - (800)-535-0202
- Environmental Justice Hotline - (800)-962-6215, or, (202)-260-6357

Watershed '96 Call for Papers Issued

Paper abstracts are now being accepted for Watershed '96: Moving Ahead Together, a major conference and exposition scheduled for June 8-12, 1996, in Baltimore, MD. The abstract submittal deadline is July 7, 1995. The conference will concentrate on how to build our capabilities and better focus and coordinate our efforts to achieve results that meet community needs.

Watershed '96 will be cosponsored by the Water Environment Federation (WEF) and federal agencies that cosponsored Watershed '93. The program will reflect the variety of individuals and organizations involved in watershed management including, land owners and managers, environmentalists, educators, planners, technical experts, and others. The conference sessions will be as interactive as possible to take advantage of the wealth of knowledge and creative spirit at play when such a diverse group of people get together.

To request an abstract submittal package, call 1-800-444-2933, and ask for #15.

The participating federal cosponsors are:

- U.S. Army Corps of Engineers
- U.S. Bureau of Land Management
- U.S. Bureau of Reclamation
- U.S. Department of Energy

- U.S. Environmental Protection Agency
 - U.S. Fish and Wildlife Service
 - U.S. Geological Survey
 - USDA Forest Service
 - USDA Extension Service
 - USDA Natural Resources Conservation Services
 - Council on Environmental Quality
 - Federal Energy Regulatory Commission
 - Federal Highway Administration
 - National Oceanic and Atmospheric Administration
 - Tennessee Valley Authority
-

Conference Schedule

April 24-28/May 15-19, 1995

Water Quality Standards Academy, Clackamas, OR, and, Minneapolis, MN, respectively (For questions call: 202-260-1315)

May 4-7, 1995

Mississippi River Conference. Memphis, TN (For reservation call: 1-800- HOLIDAY)

May 14-18, 1995

Water Resources at Risk - 1995 Annual Meeting of the American Institute of Hydrology, Denver, CO (For contact call: 612-379-1030)

May 21-24, 1995

Fourth National Watershed Conference - Opening the Toolbox: Strategies for Successful Watershed Management, Charleston, WV (For information call: 303- 988-1810)

June 5-8, 1995

Planning for Change - U.S. Army Corps of Engineers 1995 Planning/Policy Conference, Baltimore, MD (For information call: 202-272-1721)

June 7-9, 1995

Meeting the Challenge - the Legacy of the National Forum on Nonpoint Source Pollution, Arlington, VA (Call: 202-797-7720)

June 7-9, 1995

Keys to the Watershed - Turning Decisions into Results, An International Symposium, Buffalo, NY (For registration call:716-858-7762)

June 12-14, 1995

Third National Reservoir Symposium of the American Fisheries Society, Chattanooga, TN

July 16-21, 1995

Coastal Zone 95, Tampa, FL (For program call: 301-713-3086 ext. 105)

August 6-9, 1995

Soil and Water Conservation Society's 50th Annual Meeting, Des Moines, IA (For detail call: 515-289-2331 ext. 18)

October 2-6, 1995

3rd National Nonpoint Source Watershed Monitoring Projects Workshop, Seattle, WA (For information call: 206-553-6911)

"We have changed our environment more quickly than we know how to change ourselves."

- Walter Lippmann in "Drift and Mastery", 1914

Call for Papers

May 5, 1995

'96 Risk Assessment Conference scheduled for San Francisco, CA area in the Spring of 1996. Sponsored by the Water Environment Federation (For information call: 1-800-666-0206)

June 1, 1995

15th International Symposium of the North American Lake Management Society on Aquatic Ecosystem Stewardship scheduled for November 6-11, 1995 in Toronto, Ontario, Canada (For information call: 705-766-2418)

August 1, 1995

AWRA Summer Symposium on Watershed Restoration Management: Physical, Chemical, and Biological Considerations scheduled for July 1996 in Syracuse, NY (For information call: 315-470-6571)

"The first and greatest knowledge, and also common to all men, is the division and order of our environment."

- Polybius in "History", 130 B.C.

Do you have any favorite quotes? Please share them with us!

Watershed Events

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- Debbie Hubbs, Tennessee Valley Authority
- Leigh Skaggs, U.S. Army Corps of Engineers
- Terry Thompson, U.S. Geological Survey

Watershed Events is intended to update interested parties on the development and use of watershed protection approaches. These approaches consider the primary threats to human and ecosystem health within the watershed, involve those people most concerned or able to take actions to solve those problems, and then take corrective actions in an integrated and holistic manner.

Direct questions and comments about Watershed Events to:

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Revised: undefined