# **SEPA** The Water Monitor

### REGIONAL AND STATE ACTIVITIES



#### **Regional Coordinators**

Monitoring, 305(b), Volunteer Monitoring: Diane

Switzer (617) 860-4377

Waterbody System: Al Pratt (617) 860-4379 303(d)/TMDL: Mark Voorhees (617) 565-4173

Nonpoint Source: Bob Moorehouse (617) 565-3513

Clean Lakes: Warren Howard (617) 565-3515

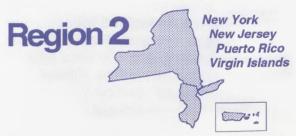
REGIONAL OFFICE: Superfund Environmental Evaluation Workshop: Region 1 hosted the 6th Annual Superfund Environmental Evaluation Workshop for EPA personnel on April 27-28, 1994 in Boston, Massachusetts. In addition to case studies, discussion topics included methods of ecological risk assessment; a strategy for a watershed approach to ecorisk assessment; determination of background concentrations and reference areas; and statistical analyses.

For more information, contact Patty Tyler, EPA Region 1, ESD Biology Section, at (617) 860-4342.

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MAINE: Casco Bay Estuary Lectures: The Casco Bay Estuary Project is sponsoring a series of lectures and activities for Spring 1994. Some of the presentations include: "Dirty History: Historic Sources of Pollution in Portland Harbor" on April 22; "Pollution in Casco Bay Today: How Contaminated is the Bottom of Casco Bay?" on May 12; and "Following the Flow of Casco Bay" on June 9. There is no cost for attendance at the lectures.

For more information, locations and times contact the Casco Bay Estuary Project at (207) 828-1043.



#### **Regional Coordinators**

Monitoring: Randy Braun (908) 321-6692 305(b), Waterbody System: Xuan-Mai Tran (212) 264-3188

Volunteer Monitoring: Diane Calesso (908) 321-6728 303(d)/TMDL: Rosella O'Connor (212) 264-8479 Nonpoint Source: Barbara Spinweber (212) 264-8632

Clean Lakes: Terry Faber (212) 264-8708

NEW JERSEY: Ambient Biomonitoring Network: The NJ Bureau of Water Monitoring initiated its Ambient Biomonitoring Network (AMNET) in 1992. The goal of the program is to establish a network of lotic (running water) stations in each major drainage basin or watershed in the State. Benthic macroinvertebrate populations will be monitored at each basin on a five to six-year rotation. New Jersey will use the network of long-term biomonitoring stations to establish a database of biological impairment statewide. The database is

necessary in order to perform trend analyses associated with generation of 305(b) reports and water quality predictive models. Based upon existing database deficiencies, the Delaware River Drainage Basin between Duttonville, Sussex Co., N.J. (near Port Jarvis, N.Y.) and Camden City, Camden Co., N.J. was selected as the first basin to be biomonitored. The final study report for this basin has been completed and is being distributed to interested parties.

The study uses EPA's Rapid Bioassessment Protocol II data analysis protocol. The protocol relies on standard sampling techniques and integrates several community, population and functional parameters into one easily comprehended evaluation of biological integrity.

Overall, out of 190 monitoring stations sampled during the study period, 45.79% were rated as non impaired, 37.37% were rated as moderately impaired, and 16.84% were rated as severely impaired. For additional information, contact Alfred L. Korndoerfer at (609) 292-0427.



#### **Regional Coordinators**

**Monitoring, Volunteer Monitoring:** Chuck Kanetsky (215) 597-8176

**305(b), Waterbody System:** Margaret Passmore (215) 597-6149

303(d)/TMDL: Thomas Henry (215) 597-8243 Nonpoint Source, Clean Lakes: Hank Zygmunt (215) 597-3429

REGIONAL OFFICE: Monroe County Biological Monitoring: The Region 3 Environmental Services Division (ESD) is working with the Monroe County Planning Commission and the Monroe County Conservation District in the Pocono Mountains of Pennsylvania to develop biological reference conditions for Monroe County's stream monitoring network. They are working to develop reference

conditions for low-gradient streams on the Pocono Plateau, high-gradient streams flowing off the east side of the Plateau to the Delaware River, and streams in the southern part of the county in the Appalachian Ridge and Valley ecosystem.

ESD provided county staff and volunteers with sideby-side sampling and habitat evaluation training in the summer of 1993. ESD also collected benthic and habitat data at 12 "minimally impacted" stations to contribute to the development of a reference database. The data were evaluated in the winter of 1994, and ESD staff worked with county staff to incorporate the findings and experience of the 1993 sampling effort into planning further monitoring. Another round of sampling is planned for the summer of 1994.

The county hopes to use the reference data to better protect some of its pristine areas, document stream changes in areas of changing land use, and identify and prioritize impacts. For more information, contact Maggie Passmore at (215) 597-6149.



Monitoring, Volunteer Monitoring, 305(b), Waterbody System: David Melgaard (404) 347-2126 303(d)/TMDL: Jim Greenfield (404) 347-2126 Nonpoint Source: Mary Ann Gerber (404) 347-2126 Clean Lakes: Howard Marshall (404) 347-2126

#### **REGIONAL OFFICE: Wetlands**

Conservation: The Wetlands Protection
Section has been involved with the TBS
television network in the preparation of a
public service announcement about
wetlands conservation to be aired on
TBS following the end of the "Captain
Planet" shows. Included in this announcement is information about the
EPA wetlands information hotline

number. EPA Region 4 is providing the hotline with wetlands materials suitable for distribution to young children who call for information. For more information, contact Jennifer Derby at (404) 347-3871.

MISSISSIPPI: Adopt-A-Stream Workshops:

The Mississippi Department of Environmental Quality is sponsoring several Adopt-A-Stream Workshops throughout the state. These 3-day workshops, which are designed for citizen volun-

teers and educators, provide information on water quality, watersheds, point and nonpoint source pollution, best management practices, and sampling techniques. For more information, contact Anne Marie Moorman at (601) 961-5394.



**TENNESSEE: Region 4 Water Quality Award Recipients:** EPA Region 4 presented its Water Quality Awards for the State of Tennessee to Bedford County as the Outstanding Soil and Water Conservation District and to John Charles Wilson of Wilson and Wilson Farms as the Outstanding District Cooperator.

Bedford County has worked diligently to help farmers and other land users reduce nonpoint source water pollution and is also a major participant in the ground water well testing program. Bedford County's most significant contribution is the creation of a record-keeping book that farmers can use to document the fertilizer, pesticide, and waste applications on their land and ensure that these applications are done in an efficient and environmentally sound manner.

John Charles Wilson manages 2,200 acres of highly erodible cropland under a conservation plan. A statewide leader in bringing the agricultural and water quality communities closer together, Wilson uses integrated crop management practices to provide nutrient and pest management. This has resulted in improvement in both water quality and plant nutrient efficiency. For more information, contact Duane Robertson at (404) 347-2126.



#### **Regional Coordinators**

Monitoring, 305(b): Dave Stoltenberg (312) 353-5784 303(d)/TMDL: Robert Pepin (312) 886-1505 Waterbody System: Fouad Dababneh (312) 353-3944 Volunteer Monitoring: Clyde Marion (312) 353-5966 Nonpoint Source, Clean Lakes: Tom Davenport (312) 886-0209

REGIONAL OFFICE: Draft Report on Saginaw Bay Tributaries: The ambient monitoring section in ESD has completed a trend and loading analysis draft report for the Saginaw Bay (MI) tributaries. The data used in the analysis were retrieved from EPA's STORET database. The stations were selected based on the following criteria: for trends, 75 percent data completeness assuming monthly sampling and at least 10 years' worth of data; for loading, 75 percent data completeness and at least 2 years' worth of data. The information from this report will be used to help water quality managers and decision makers direct activities within the watershed. For more information, contact Fouad Dababneh at (312) 353-3944.

INDIANA: Positions to Be Added at Department of Environmental Management: Recent changes in Indiana laws have increased various types of environmental control permit fees and have provided funds to allow additional hiring by the Indiana Department of Environmental Management (IDEM).

The Water Monitor is produced monthly to exchange surface water assessment information among states and other interested parties. If you would like more information or want to be added to the mailing list, please fill out the order and comment form on page 11.

In the near future, 24 positions will be added in the areas of surveillance, inspection, and biological studies. For more details, contact John Winters at IDEM at (317)-243-5028.

WISCONSIN: Green Bay RAP Update Available: The 1993 Lower Green Bay and Fox River Remedial Action Plan (RAP) is now available. The original RAP, adopted in 1988, has served as a guide for restoring water quality, recreational uses, and fish and wildlife populations of lower Green Bay for the past 6 years. Nearly three-quarters of the RAP's 120 recommended actions are underway: 38 are completed or being carried out, and 57 have been initiated.

New information about the river and bay ecosystem made the update necessary. This update supplements the 1988 plan by summarizing current environmental conditions and the status of problems. Expanded RAP goals and objectives reflect this new knowledge about the water resources. The update lays out a 2-year timetable for acting on the top-priority issues of contaminated sediment cleanup, nonpoint source pollution control throughout the 6,400-square-mile Fox-Wolf River Basin, and habitat protection and enhancement.

Copies of the 1993 RAP update and its executive summary are available through Vicky Harris, Green Bay RAP Coordinator, Wisconsin DNR, P.O. Box 10448, Green Bay, WI 54307-0448 at (414) 492-5904.

The Lincoln Creek Pilot Study: Many urban streams are little more than named storm sewers. One such stream, Lincoln Creek in Milwaukee, has been monitored for degradation of water, habitat, and aquatic life for the past year. Through a grant from the U.S. Environmental Protection Agency (EPA), researchers from the Wisconsin Department of Natural Resources (DNR) cooperated with other agencies to determine the toxic effects of stormwater runoff in urban streams. The state allocated just under \$400,000 of the estimated \$1.3 million project cost for the study.

Lincoln Creek was selected for monitoring because it represents a variety of uses of an urban stream.

Throughout its 9-mile length, Lincoln Creek passes through medium- and high-density residential areas and business and industrial districts before it reaches its destination—the Milwaukee River, which drains into Lake Michigan 4 miles later.

Preliminary assessments show that the creek is a significant source of sediment, heavy metals, nutrients, oil and grease, and other toxic pollutants to the Milwaukee Harbor and Estuary Area of Concern. Lincoln Creek drains an area of roughly 19 square miles including the communities of Milwaukee, Glendale, and Brown Deer and contributes about 40 percent of the urban pollutants in the entire Milwaukee River South subwatershed. The creek has been lined with concrete in many places. Other signs of artificial manipulation include concrete drop structures placed intermittently along the creek to allow for more steady flow. More than 200 storm sewer pipes dump into the stream. For more details, contact Lee Libenstein of WDNR, at (608) 266-7390.



#### **Regional Coordinators**

Monitoring: Charlie Howell (214) 655-8354 303(d)/TMDL: Troy Hill (214) 655-6647 305(b): Russell Nelson (214) 655-6646

Waterbody System: Paul Koska (214) 655-8357 Volunteer Monitoring: Mike Bira (214) 655-6668 and

Paul Koska (214) 655-8357

Nonpoint Source: Brad Lamb (214) 655-7140 Clean Lakes: Mike Bira (214) 655-6668

REGIONAL OFFICE: Interagency Study of the Rio Grande: Participating agencies, including the New Mexico Environment Department, the Pueblo of Isleta, the City of Albuquerque, the U.S. Geological Survey, and EPA Region 6 have begun planning a study of the Rio Grande in New Mexico and Isleta Pueblo. The study will identify general sources of pollution and their relative contributions of selected heavy metals. The study will also address human

health concerns relative to the consumption of arsenic in fish from the Rio Grande and other selected waterbodies. For more information, contact Charlie Howell at (214) 655-8354.



#### **Regional Coordinators**

Monitoring: Jerry Anderson (913) 551-5066 305(b), 303(d)/TMDL: John Houlihan (913) 551-7432 Waterbody System: Jerome Pitt (913) 551-7766 Volunteer Monitoring: Jerome Pitt (913) 551-7766 and Donna Sefton (913) 551-7500

Nonpoint Source: Julie Elfving (913) 551-7475 Clean Lakes: Larry Sheridan (913) 551-7439

REGIONAL OFFICE: Grant to Missouri for the Development of Biological Criteria: Region 7 has approved a \$30,000 grant under section 104(b)(3) of the Clean Water Act to the Missouri Department of Natural Resources (MDNR) to initiate activities leading to the development and adoption of biological criteria into the state's water quality standards program. Funding was made available through the Office of Science and Technology, Health and Ecological Criteria Division. MDNR has subcontracted the bulk of the grant to the University of Missouri at Columbia for field work and protocol development. The University's primary focus will be on developing sampling and evaluation protocols for invertebrates and physical habitat, but will also address metric development for fish communities. The MDNR has already identified a number of reference sites; Region 7 and MDNR are presently working on an expansion of the existing grant to include sub-regionalization of Missouri's ecoregions under the direction of Jim Omernik at EPA's Environmental Research Laboratory at Corvallis, Oregon. Staff from the Water Management Division and the Environmental Services Division (ENSV) are coordinating this effort with the Region's ongoing Regional Environmental Monitoring and Assessment Program (R-EMAP) project. For more information regarding the Missouri grant, please

contact Larry Shepard, Water Quality Standards Coordinator, at (913) 551-7441.

Regional Coordination Meeting: On March 31, representatives of the Environmental Services Division (ENSV) and the Planning and Management Division (PLMG) met to exchange information and look for opportunities to coordinate on-going ecological monitoring projects which each division is currently implementing.

PLMG began the meeting by describing its Great Plains Program, which focuses on protecting ecological resources within the Great Plains ecoregion. Thirteen states in the U.S. as well as portions of Canada and Mexico include parts of the Great Plains ecoregion. A key objective of the Great Plains Program is the construction of a Great Plains International Data Network to capture, compile and share data from many sources across the Great Plains. ENSV described both the R-EMAP project and the Platte River Assessment. The meeting ended with both divisions committing to a more detailed exploration of how to most efficiently and effectively coordinate these programs. For more information, contact Lyle Cowles at (913) 551-5042.



#### **Regional Coordinators**

Monitoring, 305(b): Phil Johnson (303) 293-1581 303(d)/TMDL: Bruce Zander (303) 293-1580 Waterbody System: Toney Ott (303) 293-1573 Volunteer Monitoring: Paul McIver (303) 293-1552 and Phil Johnson (303) 293-1573 Nonpoint Source/Clean Lakes: Dave Rathke (303) 293-1703

REGIONAL OFFICE: Tribal Lake Water Quality Assessment Studies in EPA Region 8: EPA has awarded lake water quality assessment grants to a number of tribes within EPA Region 8 through the Clean Lakes Program, with the goal of

determining the condition of lakes located within tribal boundaries and to identify lakes in need of more stringent controls or restoration efforts. Participating tribes include the Turtle Mountain Band of the Chippewa in North Dakota, the Blackfeet Nation in Montana, the southern Ute tribe in Colorado, and the Arapaho and Shoshone tribes on the Wind River Reservation in Wyoming.

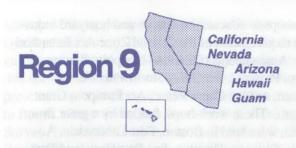
Results from this first round of lake water quality assessment studies have recently become available, with the first studies completed by the Turtle Mountain Band of the Chippewa (Belcourt, ND). The tribe studied four major lakes on the reservation to determine trophic status, as measured by physical, chemical and biological parameters. Their study identified two of the four lakes, Belcourt and Jarvis, as candidates for Phase I implementation under the Clean Lakes Program. The Clean Lakes Program 1992 Annual Report,

published by EPA, contains a more detailed summary of the Turtle Mountain effort.

The Blackfeet Environmental Department (Browing, MT) recently completed a second tribal assessment effort. The study encompasses 26 lakes located in four major river basins. The reservation covers approximately 1.5 million acres, and assessment of lake resources within this area was a significant accomplishment. The tribe prepared an atlas of lake characteristics, including water quality measurements and trophic status. This assessment report will serve as a public information document for the tribe and will provide baseline information on tribal water resources.

For more information on the Clean Lakes Program in Region 8, contact David Rathke at (303) 293-1703. For information on tribal water quality management programs, contact Barbara Burkland at (303) 293-1656.

Calendar Highlights			
May			
25-28	Local Government Workshop on Coastal and Wetlands Protection, Norwalk, CT. Contact Mark Tedesco, USEPA Region 2, at (203) 977-1541.	26-29	Effects of Human-Induced Changes on Hydrologic Systems, Jackson Hole, WY Contact American Water Resources Association, 5410 Grosvenor Lane, Suite 220, Bethesda, MD
24-27	North American Benthological Society, 42nd Annual Meeting, Orlando, FL. Contact Rob Mattson, Suwanee River Management District, Route 3, Box 64,		20814-2192, at (301)493-8600; FAX (301) 493-5884.
	Live Oak, FL 32060.	July	
June		10-13	A Global Perspective for Reducing CSO's: Balancing Technologies, Costs, and Water
7-9	Restoring or Rehabilitating Damaged Ecosystems, Pullman, WA. Contact Ed DePuit, Conferences and Institutes, 208 Van Doren Hall, Washington State University, Pullman, WA 99164-5222, at		Quality, Louisville, KY. Contact Nancy Blatt, WEF, 601 Wythe St, Alexandria, VA 22314-1994 at (703) 684-2400.
	(509) 335-3530.	August	
7-10	First Annual Environmental Computing and Information Technology '94, Washington, DC. Contact Environmental Technology '94, 5201 Leesburg Pike, Suite 201, Falls Church, VA 22041 at (703) 578-0301; FAX (703) 578-3386.	15	Rivers Curriculum Workshop, Edwardsvile, IL. Contact Dr. Robert Williams, Rivers Curriculum Project, Box 2222, Edwardsville, IL. 62026-2222, at (618) 692-3788; FAX (618) 692-3359.
16-17	8th Annual Watershed Conference: Nonpoint Source Pollution, Springfield, MO. Contact Watershed Committee of the Ozarks at (417) 866-1127.	7-12	Stormwater NPDES Related Monitoring Needs, Crested Butte, CO. Contact Barbara Hickernell, Environmental Foundation, 345 E. 47th St, New York, NY 10017 at (212) 705-7837.



#### **Regional Coordinators**

Monitoring, 305(b), Waterbody System: Janet Hashimoto (415) 744-1156

303(d)/TMDL: David Smith (415) 744-2019

Volunteer Monitoring: Clarice Olson (415) 744-1489 and

Janet Hashimoto (415) 744-1156

Nonpoint Source: Jovita E. Pajarillo (415) 744-2011

Clean Lakes: Wendell Smith (415) 744-2018

REGIONAL OFFICE: Water Management Division (WMD) Reorganization: In response to the current administration's initiative to streamline the federal government, WMD has recently released its plan for reorganization. It was decided that the division could be improved by combining all of the watershed

combining all of the watershed planning tools into one branch. The Monitoring and Nonpoint Source Section was split and monitoring was moved to the

Environmental Assessment Section. The nonpoint source (§319) program was combined with other statutorily funded programs such as sections 104(b), 106, 203(c), 303(d) and 604(b). The reorganization will become effective on May 1, 1994.

The mission of the new Environmental Assessment Section is to guide states in the collection and interpretation of environmental monitoring data to assess the quality of the Region's waterbodies. The Section will provide states and Regional staff with technical assistance in collecting data, analyzing data and performing risk assessments to effectively manage aquatic resources and set environmental priorities based primarily on monitoring data. A continuous review process, composed of administrative and environmental indicators, will be initiated to ensure the effectiveness of the various water program's management actions. For more information, contact Janet Hashimoto, Chief of the Environmental Assessment Section, at (415) 744-1156.

**Environmental Education and Volunteer Monitor**ing: The Global Rivers Environmental Education Network (GREEN) will be conducting two 2 1/2 day workshops for teachers and community leaders in EPA Region 9. The first workshop will take place on June 20-22, 1994, and targets leaders of the Native American communities throughout EPA Region 9. The second workshop will take place on June 27-29, 1994, and targets teachers and citizens who are interested in educating others on water quality monitoring in the San Francisco Bay area. The workshops are each designed for 40 attendees and will be held at the Presidio in San Francisco. The purpose of these workshops is to provide the skills needed to engage and connect both theory and practice in the conduct of a school-based volunteer water quality monitoring program. For more information, contact Chris Faulkner at (202) 260-6228.



Regional Coordinators

Monitoring, Waterbody System: Gretchen Hayslip

(206) 553-1685

305(b): Donna Walsh (206) 553-1754

303(d)/TMDL: Bruce Cleland (206) 553-2600

Volunteer Monitoring: Susan Handley (206) 553-1287 Nonpoint Source: Elbert Moore (206) 553-4181 Clean Lakes: Krista Mendelman (206) 553-1571

IDAHO: Dissolved Oxygen Study in the Spokane River: The Idaho Division of Environmental Quality (IDEQ) recently published a report titled "Diel Dissolved Oxygen Monitoring of the Spokane River During Extreme Low Flow." Diel monitoring of dissolved oxygen (DO) and temperature was conducted on an impounded and free-flowing reach of the Spokane River in north Idaho on two occasions during extreme low flow in water year 1992. The objective was to document excursions from water quality criteria for DO and to provide insight into rates of overnight uptake or daylight oxygen production for future modeling efforts.

The first sample period was characterized by marked stratification, departures from oxygen criteria in the metaliminion, and warm water temperatures. Profiles were significantly different from each other over time and across distance, largely due to low variability of data. The actual magnitude of the changes was not great enough to suggest that biological processes were significantly changing DO levels on a 24-hour basis. Generally, water was slightly warmer and contained slightly less oxygen at downstream stations. The run of the river station demonstrated the largest diel change, possibly indicating day production of oxygen by attached periphyton.

The study did not detect stratification and criteria violations following a storm event and subsequent decrease in residence time. Profiles of temperature and DO were still significantly different over time and across distance; however, they were will mixed vertically and the magnitude of the changes was very small. Based on this information, future water quality modeling efforts can assume that a large amount of organic matter is not in the system and that a large amount of algae or periphyton is not present in the impounded reach of the system. DO criteria violations appear to be infrequent and stratification conditions are fragile. For more information, contact Brian Cochrane of IDEQ at (208) 557-3524.

## HEADQUARTERS ACTIVITIES



OFFICE OF WETLANDS, OCEANS AND WATERSHEDS (OWOW)

Assessment and Watershed Protection Division (AWPD)

Marina Workshops: The International Marina Institute (IMI) has completed seven one-day

workshops to educate the marina and boatyard industry on requirements of the Coastal Zone Act Reauthorization Amendments (CZARA) Nonpoint Source Control Program, the CWA Stormwater Permit Program, and the Clean Vessel Act Pumpout Grant Program. These workshops, funded by a grant from AWPD, were held in Boston, Fort Lauderdale, Annapolis, Chicago, Houston, San Francisco, and Portland from February 22 to March 28. Evaluations from the first five workshops indicated strong support from the marina industry; they showed that the clarification and exchange of ideas between federal, state, and local government representatives helped reduce the industry's confusion about these programs. A total of 407 people (70 percent from industry, 30 percent from government) representing 21 coastal states attended the five workshops. IMI is already planning additional workshops for this fall and winter. Other agencies, such as the National Park Service, are now funding their own comparable workshops to build on this initial effort. For more information, contact Rod Frederick at (202) 260-7054.

Enhancing the States' Lake Management Programs: The seventh annual national conference on Enhancing the States' Lake Management Programs was held May 4-6 in Chicago, Illinois. This conference focused on ways to improve partnerships among state lake programs, statewide lake associations, and local lake management initiatives. The conference included sessions that highlighted information and education programs for lake management at state and local levels, shoreland zoning and other lakeshore protection approaches, volunteer monitoring, outreach publications on aquatic plant management and shoreline erosion control, strategic planning for statewide lake management organizations, and new approaches for lake management. For more information, contact Susan Ratcliffe at (202) 260-5404.

Flood Workshop: On April 5, the U.S. Geological Survey (USGS), Office of Water Data Coordination's Subcommittees on Hydrology and Sediment cosponsored an informal workshop on various agencies' activities during and after the 1993 flood on the Mississippi River, as well as activities that are planned for possible 1994 spring flooding. AWPD presented information on flood-related water quality activities at EPA and discussed progress made by the inter-

agency working group on Flood Event Water Quality Monitoring; this includes sending out draft guidance for flood event water quality monitoring this spring. The Office of Science and Technology presented information on sediment activities related to floods. Representatives from the U.S. Geological Survey, National Weather Service, National Parks Service, Corps of Engineers, Soil Conservation Service, Department of Transportation, and Federal Emergency Management Agency also gave presentations. For more information, contact Mary Belefski at (202) 260-7061.

1992 305(b) Report: The National Water Quality Inventory: 1992 Report to Congress was signed by Administrator Browner on April 20 and transmitted to Vice President Gore and Speaker Foley. The Administrator released the report at an Earth Week event at the Bladensburg Marina in Maryland. The report will be available after printing in mid-May along with the companion document, The Quality of Our Nation's Water: 1992. An 8-page fact sheet is currently available. For more information, contact Barry Burgan at (202) 260-7060.

Fourth National Volunteer Monitoring Conference: Portland, Oregon, was the site of the Fourth National Volunteer Monitoring Conference, held on April 10-14 at Portland State University. Nearly 350 attended this EPA cosponsored conference. Among those in attendance were volunteer program organizers, volunteers, teachers, students, representatives from all levels of government, and representatives from business. Chuck Clarke, EPA Region 10 Regional Administrator, gave the opening plenary address.

The conference was organized through an AWPD grant with the help of a steering committee of volunteer monitoring coordinators. This year's theme was "Putting Volunteer Data to Use."

Through an interactive workshop approach, participants explored ways to improve ties with government, universities, and other data users; addressed quality assurance, study design, and data management issues; and learned about data presentation, reaching the media, and improving communication. Other popular workshop sessions included macroinvertebrate monitoring, fecal coliform

bacteria analysis, the watershed approach, and cultural diversity training.

Conference attendees asked for more EPA involvement in the standardization of volunteer monitoring methods, in development of quality assurance/ quality control methods and guidance, and in Regional coordination and support. For future conferences, attendees urged emphasis on increasing the volunteer role in watershed management and broadening the diversity of volunteers to include all segments of society. All workshops and plenary sessions were audiotaped, and proceedings will be published later this year. For more information, contact Alice Mayio at (202) 260-7018.

# Oceans and Coastal Protection Division (OCPD)

East Coast Estuaries Shared Resources Conference: In October 1993, the Chesapeake Bay Program and OCPD jointly sponsored a conference to discuss the status of science and management for the "shared" resources of the east coast estuaries. The conference focused on four areas—the coastal ocean, the airshed, migratory fish, and the flyway. At a follow-up meeting on March 25, participants felt that key areas to focus on next include (1) the shad and habitat restoration plans being developed by the Atlantic States Fisheries Council; (2) a possible information-sharing meeting on air deposition; and (3) the issue of uninterrupted habitat for the Atlantic flyways. For more information, contact Darrell Brown at (202) 260-9103.

Local Government Workshop: OCPD sponsored a workshop April 19-20 in Portland, Oregon, entitled "Management and Protection of Estuaries, Wetlands, and Coastal Waters: Tools for Local Governments." The workshop was the latest in an ongoing series of workshops to discuss tools for protecting coastal and wetland resources. It focused on identifying environmental impacts to coastal areas and the regulatory and nonregulatory tools available to restore and/or manage coastal and wetland resources. The workshop drew participants from local, county, and state governments, local businesses, environmental action groups, and concerned citizens' associations.

Workshops are also scheduled for Atlantic Beach, NC, May 11-12; Norwalk, CT, May 25-26; Boston, MA, June 28-29; and San Juan, PR (TBD). For more information, contact Macara Lousberg at (202) 260-9109.

Coastal Technology Transfer Conference: OCPD staff are forming a work group to plan a Coastal Technology Transfer Conference in early 1995. The purpose of the conference is to bring managers, technical

advisory committee members, and technical staff from National Estuary Programs and other coastal programs together to share ideas, successes, and lessons learned. Plans are to include representatives from other EPA programs and federal agencies in the planning stages to ensure that the most innovative technologies and approaches to coastal watershed management will be shared. For more information, contact Betsy Tam at (202) 260-6466.



Directory of Volunteer Monitoring Programs, EPA 841-B-94-001: The fourth edition of the National Directory of Volunteer Environmental Monitoring Programs has just been published and is available for distribution. The directory contains information on 517 volunteer monitoring programs in 45 states and the District of Columbia, involving over 347,000 volunteers nationwide. Contact names, addresses, phone and fax numbers, and information on parameters monitored, funding sources, data users, and school involvement are included in each entry. The directory also includes an introduction that summarizes key statistics from the directory. The programs profiled in the directory cite education as the number one use of their data, report that local and state decision makers increasingly use the information gathered by volunteers, and appear to be moving toward a wholewatershed approach to monitoring. For a copy, call Alice Mayio at (202) 260-7018 or write to her at USEPA (4503F), 401 M St, SW, Washington, DC, 20460.

Fact Sheet: National Water Quality Inventory: 1992
Report to Congress, EPA 841-P-94-002. This 8-page fact
sheet summarizes the findings of the 1992 National Water
Quality Inventory (305(b) report) and includes summary
statistics on streams, lakes, estuaries, the Great Lakes,
wetlands, and groundwater. The 1992 305(b) report on which
it is based is not yet published but should be available in midMay. The fact sheet also contains ordering information for the
national report and its summary document. For a copy of the
fact sheet, contact Barry Burgan at (202) 260-7060 or fax
your request to him at (202) 260-7024.

1993 Lower Green Bay and Fox River Remedial Action Plan (RAP): This update of the 1993 RAP for the lower Green Bay and Fox River contains information on current environmental conditions in the basin and sets a timetable for dealing with priority issues such as contaminated sediment cleanup and nonpoint source control. For a copy, contact Vicky Harris, Green Bay RAP coordinator, Green Bay, WI, 54307-0448, (414) 492-5904.

Nutrient Management, EPA 841-J-94-900. The Journal of Soil and Water Conservation has published a special supplement to the March-April 1994 issue entitled Nutrient Management. This supplement contains papers presented at an EPA-cosponsored Nutrient Management conference on April 20-22, 1993. Under an EPA cooperative agreement with the Soil and Water Conservation Society, 12,000 copies will be distributed to journal subscribers and 7,200 copies to state agencies, county soil and water conservation districts, county extension offices, EPA and SCS. Additional copies are available from John Kosco at (202) 260-6385.

Volunteer Estuary Monitoring: A Methods Manual, EPA 842-B-93-004. This 176-page document is the second in a series of methods manuals produced by EPA for volunteer water monitors. It contains step-by-step instructions on how to conduct volunteer monitoring of parameters such as dissolved oxygen, nutrients, salinity, temperature, and submerged aquatic vegetation. This manual was prepared by the Alliance for the Chesapeake Bay through a grant with the Oceans and Coastal Protection Division. It will serve as the basis for three "train-the-trainer" workshops that will be presented in selected coastal areas later this year. For a copy contact Joe Hall at (202) 260-9082.