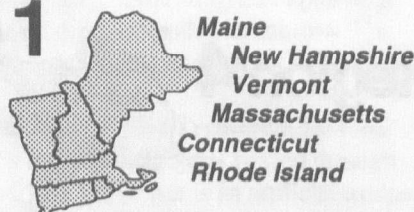




The Water Monitor

REGIONAL AND STATE ACTIVITIES

Region 1



Regional Coordinators

Monitoring, 305(b), Volunteer Monitoring: *Diane Switzer (617) 860-4377*

Waterbody System: *Al Pratt (617) 860-4379*

303(d)/TMDL: *David Pincumbe (617) 565-3544*

Nonpoint Source: *Bob Moorehouse (617) 565-3513*

Clean Lakes: *Warren Howard (617) 565-3515*

REGIONAL OFFICE: Global Positioning System

Used to Survey Underground Storage Tanks: Region 1 has recently completed a survey of the Underground Storage Tanks in the Merrimack River Basin using the Global Positioning System (GPS). The locations of the tanks and facilities were accurately surveyed for entry into the Region's Geographic Information System (GIS). The locations of all major and minor NPDES discharges have also been collected within the Merrimack River Basin. This data supports the Merrimack River Initiative by providing a means to map and spatially assess the Basin, based on possible pollution point sources.

GPS has proven to be an asset in the Region's development of accurate locational databases. GPS receivers are

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routinely being used in the Environmental Monitoring and Assessment Program - Surface Water (EMAP-SW), and were successfully used in the 1993 REMAP project.

For more information, contact Al Pratt, GPS Coordinator, EPA Region 1, at (617) 860-4379.

Region 2



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: *Mack Henning (212) 264-2059*

Clean Lakes: *Terry Faber (212) 264-8708*

REGIONAL OFFICE: Regional ITFM Meeting: As a follow-up to the recommendations of the Intergovernmental Task Force on Monitoring Water Quality (ITFM) and to further strengthen relationships between state, federal and local monitoring entities, the Surveillance and Monitoring Branch in Region 2's Environmental Services Division held a Regional ITFM meeting on August 11, 1993 in Ringwood State Park, Ringwood, NJ. Approximately 25 participants attended the meeting representing tribes, states, the U.S. Geological Survey, the National Oceanic and Atmospheric Administration's National Ocean Service and National Marine Fisheries Services, universities and basin monitoring commissions.

Participants formed workgroups around three topics: Environmental Indicators, Comparable Methods and Consensus Standards, and Data Management and Information Sharing. The workgroups identified strengths and weaknesses in coordinating these issues between monitor-

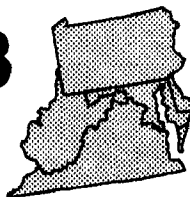


ing entities. This information will be used as a basis for a possible cooperative pilot study to be conducted in the summer of 1994. The group also voted to continue the Regional ITFM effort and will meet again in January, 1994. For more information, contact Randy Braun at (908) 321-6692.

NEW YORK: Lower Genesee River Study: Biologists, chemists and engineers representing several New York Department of Environmental Conservation (DEC) organizational units recently completed field work for the second year of the Lower Genesee River Study. The effort is designed to study a reported "fishless segment" in the River. Contaminated sediments are also of concern. A battery of tests are being conducted by participating specialists, including macroinvertebrate community analysis, caged fish studies, sediment chemical constituents and toxicity, fish collection and water column chemistry. The Phase I Report for 1992 was recently issued, and includes the findings of the individual studies. Conclusions will be reported after the DEC has evaluated second year work. For more information, contact Peter Mack at (518) 457-3495.

Rotating Intensive Basin Studies: The DEC has completed sample collection for the first year of the Rotating Intensive Basin Studies (RIBS) for the Upper Hudson, Erie/Niagara, Delaware, Lake Champlain, and Atlantic Ocean/Long Island Sound River Basins. The 1991/92 Report will soon be completed, including a report of water column data for Permanent Network Stations covering the first six-year RIBS cycle, 1987-1992. For more information, contact Peter Mack at (518) 457-3495.

Region 3



Delaware
Pennsylvania
Maryland
Virginia
West Virginia

Regional Coordinators

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

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

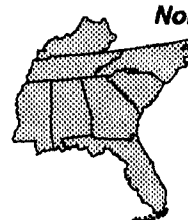
303(d)/TMDL: Thomas Henry (215) 597-8243

Nonpoint Source, Clean Lakes: Hank Zygmunt
(215) 597-3429

REGIONAL OFFICE: Biology Workshop Scheduled:
The 1994 Mid-Atlantic Water Pollution Biology Workshop is scheduled for March 24 - 25, 1994 at Cacapon State Park

Lodge near Berkeley Springs, West Virginia. The workshop will begin at 9:00 am on March 24 and adjourn at noon on March 25. Tentative agenda items for the workshop are biological monitoring, toxicity testing, bioassessment protocols and ecological risks. In addition, the Region 3 Nonpoint Source Monitoring (NPS) Workshop will be held March 22 - 23 in the Berkeley Springs area. More details on the NPS workshop will be made available at a later date. For more information, contact Carol Rose at (304) 234-0240.

Region 4



North Carolina
Kentucky
South Carolina
Tennessee
Georgia
Alabama
Mississippi
Florida

Regional Coordinators

Monitoring: David Melgaard (404) 347-2126

305(b), Waterbody System: Larinda Tervelt
(404) 347-2126

303(d)/TMDL: Jim Greenfield (404) 347-2126

Volunteer Monitoring: Virginia Buff (404) 347-2126 and
Connie Alexander (404) 347-1740

Nonpoint Source: Mary Ann Gerber (404) 347-2126

Clean Lakes: Howard Marshall (404) 347-2126

REGIONAL OFFICE: Total Maximum Daily Load

(TMDL) Regional Workshop: A TMDL Regional Exchange Workshop was held in Atlanta, Georgia on November 30 - December 2, 1993 for EPA Regions 4 and 6. The course, which is designed to provide program support and technical guidance to states and EPA Regions in the proper application of TMDLs, is sponsored by the EPA Office of Science and Technology (OST), Exposure Assessment Branch, and the Office of Wetlands, Oceans and Watersheds (OWOW), Watershed Branch. For more information, contact Jim Greenfield at (404) 347-2126.

SOUTH CAROLINA: East Cooper Sampling and

Identification of NPS Pollutants: Between August 1992 and March 1993, citizen volunteers and staff of the South Carolina Department of Health and Environmental Control (SC DHEC) collected 344 water samples for chemical analysis from tidal ditches, stormwater outfalls and open tidal waters of the East Cooper area of Charleston County. Project participants also collected oysters from the general area for analysis. The purpose of the water and oyster tissue sampling was to document suspected nonpoint source (NPS) water pollution.

The monitoring project found fecal coliform bacteria to be the primary NPS pollutant. Fecal coliform bacteria are being transported into the marshes, tidal creeks and open water via inland ditches, canals and stormwater outfalls, resulting in degradation of water quality and, in some locations, the loss of an important water use: shellfish harvesting. In certain areas, malfunctioning septic systems are causing bacterial contamination.

Citizens and local governments will be participating in the next step in the East Cooper project by forming a committee to consider, select and implement the most responsive, workable and cost-effective best management practices (BMPs) to control the identified pollution sources. For more information, contact Becky Rideout at (803) 734-4813.

Artificial Wetlands Wastewater Treatment System:

One of SC DHEC's innovative projects funded through Section 319 of the Clean Water Act is an artificial wetlands wastewater treatment system especially designed for poorly drained soils. This project has successfully demonstrated the treatment capabilities of this best management control measure for on-site wastewater disposal.

The site selected for this project was a home in an unsewered subdivision that uses conventional septic tank systems for domestic wastewater disposal. Prior to the implementation of this artificial wetland, the site experienced septic system failures during the high water table season.

A simple system was designed that purifies septic tank discharges that would otherwise leach directly into the soil and percolate down to the groundwater and nearby waterbodies. Stones are buried in a shallow ditch and plants are rooted in the stones. Partially treated sewage from the septic tank flows through the stone filter, providing moisture and nutrients to the plants. The plants cleanse the septic tank's discharge while adding beauty to the lawn. The only upkeep on these systems is to harvest some of the plants once or twice a year.

The artificial wetland designed for this project was 43x16 feet and was constructed at a cost of \$6,800. For more information, contact Phil Hayes at (803) 734-5078.

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 8.

Region 5



Regional Coordinators

Monitoring, 305(b): Donna Williams (312) 353-6175

303(d)/TMDL: Robert Pepin (312) 886-1505

Waterbody System: Fouad Dababneh (312) 353-3944

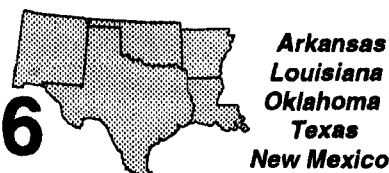
Volunteer Monitoring: Donna Williams (312) 353-6175 and Tom Davenport (312) 886-0209

Nonpoint Source, Clean Lakes: Tom Davenport (312) 886-0209

WISCONSIN: Cryptosporidium Monitoring Project:

As a result of an outbreak of Cryptosporidiosis in Milwaukee last spring, the Wisconsin Department of Natural Resources (WDNR) will be conducting a study on the occurrence and distribution of *Cryptosporidium* and *Giardia* in Wisconsin's surface waters over the next 18 months. WDNR will collect samples from streams in urban, agricultural and wildland watersheds, from sewage treatment plant final effluents, and at surface drinking water intakes. Finished drinking water samples will be collected at locations where *Cryptosporidium* or *Giardia* are found in intake water. This study will address the occurrence and distribution of these organisms as a result of land use, time and geographic variables. For more information, contact Joe Ball at (608) 266-7390 or John Archer at (608) 265-5121.

Region 6



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

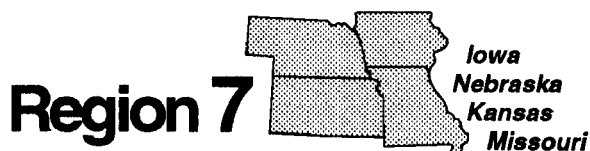
Volunteer Monitoring: Mike Bira (214) 655-6668 and Paul Koska (214) 655-8357

Nonpoint Source: Brad Lamb (214) 655-7140

Clean Lakes: Mike Bira (214) 655-6668

REGIONAL OFFICE: Biological Databases/Community Assessment Software: Region 6 is interested in

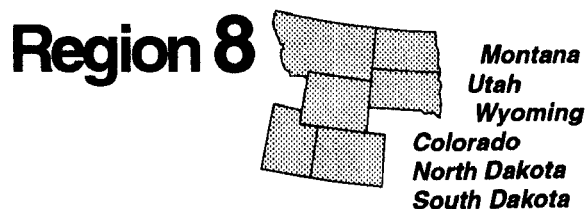
identifying biological data management and aquatic community assessment software currently in use. The Region plans to support the development of a "user-friendly" system that will provide for storage and import/export of biological data with associated data assessment tools. Such a system could be a complement to a modernized STORET, and provide for interim data management needs. If you are currently using such a system, or wish to offer comments on system development, 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

No material was submitted for November.

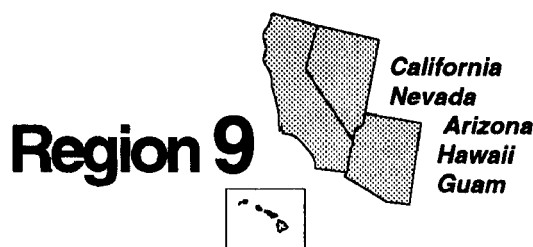


Regional Coordinators

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: Carol Russell (303) 293-1449
Clean Lakes: Dave Rathke (303) 293-1703

FORT PECK TRIBES: Tribal Bioassessment Workshop: The Fort Tribes Office of Environmental Protection (Fort Peck, MT) recently hosted a workshop for Region 8 tribal water quality staff. Representatives from MT, SD, CO, UT, CA and AL attended the meeting. Workshop presenters included representatives from the Montana Water

Quality Bureau, Region 8, Tetra Tech, and BlueStem, Inc. The workshop included discussion of the theory behind bioassessments, the calculations of relevant biological indices, the use of habitat assessments in conjunction with biological information to determine stream health, and quality assurance/quality control procedures for biological sampling programs. Field and lab work included fish collection, benthic invertebrate sampling and habitat assessment techniques at a site on the Poplar River, and laboratory identification of macroinvertebrate specimens. The information from this workshop will help Region 8 tribes develop bioassessment programs. For more information, contact Deb Madison, Fort Peck Tribes, at (406) 768-5155.



Regional Coordinators

Monitoring, 305(b), Waterbody System: Chris Faulkner (415) 744-2012
303(d)/TMDL: David Smith (415) 744-2019
Volunteer Monitoring: Clarice Olson (415) 744-1489 and Chris Faulkner (415) 744-2012
Nonpoint Source: Jovita E. Pajarillo (415) 744-2011
Clean Lakes: Wendell Smith (415) 744-2018

REGIONAL OFFICE: Water Quality Monitoring in Panoche-Silver Creek: EPA Region 9, the Soil Conservation Service and a variety of other agencies and groups are working on a project to resolve problems with sedimentation and selenium pollution in the watershed surrounding the town of Mendota, CA. Seasonal and highly destructive flooding plagues Mendota. Sediments contaminated with selenium are believed to enter the water column from nonpoint sources such as rangeland and farming activity in the upper reaches of the basin. A group composed of federal and state agencies, farmers, ranchers, residents of Mendota and environmental organizations has been convened to develop a basin plan to remedy the water quality impairment. EPA Region 9 is responsible for assembling data on the watershed and assisting in developing a monitoring plan to propose adequate controls and evaluate the effectiveness of implemented controls. For more information, contact Chris Faulkner at (415) 744-2012.

Region 10



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

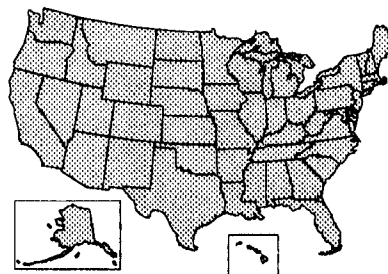
Nonpoint Source: *Elbert Moore* (206) 553-4181

Clean Lakes: *Judith Leckrone* (206) 553-6911

REGIONAL OFFICE: **Biological Assessment Workshop:** EPA Region 10 hosted its fourth Biological Assessment Workgroup meeting in White Salmon, Washington on November 8 - 10, 1993. The purpose of this meeting was to discuss ongoing biological assessment activities in Region 10 states and to share bioassessment methods, emphasizing the usefulness of the current methods and changes needed to improve data quality. Participants included EPA (Seattle and Corvallis), all Region 10 states, tribes, the U.S. Geological Survey, the U.S. Fish and Wildlife Service, the Bureau of Land Management, the U.S. Bureau of Mines,

the National Park Service and local universities. Conference meeting notes are being developed. For more information, contact Gretchen Hayslip at (208) 553-1685.

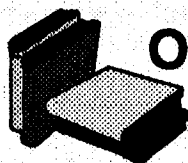
HEADQUARTERS ACTIVITIES



OFFICE OF WETLANDS, OCEANS AND WATERSHEDS (OWOW)

Assessment and Watershed Protection Division (AWPD)

305(b) Consistency Workgroup: The 1996 Section 305(b) Consistency Workgroup held its first meeting in St. Louis, MO, October 19 - 21. Representatives attended from 17 states, 1 tribe, 3 federal agencies, 9 EPA Regions,



On the Bookshelf . . .

1992 Clean Lakes Program Report: This report describes the achievements of the Clean Lakes Program during the past year, highlighting the commitment of local communities and their partnership with states and the federal government to protect and restore lake watersheds. Contact Susan Ratcliffe at (202) 260-5404.

Lakeline, September 1993, Vol. 13, No. 3: This issue of the North American Lake Management Society's (NALMS) official publication includes a number of articles on volunteer lake monitoring, including a profile of programs in the Upper Midwest; a story on Florida LAKEWATCH; and articles on quality assurance. A limited number of copies are available to non-members. Send \$5.00 to NALMS, One Progress Blvd, Box 27, Alachua, FL 32615-9536, or call (904) 962-2554.

The Volunteer Monitor, Vol. 5, No. 2, Fall 1993: In this issue, entitled "Staying Afloat Financially," volunteer monitoring groups share their experiences and ideas on finding financial support for their programs. Articles include advice on drawing up a budget, finding grassroots support, getting grants and courting corporate sponsors. For a copy, contact Alice Mayo at USEPA, 401 M St., S.W., (4503F), Washington, DC 20460 or call (202) 260-7018.

TMDL Case Study, Tar-Pamlico Basin, North Carolina: This total maximum daily load case study is the 10th in the series published by the Watershed Branch of AWPD. It is available either on the NPS-BBS TMDL Special Interest Group Forum or through your regional 303(d) coordinator.

and headquarters program offices. The major focus of the meeting was to discuss needed changes to the Section 305(b) assessment and reporting process for the 1996 cycle. To accomplish this objective, participants agreed to divide the full workgroup into subgroups by functional area: assessment, monitoring, report content, data management, groundwater and drinking water, and a focus group on tribal assessments. These subgroups, co-chaired by state and regional representatives, will meet over the next several months to determine which issues can be resolved in the short-term and to make recommendations on how to do so. The full workgroup will meet again in May 1994; EPA expects to issue the 1996 Section 305(b) Guidelines by February 1995. For more information, contact Barry Burgan at (202) 260-7060.

National Forum on Nonpoint Source Pollution: Over the last year, AWPD staff have been working with the National Geographic Society (NGS) and others on a public-private partnership effort to increase visibility of nonpoint source problems and to advance market-driven, educational, and voluntary solutions. This effort is directly linked to NGS's "Geography of Fresh Water" initiative, announced by Chairman Gilbert Grosvenor at a November 9 press conference.

During the press conference, Chairman Grosvenor announced the convening of a National Forum on Nonpoint Source (NPS) Pollution to advance sustainable watersheds. For only the second time in their history, the NGS released a special issue of their magazine: This issue focused entirely on water pollution. NGS has also produced radio and television specials on water issues.

The first meeting of the NPS Forum's Blue Ribbon Panel is currently scheduled for late January 1994. Three Governors, at least seven corporate chief executive officers (CEOs), and several nonprofit CEOs will attend the meeting. The Secretary of Agriculture and Administrator Browner have both been invited to be on the Blue Ribbon panel. For more information, contact Carl Meyers at (202) 260-7040.

Midwest Flood Public Health Committee: The Water Workgroup and Flood Monitoring Task Force at EPA assisted the U.S. Department of Agriculture's Public Health Committee in drafting a proposal to perform a systematic evaluation of private wells in states affected by this summer's Midwest floods. The committee will submit the proposal to the Federal Emergency Management Agency for consideration for funding. The proposal calls for a one-time sampling effort at 5,600 private wells for bacteriological and nitrate analysis. Wells from every county in each state will be tested, with those from non-

flooded counties serving as a control. The study is to determine whether groundwater contamination due to the flood is a local or regional health concern, and if corrective measures are warranted. The Centers for Disease Control is leading this effort. For more information, contact Mary Belefski at (202) 260-7061.

Oceans and Coastal Protection Division (OCPD)

Delaware Estuary Program Monitoring Plan Workshop: On October 19, OCPD staff participated in the Delaware Estuary Program monitoring workshop, in Wilmington, Delaware. Participants also included representatives from the states (DE, NJ, and PA), the U.S. Fish and Wildlife Service, the U.S. Geological Survey, the Soil Conservation Service, industry, and environmental organizations. The purpose of the workshop was to develop the foundation for the Comprehensive Regional Monitoring Plan which is an integral part of the Comprehensive Conservation and Management Plan. To accomplish this, the group addressed the following issues: (1) the geographic scope of resources to be managed; (2) information needs/monitoring objectives; and (3) measurement parameters. The group plans to have a monitoring plan completed by January 1994. For more information, contact Joe Hall at (202) 260-9082.

Final New York Bight Restoration Plan (NYBRP): The final Report to Congress on the NYBRP was submitted to the Office of Water in October for transmittal to the Office of Management and Budget for review. The Report completes the requirements of the Marine Plastic Pollution Research and Control Act of 1987. It describes early actions and recommendations to address floatable debris, pathogen contamination, toxics, nutrients and organic enrichment, and habitat loss and degradation in the Bight. For example, a program of surveillance and capture has successfully reduced beach closures due to debris. A long-term program to address floatables has also begun, including combined sewer overflow abatement strategies and the purchase of skimmer vessels to collect debris. Additional efforts to protect the Bight will continue through the New York-New Jersey Harbor Estuary Program. For more information, contact Ruth Chemerys at (202) 260-9038.



Seminar on 106-Mile Site Monitoring Program: From October 25 to 28, OCPD staff sponsored a technical seminar in Stony Brook, New York, on the results of a monitoring program at the 106-Mile Sewage Sludge Disposal Site. The 106-Mile Site monitoring program was a statutory requirement of the Ocean Dumping Ban Act

(ODBA) that required EPA and NOAA to monitor the effects of sewage sludge dumping at the Site. This seminar brought together the scientists who worked on the program to monitor the fate and impacts of sewage sludge dumping. For more information, contact Dave Redford at (202) 260-9179.

Calendar Highlights

December

6-8 **2nd Annual Region 7 Nonpoint Source Workshop**, Kansas City, KS. Contact Julie Elfving at (913) 551-7475.

9 **2nd Annual Fertilizer Research and Education Conference**, Davis, CA. Contact: Jacques Franco, CDFA, 1220 N St., P.O. Box 94281, Sacramento, CA 94271-0001.

11-15 **55th Midwest Fish and Wildlife Conference - New Agendas in Fish and Wildlife Management: Approaching the Next Millennium**, St. Louis, MO. Contact: Wayne Porath, MO Dept. of Conservation, 1110 S. College Ave., Columbia, MO 65201. (314) 882-9880.

13-14 **Integrated Resource Management and Landscape Modification for Environmental Protection**, Chicago, IL. Contact: ASAE, 2950 Niles Road, St. Joseph, MI 49083-9659. (616) 429-0300.

31- Jan. 2 **2nd Thematic Conference on Remote Sensing for Marine and Coastal Environments: Needs, Solutions, and Applications**, New Orleans, LA. Contact: ERIM, Marine Management Conference, P.O. Box 134001, Ann Arbor, MI 48113-4001. (313) 994-1200 ext. 3234. FAX: (313) 994-5123.

January

10-12 **Pacific Salmon and their Ecosystems**, Seattle, WA. Contact Beverly Gonyea, College of Forest Resources, AR-10, University of Washington, Seattle, WA, 98195. (206) 543-0867. FAX: (206) 685-0790.

14-15

Alabama Environmental Partnership Conference, Birmingham, AL. Contact Legacy, Inc., P.O. Box 3813, Montgomery, AL 36109, (205) 250-2415 or (205) 271-7938.

27-28

International Symposium on Remote Sensing and GIS. Contact Vern Singhroy, Canada Centre for Remote Sensing, 588 Booth St., Ottawa, Ontario, K1A 0Y7. (613) 947-1215, FAX: (613) 947-1385.

February

15-19

Biodiversity of the Indian River Lagoon, Fort Pierce, FL. Contact Derek Busby, Indian River Lagoon NEP, 1900 So. Harbor City Blvd., #109, Melbourne, FL 32901. (407) 984-4950.

16-18

Ecosystem Management - What Is It and How Do We Achieve It? Annual Meeting of the Oregon Chapter of the American Fisheries Society, Sunriver, OR. Contact Bob Hughes, METI, 200 SW 35th Street, Corvallis, OR, 97333. (503) 754-4516, FAX: (503) 754-4716.

17-18

North Carolina Stormwater Management Conference, Asheville, NC. Contact Bill Eaker, Land-of-Sky Regional Council, 25 Heritage Dr., Asheville, NC 28806. (704) 254-8181.

23-25

Mid-Atlantic Highlands Area: Environmental Monitoring and Assessment Conference, Hershey, PA. Contact Susan Brager, Eastern Research Group, Inc. 110 Hartwell Ave., Lexington, MA. 02173-3198. (617) 674-7347, FAX: (617) 674-2906.