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*Nonpoint Source*

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 **EPA** *News-Notes*

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**A Commentary. . .**

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*Communicating Is Becoming Increasingly Popular*

We don't want to sound platitudinous, but...it seems to us that communicating is becoming increasingly popular as more and more State and local water quality agencies publish newsletters to let their publics know what is going on.

For example: the Puget Sound Water Quality Authority publishes *Soundwaves* to keep 300 local governments, State officials and thousands of local citizens aware of its busy and vital agenda. EPA Region VIII's Nonpoint Source Office has issued its first newsletter to inform its six-state Region. The State of Louisiana's Water Quality Program has started *Nonpoint News*, a bimonthly newsletter for members of their Interagency Committee. And so it goes. There are lots more.

We consider this a healthy trend. It reflects the considerable amount of new action out there about which those involved with, and affected by NPS issues, should know. For this very reason, the decision was made to launch *News-Notes*, whose purpose is to inform a broad audience about a new national program that tackles a very old problem, the control of nonpoint sources of water pollution.

NPS solutions are more often found in changing citizens' attitudes and behavior patterns rather than in the familiar construction of sewage treatment plant facilities. Citizen participation, involvement, and commitment are key words in the NPS control efforts of State and local governments—this is where the real action is, about which we all must communicate.

This issue of *News-Notes* features an inventory of State and local water quality information and education materials. We want to know about publications and videos you have produced... communications materials designed to encourage public participation in decisions for a cleaner, more healthy environment. Let's pass along information about successful awareness initiatives to those embarking on NPS control programs. See the center pull-out section for more information on our study and how you can help. Thanks.

And, oh yes, if your water quality program has a newsletter, please put us on your mailing list so we can read about your activities and successes in all areas. Thanks again.

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**Headquarters Notes**

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*Seven State NPS Management Programs Identified as Commendable*

The NPS Management Programs of seven States have been recently recognized for their sound, dynamic features. "These commendable selections illustrate significant achievements in the evolving approaches that States are taking to nonpoint source management," commented Stu Tuller, Nonpoint Source Management Section Chief of the Office of Water's Assessment and Watershed Protection Division, U.S. EPA.

Seven States  
(Continued)

States are looking forward to receiving their first Federal grants under Section 319, NPS Federal funding, made available for FY 1990 by the last session of Congress. The Congressional appropriation requires EPA to make awards to the States by March 1, 1990.

Highlights of the seven State NPS Management Programs follow:

### **Louisiana**

Susan Alexander, EPA's Region VI NPS Coordinator, cited Louisiana's program as having significantly evolved over the past year to the point of leadership in State NPS management.

Alexander listed four specific State actions and newly instituted processes as instrumental in Louisiana's steady improvement:

- The State has fully begun to utilize its NPS Interagency Coordinating Group (ICG) to help the Department of Environmental Quality (DEQ) set priorities for water quality projects for most agencies. The ICG consists of thirteen State and Federal agencies with land and/or water management responsibilities. It aims to ensure that ongoing programs within each agency pursue water quality protection to the maximum extent possible. This cooperative effort reduces duplication of effort or funding, as well as inconsistencies.
- The State actively integrates NPS considerations into its ongoing DEQ water quality programs. For example:
  - exploring the establishment of water quality standards to help to control the overuse of agricultural chemicals such as fertilizers and pesticides;
  - adding special conditions on side slopes when granting Section 404 permits and Section 401 certifications;
  - implementing a cooperative ground-water effort between USDA and DEQ in Tangibahoa Parish to prevent ground-water contamination from manure lined waste lagoons; and
  - revamping long-term water quality trend monitoring stations both 1) to sense changes in water quality due to NPS/BMP installation in target areas, and 2) to cover new State-suspected NPS problem areas based on evaluation, but for which monitoring data are lacking. Additional monitoring for BMP effectiveness in targeted areas is being partially funded through a 319(h) grant. The new problem verification monitoring protocols are being partially funded under Section 106 of the Clean Water Act.
- In developing its NPS management approaches, DEQ has solicited cooperation from a number of State and Federal agencies with NPS management capabilities. Several joint/cooperative projects will soon be initiated:
  - a special wetlands demonstration project;
  - a silviculture NPS management demonstration;
  - an urban NPS education project; and
  - an agricultural demonstration for new rice farming BMPs in the Mermentau Basin.
- "Most importantly," commented Alexander, "the State of Louisiana has committed, through its management program, to evaluate each project and program for its effectiveness in protecting/enhancing water quality in the State. The evaluation of NPS

*Seven States  
(Continued)*

education efforts, for example, will involve follow through to see if people changed their behavior due to the education effort." She also indicated that programs will be modified if proven to be ineffective.

In summarizing, Alexander called Louisiana's NPS Management Program "multi-faceted." She said that "their operations are demonstrative of an effective NPS lead agency. They set an excellent example of the success that such an approach to water quality management can have."

*[For more information contact: Jan Boydstun, NPS Coordinator, Department of Environmental Quality, PO Box 44091, 625 N. 4th Street, Baton Rouge, LA 70804-4091. Phone: (504) 342-6363.]*

### **South Dakota**

"The South Dakota Nonpoint Source Management Program has evolved into a strong implementation-oriented program since the early days of 208 water quality management planning," observed Roger Dean, Region VIII Nonpoint Source Coordinator. "This program development is a result of the proactive attitude and the implementation-results orientation of State staff."

- The South Dakota Statewide Section 208 Management Plan was one of the first to define and prioritize individual watershed NPS implementation needs. For example, a major study of the Big Sioux aquifer under Section 208 resulted in USDA funding of the Oakwood-Lake Poinsett Project under the rural Clean Water Program (RCWP). It also provided a major \$1.2 million monitoring effort for agricultural chemicals in ground water under the subsidiary RCWP Comprehensive Monitoring and Evaluation Program (CM&E).
- The State has transferred \$200,000 of its Section 201(g)(1)(B) funds to establish a full time project office to be used for a Statewide NPS Information & Education project.
- The broad coalition represented by a 26-member South Dakota NPS Task Force is insuring coordinated planning efforts in all NPS-related efforts, including USDA's new Hydrologic Unit Planning Process and its Program Neutral Planning Process. The Task Force will also assure that Federal land will be brought into or remain in compliance with South Dakota water quality standards and designated beneficial uses through implementation of EPA's Federal Consistency Guidance and Executive Order 12088.

Overall, the State has a consistent and unified approach to the control of NPS pollution on all State, private and Federal lands.

*[For more information contact: Duane Murphy, Clean Lakes/Nonpoint Administrator, Division of Water Resource Management, Joe Foss Building, 523 E. Capitol, Pierre, SD 57501. Phone: (605) 773-4216.]*

In a December 27, 1989, letter to EPA Administrator William K. Reilly, Assistant Administrator for Water LaJuana S. Wilcher cited the NPS Management Programs of five additional States as representative of "...the most exemplary nonpoint source programs...in terms of comprehensiveness, overall quality and effectiveness." She continued by observing that "[o]ther programs in other States around the country have individual strengths, however, and we are constantly promoting technology transfer among the State programs to draw on these strengths and to build better programs nationally."

Seven States Assistant Administrator Wilcher's letter emphasized the following information on each  
(Continued) program:

### **Arizona**

Arizona's program is notable for its strong and effective regulatory approach to agriculture in an arid environment (see *News-Notes*, October, 1989, for a related article).

[For more information contact: Carol Russell, Manager, NPS Program, Arizona DEQ, 2655 E. Magnolia, Suite # 2, Phoenix, AZ 85032. Phone: (602) 392-4066.]

### **Idaho**

Idaho's program has four outstanding features: the quality of its nonpoint assessment; its groundbreaking work linking BMPs to water quality standards; its highly progressive biological/habitat monitoring program; and its effective agriculture cost-share program.

[For more information contact: Al E. Murrey, Chief, Water Quality Bureau, Division of Environmental Quality, Statehouse, 450 W. State Street, Boise, ID 83720. Phone: (208) 334-5860.]

### **Minnesota**

Minnesota achieves a comprehensive NPS control program by approaching NPS problems on a hydrologic unit basis, thereby addressing and accounting for all principal sources contributing to the problem. Implementation is carried out through the Clean Water Partnership (CWP) Program, a State cost-share program which assists in funding a full range of NPS controls.

[For more information contact: Wayne P. Anderson, Head, NPS Unit, MN Pollution Control Agency, 520 Lafayette Road, St. Paul, MN 55155. Phone: (612) 296-7323.]

### **North Carolina**

North Carolina has fashioned an impressive NPS Management Program through comprehensive NPS assessment and extensive public and interagency coordination, as well as through its ability to focus Federal, State, local and public interest programs on priority problem areas and to generate financial, political and public support for implementation.

[For more information contact: Beth McGee, NPS Program Coordinator, Division of Environmental Management, PO Box 27687, Raleigh, NC 27611. Phone: (919) 733-5083.]

### **Vermont**

Vermont was one of the first States to establish a Statewide, broadly representative Nonpoint Source Advisory Committee with members from key State agencies, selected State offices of Federal agencies (e.g. Soil Conservation Service and Forest Service), user groups such as fishermen and boaters, environmental groups and the public. The progressive Advisory Committee has ensured that the assessment process include data and information from all sources, that the Management Program's final priorities consider those of all interests, and that all available technical and financial resources be tapped and utilized in the implementation phase.

[For more information contact: Stephan Syz, Chief, Water Resources Planning, Department of Environmental Conservation, Building # 1, 103 South Main Street, Waterbury, VT 05676. Phone: (802) 244-6951.]

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This brief roundup has presented just a small snapshot of noteworthy State NPS Management Programs. It is intended to illustrate by example, not to serve as a comprehensive treatment. When Section 319 grant awards have been completed, *News-Notes* will report on the priority actions that the States will undertake during FY 1990, with Federal assistance.

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## *New Water Conference Available on ORD Electronic Bulletin Board*

A Water Conference feature will be a part of the new electronic bulletin board system (BBS) recently inaugurated by the EPA Office of Research and Development. The BBS is intended to foster communication and technology transfer among the Regions, ORD Laboratories and various Headquarters offices.

The Water Conference will be a mini bulletin board within the main BBS. It will contain information on EPA's water-related regulations and research projects, upcoming meetings, regulation development schedules, research initiatives, and other items of common concern.

The Conference is open to anyone with an interest in water regulations and research. To access the BBS, a computer, modem and communications program such as CrossTalk or Smartcom are necessary. Any system capable of communication at 1200 or 2400 baud, 8 data bits, 1 stop bit, and no parity will work. The data/modem telephone number is (301) 589-0046. The voice number, if you have any trouble, is (301) 589-8368.

*[For more information contact: Burnell Vincent, U.S. EPA (RD-672), Washington, DC 20460. Phone: (FTS/202) 382-7891.]*

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## **Notes From Agriculture**

### *New USDA Water Quality Efforts Provide Challenges and Opportunities to State NPS Managers*

State water quality program managers will have the opportunity to work with U.S. Department of Agriculture (USDA) agencies as they implement their 1990 water quality projects and select additional high priority watersheds to include in USDA's 1991 water quality efforts, as a part of USDA's accelerated effort to support the President's 1990 Water Quality Initiative.

USDA agency project implementation provides direct cost-sharing and technical assistance to farmers and local conservation districts. While not required under current USDA approaches, selected project areas can be consistent with State NPS Assessment Reports or Management Programs prepared under Section 319 of the Clean Water Act.

In announcing its FY 1990 program, USDA indicated it will work closely with State and local agencies to solve identified and prioritized (water quality) problems on all projects. The USDA projects include 37 selected Hydrologic Units and 8 designated Demonstration Projects in 38 States, as well as 39 newly-authorized Water Quality Special Projects in 28 States.

These water quality projects will be implemented cooperatively by USDA's Agricultural Stabilization and Conservation Service (ASCS), its Extension Service (ES) through State Cooperative Extension Services (CES), and its Federal Soil Conservation Service (SCS).

The three types of projects have different missions:

- Hydrologic Unit projects will expand the cadre of trained technical specialists and improve the educational methodology to assist farmers and ranchers to adopt "off-the-shelf" technology to prevent contamination and protect water quality;
- Demonstration Projects, for which ASCS will provide some cost-sharing to encourage participation, will show that farmers are willing to adopt newly developed water quality measures to manage agricultural uses of nutrients and pesticides more effectively, thereby minimizing surface and ground water loadings of agricultural chemicals and wastes; and

USDA's Water  
Quality Efforts  
(Continued)

- Water Quality Special Projects will allow ASCS to share costs with farmers to install water quality BMPs in project areas.

**USDA FY '90 Funds Total Nearly \$32 Million**

ASCS will provide cost-sharing of some \$7 million for Hydrologic Unit Area Projects, and almost \$900,000 for Demonstration Projects to individual farmers for water quality improvements which will be accomplished by installing best management practices (BMPs) such as animal waste control facilities, sod waterways, water management systems, filter strips, and integrated crop management.

In addition, ES and CES are providing more than \$5.2 million in educational assistance to farmers, including specific recommendations on nutrient and pesticide use.

SCS will provide \$11.3 million in technical assistance, including direct support for increased SCS State and conservation district staffing.

The Economic Research Service (ERS) will provide staff support in the amount of \$150,000 to evaluate the cost-effectiveness of alternative management practices.

\$7.6 million is scheduled for USDA participation in regional initiatives, such as the Chesapeake Bay program.

According to Daniel A. Smith, Water Quality Program Manager with SCS in Washington, DC, SCS will allocate \$80,000 per project in 1990 for technical assistance. ES is allocating \$105,000 per Demonstration Project and \$45,000 per Hydrologic Unit, says Fred N. Swader, the agency's National Program Leader for Water Resources, also in Washington, DC.

ASCS will, additionally, spend \$11.9 million to carry out the 39 Water Quality Special Projects through the State and county offices of ASCS, which will administer the Special Projects with assistance from CES and SCS.

**FY 1990 Water Quality Projects Approved by USDA, by State**

<i>State</i>	<i>Hydrologic Unit Projects</i>	<i>WQ Special Projects</i>	<i>Demo Projects</i>
AL	Sand Mtn/Lake Guntersville	Big Prairie Cr.	
AZ	Casa Grande/Coolidge		
AR	Moore's Creek	Beaver Lake	
CA	W. San Joaquin Valley		Sacramento Valley
CT	Housatonic River		
DE	Inland Bays Watershed	Nanticoke	
FL	Middle Suwannee River		Lake Manatee
GA		Piedmont	
IA	Union Grove and Black Hawk	Croydon Lake	
IL	Illinois River Sands	Cedar La	
IN	Upper Tippacano	LaGrange Co. Lake	
KS		Miola Lake	
KY		Mammoth Cave Area	
LA	Bayou Queue De Tortue	Tangipahoa River	
ME	Long/Cross Lakes	Kenduskeag Stream; 25 Mile River	
MA	Buzzards Bay	Lower Deerfield River	
MD		Bohemia-Sassafrass Rivers; Chincoteague and Sinepuxent Systems	Monocacy River

<i>USDA's Water Quality Efforts (Continued)</i>	MI	Sycamore Creek	Clam River	
	MN	St. Peter/Prairie Du Chien		Anoka Sand Plain
	MS	Tangipahoa River	Tenn-Tom.	
	MT	Godfrey Creek		
	NE	Elm Creek	Quad Co; Southern Nuckolls	Mid-NE Demo
	NH	Great Bay		
	NM	Dona Ana/Sierra		
	NY	East Sidney Lake	Cattaraugus Creek; Multi-County Chesapeake Bay/ Susquehanna River	
	NC	Goshen Swamp		Herrings Marsh Run
	ND	Bowman/Haley	Renwick	
	OH	Indian Lake	Clark Lake; Upper Darby; Upper Vermillion	
	OK	Battle Branch		
	OR	Ontario Area	Coquille River; Nestucca River Potomac-Juniata	
	PA			
	PR	Lake Loiza		
	RI	Pawcatuck	Narragansett Bay	
	SC	Camping Creek	Clarendon-Sumter; Greenwood-McCormick	
	SD	Richmond Lake		
	TN	N. Fork & Fall Creek		
	TX	Upper N. Bosque		Seco Creek
UT	Little Bear River			
VT	Lower Missisquoi	Lower Lake Champlain		
VA		Lower Nottaway and Blackwater Rivers; Rockingham County		
WA		Kamm Creek; So Fork of the Palouse River		
WV	Greenbriar River			
WI	Plover/Whiting Well Head	Lake Neshonoc	E. River	
WY	Ocean Lake	Little La Crosse River		

#### **Selection of 1991 Water Quality Initiative Projects**

Jim Meek, EPA Liaison with the USDA Science and Education Office in Washington, says it is important that State water quality staff participate actively in USDA committees during the selection and implementation stages of the 1990 and 1991 projects.

Dov Weitman, Acting Chief, EPA's Nonpoint Source Control Branch, suggests that State water quality agencies and other lead NPS agencies work closely with State soil and water conservation agencies to promote Statewide consistency in addressing agricultural impacts on water quality.

"Together these State agencies can propose USDA water quality projects that address State water quality problems as identified in the States' 319 process. This will help USDA assure that their projects further the States' clean water statutory objectives to reduce levels of NPS pollution in identified waters in order that they might attain or maintain applicable State water quality standards," Weitman said.

USDA's Water  
Quality Efforts  
(Continued)

[For more information contact: Gerald R. Calhoun, Water Quality Liaison, USDA/ES, S-3344, Washington, DC 20250. Phone: (FTS) 447-4946, (202) 447-4946; Daniel A. Smith, Water Quality Program Manager, USDA/SCS, Water Quality Division, P.O. 2890, Washington, DC 20013-2890. Phone: (FTS) 382-8524, (202) 382-8524; Vincent Grimes, Chief, Conservation and Automation Branch, USDA/ASCS, P.O. Box 2415, Washington, DC 20013. Phone: (FTS) 447-7333, (202) 447-7333.]

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## SCS Water Quality Technology Development Staff Formed

The Soil Conservation Service (SCS) has formed a National Water Quality Technology Development Staff (NWQTDS) to provide national SCS staff leadership for water quality and quantity technology development. Located at the SCS South National Technical Center in Ft. Worth, TX, NWQTDS develops technical methodologies for planning and implementing resource management systems on farms and ranches. Such methodologies and systems are to be created either as a result of various Federal and State laws, or at the request of a landowner.

Led by Staff Head Stephen B. "Bernie" Owen, NWQTDS will work with all disciplines and program staffs within SCS to develop the technical methodologies. The diverse composition of NWQTDS includes the following: a staff head, resource conservationist, geologist, agricultural engineer, soil scientist, nutrient specialist, agricultural economist, pesticide specialist, limnologist, computer specialist and secretary.

NWQTDS carries out the following general functions:

- developing and transferring to SCS national headquarters and the Technical Centers new and existing water quality and quantity technology;
- encouraging and supporting appropriate water quality and quantity research;
- acting as a liaison and coordinator with research institutions, universities, State and other Federal agencies, and private industry to collect information on water quality effects resulting from agricultural activities and potential remedial land treatment practices;
- coordinating development and sharing information with SCS Technical Centers on new technology related to water quality and quantity;
- providing technology transfer to all levels of SCS through available techniques, tools, and channels; and
- providing support to SCS Technical Centers by training personnel in the areas of water quality and quantity.

According to Don W. Goss, Soil Scientist, the NWQTDS mission frequently involves "training the trainers" to pass on the latest in technology development.

[For more information contact: Stephen B. "Bernie" Owen, Staff Head, SCS/NWQTDS, P.O. Box 6567, Ft. Worth, TX 76115. Phone: (817/FTS) 334-5422.]

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## USDA Working Group Has Water Quality Oversight Responsibility

The U.S. Department of Agriculture (USDA) has established a policy-level Working Group on Water Quality to improve the internal coordination of Department water quality programs.

The Working Group has been charged with three specific tasks: 1) coordinating all Department policies and programs relating to water quality activities; 2) developing and recommending strategies for carrying out these activities; and 3) providing advice and

USDA Working Group guidance on water quality issues to the Secretary of Agriculture's Policy and Coordination Council, which is composed of all USDA sub-cabinet officials.  
(Continued)

Dr. Harry Mussman, Deputy Assistant Secretary for Science and Education, chairs the Working Group which will include representatives of the Assistant Secretaries for Marketing and Inspection, Natural Resources and Environment, and Economics, as well as each of the USDA agencies involved in water quality programs.

On January 25, 1990, Secretary of Agriculture Clayton Yeutter described the formation and mission of the Working Group before the U.S. Senate Committee on Agriculture, Nutrition, and Forestry: "The primary purpose of this group is to coordinate all Departmental water quality issues and activities, including research, information, education, technical assistance, financial issues, and regulatory issues. The Working Group's oversight responsibilities include reviewing water quality policies and programs to assure their effectiveness, appropriateness, and adequacy."

[For more information contact: Jim Meek, Special Assistant for Water Quality to the Assistant Secretary for Science and Education, USDA, 217-W Admin. Bldg., Washington DC 20250. Phone: (FTS/202) 447-5979.]

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## **Notes from EPA's Regions**

### *EPA Region I Co-Sponsors Estuary Ecosystem Research Program*

Researchers working in Waquoit Bay, Massachusetts were recently awarded a 4-year, \$2 million Land Margin Ecosystem (LMER) Grant to investigate how changes in the landscape mosaic associated with development in the Waquoit Bay watershed affect the delivery of ground-water-carried contaminants to the Bay.

One of the key objectives of the project will be to provide a scientific basis for the development of land use controls around the Bay related to water quality considerations.

Uniquely, the project will be jointly funded through EPA, NOAA and the National Science Foundation (NSF). NOAA, through its Marine and Estuarine Management Division, will provide approximately \$100,000 per year. EPA, through the Region I Water Division and the Office of Marine and Estuarine Protection at Headquarters, plans to provide \$250,000 per year. NSF will cover any shortfalls.

The research will occur at the Waquoit Bay National Estuarine Research Reserve, located between the Cape Cod, Massachusetts towns of Falmouth and Mashpee on Vineyard Sound.

The Waquoit Bay watershed includes five sub-units, each with different development densities. This density differentiation allows the researchers to compare ground-water loadings and review the effects of varying dosages in the waters along the shore, prior to more general mixing in the Bay.

The investigators will particularly focus on: 1) the pathways by which nutrients are transported through ground water into the Bay; and 2) the chemical transformation of nutrients in the ground water and nearshore marine waters.

Two features of the development process increase nutrient levels in the Bay. First, overdevelopment along the shore brings with it more septic systems, whose leaks cause higher nutrient loadings to Bay ground water. Second, clearing for houses and other development leaves fewer trees to take up rain-borne nutrients, resulting in higher nutrient runoff into the Bay.

Region I  
(Continued)

"Eutrophication, or over-enrichment, of bays, estuaries and nearshore waters is perhaps the largest, and most difficult to address, marine water quality problem along the east coast," observed Steve Bliven of Massachusetts Coastal Zone Management, Executive Office of Environmental Affairs. Bliven praised the study, noting that it "should provide technical bases for septic system and development setbacks, nutrient loading bylaws, and watershed density zoning formulae. As such it will begin to allow us to zone land use based on water quality goals for adjacent water bodies."

EPA Region I will supply funds to the Cape Cod Regional Planning Agency to produce a Geographic Information System that will use data from this research project to analyze density zoning and other land use controls.

To integrate the work, which is being conducted by many researchers from various disciplines, three models will be developed. They include:

- A hydrological model to describe how nutrients are transported in ground water and delivered to the Bay. This model, coupled with development density information, will establish loading rates.
- A hydrographic model that will explore the flushing and mixing of the Bay by ocean and river water to define the nutrient dilution pattern.
- An ecological model using input from the two preceding models to summarize the consequences of nutrient overloading on the Bay ecosystem.

The researchers will examine in depth one biological process—the impact of nutrient-boosted macroalgae growth on species diversity and abundance. They will also explore the effects of the macroalgae.

[For more information contact: Steve Bliven, Massachusetts Coastal Zone Management, Executive Office of Environmental Affairs, 100 Cambridge Street, Boston, MA 02202. Phone: (617) 727-9530; Dr. Ivan Valiela, Principal Investigator, Boston University Marine Program, Marine Biological Lab, Woods Hole, MA 02543. Phone: (508) 548-3705, ext. 515; Christine Gault, Program Director, Waquoit Bay National Estuarine Research Reserve, P.O. Box 92W, Waquoit, MA 02536. Phone: (505) 457-0495; Rosemary Monahan, EPA Region I (WQE-1900), JFK Federal Building, Boston, MA 02203. Phone: (617) 565-3518; Bill Thomas, MEMD/NOAA, 1825 Connecticut Ave., NW, Suite 714, Washington, DC 20235. Phone: (202) 673-5126.]

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## **Notes From The States**

### *Idaho Antidegradation Controversy Resolved*

EPA notified the State of Idaho in 1985 that existing Idaho statutes and regulations did not meet the antidegradation requirements of the Federal Water Quality Standards Regulation (40 CFR 131), and set May, 1986 as the deadline for Idaho to come into compliance.

EPA adopted this Water Quality Standards Regulation on November 8, 1983. The regulation provides that State water quality standards should be developed for each water body in a State, or portion thereof. These standards are to describe designated beneficial uses for such waters, the criteria necessary to protect those uses and an antidegradation policy which provides that existing water uses shall be maintained and protected.

Controversy surrounded Idaho's attempts to bring its water quality standards and antidegradation policies into conformity with Federal regulations, as the protection of high quality waters from nonpoint sources of pollution is basic to maintaining existing water uses.

Idaho  
(Continued)

The next three years saw debate and argument, and laws passed and vetoed, but no final resolution. Finally, in April, 1988, Governor Cecil D. Andrus established a small negotiating committee made up of environmental and industrial interests, and called in the Northwest Renewable Resources Center (NRRC) to mediate.

NRRC, in their winter 1988 newsletter, summed up the situation they found upon entering the conflict:

*The story was a familiar one. Parties representing government, industry, tribes, fishermen and conservationists had spent hundreds of hours trying to reach agreement on a natural resource issue - a water antidegradation policy. For every step forward, two steps backward soon followed. All sides accused the others of bad faith and dirty tricks. Legislative solutions had been passed twice, only to be vetoed by two different governors. A lawsuit on behalf of the parties was filed in Federal District Court in an effort to resolve the issue.*

Just before the mediation process began, Governor Andrus had vetoed an industry-sponsored bill which he felt gave inadequate protection to Idaho's waters. He had also negotiated an agreement with the Sierra Club Legal Defense Fund to stay their lawsuit in Federal court until October, 1989 to allow for further negotiations—this time with the assistance of NRRC.

Frank Gaffney, the NRRC project director who led most of the mediation sessions, described the Idaho experience at EPA's October, 1989 National Symposium on Water Quality Assessment at Fort Collins, Colorado. Gaffney told the Symposium that at the outset of the mediation:

*The Governor stated that if either side failed to negotiate in good faith or withdrew from the table, he would implement the other side's regulations. To industry, this was the vilest of shotgun marriages.*

Gaffney reported that little progress was made over the first ten weeks, during which the NRRC tried, with little success, to demonstrate to the timber industry negotiators the advantages of resolving the antidegradation issue at the table. In late June, industry negotiators gave NRRC assurances that they were "ready to give it the necessary effort." Gaffney felt that "several factors [came] together at the same time" to assist industry in coming to this decision:

- NRRC Staff held a very productive meeting with the Intermountain Forest Industry Association Board, an interstate group, addressing their concerns about the Idaho process. At this meeting, NRRC agreed to request from Governor Andrus for a 30 day delay in the dual rule-making process he had stipulated, in order to create a "neutral window" for intense negotiations.
- The first annual review of Washington State's forest practices regulations, in which NRRC played a major role, was held in late June. "Its positive outcome help[ed] to ease concerns in Idaho."
- Agriculture and mining interests in Idaho were close to "resolving their differences at the table, and it was now in their interest to see the negotiations pursued by timber to the end or they would lose the accommodations which had already been hammered out."
- "All of the negotiators had become better acquainted with and more comfortable with NRRC mediators and were convinced that they brought no preconceived answer with them."

A three day "lockup session" with all parties was held in Sun Valley in mid-July followed by two more sessions in Boise in early August. An agreement in principle was reached August 18.

Idaho  
(Continued)

The highlights of the Idaho antidegradation agreement cover five essential points:

- **Basin Area Meetings (BAMs)**—Biennial meetings will be held in each of the six water quality regions in Idaho to discuss the current status and trends in water quality and fish habitat. The meetings will be chaired by the Governor or his designee and sponsored jointly by appropriate State and Federal agencies, tribes, industry and user groups.
- **Stream Segments of Concern**—The public will nominate stream segments which are felt to need heightened levels of water quality protection beyond current regulations. The sponsoring agencies and/or organizations will attempt to reach consensus on areas to be designated stream segments of concern. If they cannot reach consensus, the governor will make the decision. Best Management Practices (BMPs) in stream segments of concern may exceed those required by the existing regulations.
- **Coordinated Monitoring Program**—The State Water Quality Agency was directed to develop a coordinated NPS monitoring plan. An oversight committee will be established to assist agencies in coordinating existing water quality monitoring activities and to identify areas where additional monitoring is required.
- **Outstanding National Resource Waters**—A process was agreed to for nominating, approving and listing outstanding national resource waters.
- **Industry Specific Provisions**—Provisions specific to the mining, timber and agricultural industries were established to implement the antidegradation policy. BMPs remain the primary method of protecting water quality.

NRRC reported that the Idaho Sportsman's Coalition's Barry Ross said of the agreement: "It's not something any of us wanted, but it probably more than we expected." Jack Peterson of the Idaho Mining Association commented that the "reasons I think that mediation is valuable is that it tries to resolve an issue to the benefit of all of the negotiating parties rather than to the benefit of one and to the detriment of the other."

Now that the agreement in principle has been reached, the negotiators, the groups they represent, and the State and Federal agencies are working together to implement it. As Governor Andrus observed: "This [agreement] truly marks a new day for Idaho. The successful resolution of this issue provides us with a model for future cooperation and mutual understanding."

*[For more information contact: Al E. Murrey, Chief, Water Quality Bureau, Division of Environmental Quality, State House, 450 W. State Street, Boise, ID 83720. Phone: (208) 334-5860; or Frank Gaffney, Project Director, Northwest Renewable Resources Center, 1133 Dexter Horton Building, 710 Second Avenue, Seattle, WA 981104. Phone: (206) 623-7361.]*

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## Local Notes

### *A Local Success Story From Rural Kansas*

News-Notes received the following dispatch from Wayne Bossert, manager of the Northwest Kansas Groundwater Management District No. 4:

"Our local Ground Water Management District has over the past 2.5 years operated an on-going abandoned well plugging program designed to locate and remediate all abandoned wells. We have field inspected to date 2,121 abandoned wells within our district boundaries and have required their owners to properly plug, cap or reconstruct them. As of November 30, 1989, 56% (1,182 wells) of these wells have been safely remediated while the remaining wells are still within our active tracking system.

Rural Kansas  
(Continued)

"Over the past 14 months our program has been locating abandoned wells at a rate of just over 4 wells per workday and has been remediating them at a rate of just over 2.25 per workday. Of the total 2,121 wells handled, our program has located 85% of these while the remaining 15% have been voluntarily turned in by the well owners for instructions concerning remediation.

"We have also, since only late in the program, identified 69 abandoned wells in the field which had been recently plugged—we assume as a result of our program."

[For more information contact: Wayne Bossert, Northwest Kansas Groundwater Management District #4, P.O. Box 905, Colby, Kansas 67701-0905. Phone: (913) 462-3915.]

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## Volunteers Play Key Role in Tribes' Water Quality Program

A diverse group of people have joined together as volunteers to achieve a common goal—improving the water quality in Washington State's Stillaguamish River.

Through the Tulalip Tribes Volunteer Water Quality Monitoring Program, approximately 200 volunteers, including students from local schools, tribal members, sport anglers, local residents, environmentalists and others have been trained to perform one or more of the many tasks related to the water monitoring program. By channelling their concern for the environment into a working initiative, the volunteers in turn provide valuable assistance to tribal personnel. The water quality data collected from the Stillaguamish River will help to develop a comprehensive resource management plan for the river. Moreover, the volunteers receive technical training in field and lab work, and gain information about watershed issues.

The program is a joint venture of the Tulalip and Stillaguamish Tribes, the Stillaguamish Chapter of Trout Unlimited and the Pilchuck Audubon Society. While the program began two years ago under the direction of Tulalip Tribes Field Studies Coordinator Gino Lucchetti and Volunteer Coordinator Kit Paulsen, the State had previously designated the Stillaguamish River for Early Action watershed planning. A State Centennial Clean Water Grant funds the volunteer monitoring program.

In its operation, program volunteers and tribal workers collect water samples from several different locations along the course of the river and in the marine waters of Port Susan. The volunteers meet once a month to collect these water samples and analyze them at the Tulalip Tribes Hatchery lab for bacteria, nutrients, dissolved oxygen, temperature, ph, and other factors. The data helps to identify pollution problems that affect fish and wildlife throughout the watershed.

"This is an exciting project," said Lucchetti. "The program brings together a large, diverse group of participants who work together to identify the effects of pollution in the river."

Volunteer Richard Vanderhoff, a Boeing Aircraft Company engineer, and his wife Ann got involved with the program because of their concern for the water quality near their home at Port Susan. "Living near the water like we do I felt a real need to know what was in my water," Vanderhoff said. "My wife and I are concerned about the water quality in this region and felt we would like to do whatever we could to help clean it up and keep it that way"

In addition to the monthly sampling and testing meetings, volunteers like the Vanderhoffs are also on "alert" to provide assistance collecting and analyzing samples during storms, when river runoff is at its peak.

"Sometimes they do rout us out of bed in the middle of the night for storm sampling," Vanderhoff said. "But it's all for a good cause."

*Tribal-led Volunteers  
(Continued)*

Volunteer Coordinator Paulsen said the work performed by the volunteers is a key reason for the initial success of the program. "We can collect far more water samples for analysis with the volunteer assistance," Paulsen said. "The excellent quality of work provided by the volunteers allows us to build a larger, more detailed data base for watershed management uses."

Carol Jolly, Assistant Director for Water and Shorelands of Washington State's Department of Ecology, praised the Tulalip Tribes Volunteer Water Quality Monitoring Program for effectively building cooperation among so many of the area's residents. "The nonpoint source controls to be carried out in the Early Action watersheds are dependent on the kind of sound water quality information and broad involvement reflected in this very successful Tribal-led effort," she said.

*[For more information contact: Chuck Bandel, Northwest Indian Fisheries Commission, 519 1/2 Delta, Marysville, WA 98270. Phone: (206) 653-4622.]*

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## *NPS Pollution Control Program of the Lower Colorado River Authority of Texas*

The Lower Colorado River Authority writes to inform our readers that its NPS pollution program aims to control and prevent pollution from nonpoint sources affecting the Highland Lakes and Colorado River in central Texas. This program contains four essential elements: educational, regulatory, role model, and non-regulatory.

- The educational element provides the public with information on the significance and causes of NPS pollution, and what individuals can do to reduce the problem. Eight-hundred copies of the award-winning LCRA documentary film, "Pointless Pollution: America's Water Crisis," narrated by Walter Cronkite (see *News-Notes*, December, 1989), have been distributed in Central Texas. Each of the 111 school districts within LCRA's 43-county service area has received a free copy of the film along with LCRA's NPS brochure. The film is also being distributed nationwide, and will be aired for PBS affiliated stations in spring 1990.
- The regulatory aspect focuses on the Lake Travis Nonpoint Source Pollution Control Ordinance, enacted in December, 1989. The ordinance is "performance based," requiring that new development include controls such as holding/settling ponds or strips of trees and vegetation to remove 70-90% of the following pollutants: suspended solids (soil and debris), phosphorus (residue from fertilizers and animal waste) and oil and grease. The slope of the property to be developed determines the removal requirements for each pollutant. LCRA is preparing a technical manual providing aid on the design and implementation of NPS pollution controls.

The ordinance will not restrict builders' decisions concerning how they develop their property, as long as the pollution control requirements are met. Local zoning would govern use. The ordinance applies to all new construction development, including road building, excavating, the clearing of land and dredging. It does not apply to development already in place or underway, nor to construction of a single-family residence on a single-family lot.

The Texas Legislature gave LCRA the authority to enact such ordinances with enforcement powers that include:

- issuing a stop-work order;
- revoking permits;
- levying fines of up to \$10,000 per day; and/or
- taking court action to halt a project.

*Lower Colorado River  
(Continued)*

- The role model element requires LCRA facilities to control NPS pollution. Erosion controls are being installed during the construction of LCRA electric substations and electric transmission lines.
- The non-regulatory element requires LCRA water customers and lessees of LCRA properties to install NPS controls.

Collectively, these elements of LCRA's program prevent degradation of water quality from NPS pollution. The program also conserves soil resources by preventing erosion into reservoirs and streams, which in turn prolongs the storage capacity and life of these reservoirs.

The program also helps to maintain three key aspects of the central Texas economy: 1) fishable and swimmable reservoirs which provide a basis for the recreation and tourism industries of the Highland Lakes; 2) a clean and adequate drinking water supply; and 3) water resources for crops, such as rice, in coastal areas.

LCRA's Lake Travis Nonpoint Source Pollution Control Ordinance went into effect on February 1, 1990. This is the first in a series of ordinances to be developed so that over the next few years the entire Highland Lakes chain of the lower Colorado River will be covered. Then NPS plans of varying types will be developed for downstream areas from Austin to the Gulf of Mexico.

LCRA staff developed this ordinance completely in-house, with no State, Federal or other outside financial assistance. Developers, environmentalists, public officials and other interested parties, however, were extensively consulted during its development.

Implementation of the ordinance is expected to cost approximately \$500,000 per year. The cost will cover the approval process for NPS plans submitted on new developments, inspection of controls during construction and inspection and approval of completed controls. Fees associated with the ordinance will finance this cost. The fees will range from as little as \$100 for a 5-acre development to as much as \$8,000 for a 1,000 acre development. In addition, fees ranging from \$100 to \$300 will be charged for the annual inspection of NPS controls.

A \$13,000 grant from EPA Region VI did aid in the national distribution of LCRA's 30-minute, Cronkite-narrated video documentary.

As a part of the Texas Water Commission's FY '90 NPS Management Program under Clean Water Act Section 319, LCRA has applied for a \$150,000 EPA grant to monitor the performance of its various NPS controls to determine if they meet the performance standards anticipated.

LCRA's program affects its entire 10-county statutory district of 9,794 square miles, with a total population (1988) of 780,781. Within LCRA's district, the largest metropolitan area is Austin, with a population of 500,000.

*[For more information contact: Kolleen Wilwerding, Lower Colorado River Authority, P.O. Box 220, Austin, TX 78767. Phone: (512) 473-3214.]*

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### *An Editorial Observation...*

The three bits of local news reported just above were all unsolicited contributions sent in by *News-Notes* readers—some by mail, some by FAX. The authors want to share their good and successful efforts. We too believe that these successes are worth sharing and are pleased to print these reports.

If you have an experience about which you believe others would like to know, send it along to us. Our address is found on the coupon located elsewhere in this issue of *News-Notes*.

Write to us. Share. Use the NPS Information Exchange.

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## **Reviews - New and Available**

### *NPS Pollution Poster and Brochure Available*

An attractive NPS pollution poster showing President Bush fishing in clean mountain waters has just come off the press. The poster is currently available from the Nonpoint Source Control Branch at EPA Headquarters. Also available is a colorful, information packed, four-fold brochure on NPS pollution and what you can do to prevent it.

These new, eye-catching publications will be useful to Federal, State and local government organizations who wish to educate the public on the causes and effects of NPS pollution. A number of organizations and environmental groups are lending a hand to distribute these materials. These include: Trout Unlimited, North American Lake Management Society, Isaac Walton League, National Association of Conservation Districts, Cooperative Extension Service, U.S. Fish and Wildlife Service and Take Pride in America Campaign, Conservation Technology Information Center, EPA Regions and States.

*[Copies of the poster and brochure are available from: Lynne Kolze, Environmental Protection Specialist, Nonpoint Source Control Branch, Assessment and Watershed Protection Division (WH-553), U.S. EPA, 401 M Street, S.W., Washington DC 20460. Phone: (202/FTS) 382-7104.]*

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### *Second National Symposium on Water Quality Assessment— Meeting Summary*

A meeting summary for the National Water Quality Assessment Symposium held in Fort Collins, Colorado on October 16-19, 1989 (see News-Notes, December, 1989) is now available. The introduction to the summary states: "The overall objective of the meeting was to bring together water quality professionals to exchange information and ideas about the collection, analysis, management, and use of water quality information, particularly to assess nonpoint source problems in the Western U.S."

The symposium developed a series of state-of-the-art understandings and an unfinished agenda check list for recommended follow-up in the months ahead. This publication presents abstracts and summaries of all of the sessions held at the symposium. While the summary will be mailed to each of the attendees, a limited number of additional copies are available for distribution.

*[For more information contact: Bruce Newton, Assessment and Watershed Protection Division (WH-553), U.S. EPA, 401 M Street, S.W., Washington, DC 20460.]*

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### *A Citizen's Handbook for Wetland Protection*

*A Citizen's Handbook for Wetland Protection* has been prepared by EPA's Region VIII for the six Rocky Mountain and northern Great Plains States that comprise this Region: Utah, Colorado, North Dakota, South Dakota, Wyoming and Montana.

The handbook contains a valuable and understandable explanation of wetland ecology; the types of wetlands found in the area; and the functions and values of wetlands, including water quality improvement, fish and wildlife habitat, aquatic food chain support, stormwater detention, shoreline anchoring, ground water recharge and discharge, recreation, education, and nature study.

On the loss of wetlands, the publication states that "riparian ecosystems have been so mistreated that they probably represent the most modified land type in the West," and that "the region cannot withstand additional losses of wetlands vital to water quality control, flood attenuation and wildlife species."

A Citizen's Handbook  
(Continued)

Extensive sections of the publication cover the 404 permit program governing the filling of wetlands, jointly administered by the Corps of Engineers and the Environmental Protection Agency. Major topics discussed include the environmental effects basis for approving or denying such permits, the public hearing process and citizen involvement.

Although the utility of this work extends well beyond its regional boundaries, its true value lies in its local focus: wetlands exist locally, wetlands fill permits are issued for local pieces of real estate, and decisions to fill or not to fill affect local ecosystems and local water quality. A directory of key agencies is provided, with local addresses and phone numbers for those public agencies involved in wetland protection—from EPA, the Corps of Engineers and the U.S. Fish and Wildlife Service to State wildlife, natural resource and water quality agencies.

Finally, the publication looks beyond existing law and regulation to what can be done in the development of State wetland protection laws and local wetland regulations. Discussions of private land conservation, wetland acquisition, tax incentives, and best management practices provide a sort of check list for local citizen action.

The *Citizen's Handbook for Wetland Protection* is aptly titled, and a welcome addition to the literature. Such locally-oriented handbooks are needed wherever there are environmental decisions to be made, and citizen concerns exist about those decisions...which is just about everywhere.

[For copies contact: Brad Miller, Wetlands Coordinator, Region VIII, U.S. EPA, 999 18th Street, Suite 500, Denver, CO 80202-2405. Phone: (FTS) 330-1583, (303) 293-1583.]

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### *Urban Targeting and BMP Selection—An Information and Guidance Manual for State NPS Program Staff Engineers and Managers (Draft)*

State NPS Assessment Reports indicate that urban runoff significantly contributes to degraded water quality. Where it is a contributor or potential source, it is necessary to implement controls to prevent any further water degradation and to improve water quality.

In some cases, due to insufficient resources or a staged construction approach to implementation, NPS pollution managers must target available resources and prioritize control programs based on site-specific conditions to ensure that the greatest water quality benefits can occur. To assist State and local agency personnel to target areas for runoff controls within their jurisdictions, this manual consolidates existing information and develops a methodology. The draft manual has a technical orientation, with a level of detail appropriate for local and State agency use.

[For more information contact: Tom Davenport, NPS Coordinator, EPA Region V, 230 South Dearborn Street, Chicago, IL 60604. Phone: (FTS/312) 886-0209. For copies of the manual contact any of the ten EPA Regional NPS Coordinators.]

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## **A Coupon**

**Mail to:** **NPS NEWS-NOTES (WH-553)**, Assessment and Watershed Protection Division  
U.S. EPA, 401 M Street, S.W., Washington D.C. 20460

*Here's my name (or a friend's name) for your mailing list to receive NPS NEWS-NOTES whenever it is published:*

**Name:** \_\_\_\_\_  
**Organization:** \_\_\_\_\_  
**Address:** \_\_\_\_\_  
**City/State:** \_\_\_\_\_ **Zip** \_\_\_\_\_  
**Phone:** \_\_\_\_\_

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## **Datebook**

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This DATEBOOK has been assembled with the cooperation of: *Conservation Impact*, the newsletter of the Conservation Technology Information Center, 1220 Potter Drive, Room 170, West Lafayette, IN 47906-1334; and *NWQEP NOTES*, the newsletter of the National Water Quality Evaluation Project, North Carolina Agricultural Extension Service, North Carolina State University, 615 Oberlin Rd., Suite 100, Raleigh, NC 27605-1126. Their cooperation is appreciated. If you have a date you want placed in the DATEBOOK contact the editors of NPS NEWS-NOTES.

### **Meetings and Events**

#### **March**

20 - 21 *North Dakota Water Quality Symposium*, Fargo, ND. Contact: Darnell Lundstrom, Extension Agriculture Engineering, P.O. Box 5626, NDSU, Fargo, ND 58105. Phone: (701) 237-7239.

#### **April**

22 *Earth Day*. Make a personal commitment to the protection of the environment on this Earth Day twentieth anniversary. Find out what groups are planning Earth Day programs in your area and join in. Check with your local or state environmental protection office. Contact your appropriate U.S. EPA Regional Office. If no activities are underway nearby, you and your friends or neighbors can launch a program of your own. The important thing is to take some action that will leave the earth a better place for us all.

22 - 25 *North Central Regional Water Quality Conference—Assessing Agricultural Impacts on Water Quality and Identifying Preventative Actions to Reduce Impacts*, Clarion Hotel, St. Louis, MO. For program information contact: Gary Jackson, Room 216, Agriculture Hall, 1450 Linden Drive, Madison, WI 53706. Phone: (608) 262-1916. For registration & exhibits information contact: CALS Conference Office, Jorns Hall, 650 Babcock Drive, Madison, WI 53706. Phone: (608) 263-1672.

26 - 27 *Stormwater and Water Quality Model Users Group Meeting*, Eatontown, New Jersey. Contact: Vajira Gunawardana, P.E. or Colleen Petty, Conference Coordinators, Najarian & Associates, Inc., One Industrial Way West, Eatontown, New Jersey 07724. Phone: (201) 389-0220. Registration Fee \$75 (\$50 for students).

#### **May**

2 - 4 *Pollution Prevention*, Clarion Hotel, New Orleans, LA. The Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) will hold a Congress of State and local officials and the public to 1) reach a common understanding of what constitutes "pollution prevention" and identify its role in environmental protection; 2) share information on successful initiatives; 3) identify existing barriers to effective utilization; and 4) discuss future actions to better integrate pollution prevention into ongoing environmental programs. Contact the Clarion Hotel for reservations. Phone: (800) 824-3359 or (504) 522-4500 (single/double room rate \$79). Contact ASIWPCA for registration materials and program information. Phone: (202) 624-7782.

16-18 *Innovations in River Basin Management* (Canadian Water Resources Association), Penticton, British Columbia. Topics include watershed water quality. Contact: Robin McNeil, Program Chairman, Ministry of Environment, Water Management Branch, Parliament Buildings, Victoria, B.C., Canada V8V 1X5.

#### **June**

18-21 *U.S./U.S.S.R. Joint Conference on Global Environmental Hydrology and Hydrogeology*, Leningrad, U.S.S.R. Invited paper topics include: factors affecting water quality (surface and ground), agricultural contamination, relationship of land use to groundwater quality, urban NPS

Datebook (Continued)

June

contamination, and regional strategies to protect ground and surface water. Contact: American Institute of Hydrology, 3416 University Ave., SE, Minneapolis, MN 55414. Phone: (612) 379-1030.

24-25

*An Educational Partnership: Industry-University-Society* (1990 International Summer Meeting—Society of Agricultural Engineers), Columbus, Ohio. Sessions on water resource issues include: erosion/conservation, water management, and hydrologic systems and transport processes. Contact ASAE, 2950 Niles Rd., St. Joseph, MI 49085-9659. Phone: (616) 429-0300.

July

9-11

*1990 Watershed Symposium*, Durango, Colorado. Topics related to watershed processes, modeling of wind/water erosion, and application of planning and analysis tools in watershed management. Contact: Robert Riggins, USACERL, P.O. Box 4005, Champaign, IL 61824.

22-25

*Urban Non-Point Source Pollution and Stormwater Management Symposium*, University of Kentucky, Lexington, KY. Contact: Kentucky Water Resources Institute, 219 Anderson Hall, University of Kentucky, Lexington, KY 40506-0046.

29-Aug. 1

*Water Futures, 45th Annual Meeting of the Soil and Water Conservation Society*, Salt Lake City, UT. Contact: SWCS, 7515 Northeast Ankeny, IA 50021-9764. Phone: (515) 289-2331.

August

12 - 15

*ASIWPCA Annual Conference*, Hyatt Newporter Hotel, Newport Beach, CA. Contact hotel for reservations. Phone: (800) 341-1474 or (714) 644-1552. Contact ASIWPCA for registration materials and program information. Phone: (202) 624-7782.

21-23

*Great Plains Conservation Tillage Symposium*, Bismarck, ND. Contact: Hunter Follett, Colorado State University, Plant Science Building, C-4, Fort Collins, CO 80526. Phone: (303) 491-6201; or Jim Stiegler, Oklahoma State University, Agronomy Dept., Room 363, N. Ag. Hall, Stillwater, OK 74078. Phone: (405) 744-6421.

November

4-9

*The Science of Water Resources: 1990 and Beyond*, Denver, Colorado. Topics include: hydrologic trends, legal issues, water resources development, and emerging issues (NPS pollution, urban impacts on water quality, water resources education, radon, hazardous wastes, biomonitoring). Contact: Jim Loftus, Colorado State University, Rm. 100, Engineering South, Ft. Collins, CO 80523. Phone: (303) 491-7923; or Bob Montgomery, Woodward-Clyde Consultants, 4582 Ulster Parkway, Suite 1000, Denver, CO 80237. Phone: (303) 694-2770.

4-9

*Symposium on Urban Hydrology*, to be held simultaneously and in conjunction with *Water Resources: 1990 and Beyond* (see above). Sponsored by the American Water Resources Association. Contact: Marshall E. Jennings, U.S.G.S., 8011 Cameron Road, Austin, TX 78753. Phone: (512) 832-5791.

6 - 10

*10th Annual International Symposium on Lake, Reservoir and Watershed Management*, sponsored by the North American Lake Management Society, Sheraton Tara Hotel, Springfield, MA. Contact: NALMS, P.O. Box 217, Merrifield, VA 22116. Phone: (202) 466-8550.

CALL FOR PAPERS—Due May 1, 1990. Send a one-page, single-spaced abstract that states the substantive content, goal, format and conclusions of the presentation to NALMS. Address and phone number above.

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Datebook (Continued)

November

12 - 14

*Conference on Application of Geographic Information System Simulation Models and Knowledge-Based Systems for Land Use Management*, to be held at Virginia Polytechnical Institute and State University, Blacksburg, VA. Contact: Dr. J. P. Mason, Coordinator, 212 Seitz Hall, VPI & State University, Blacksburg, VA 24061. Phone: (703) 231-6087.

CALL FOR PAPERS—Due April 1, 1990. Abstracts of proposed papers for the above conference. For further information contact Dr. Mason (see above).

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## **A Correction**

In our story on the Big Spring Project (*News-Notes*, February, 1990, p. 8), the insecticide fonofos should have been identified by its trade name, Dyfonate.

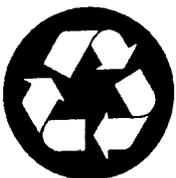
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## **A Change**

Our FAX number is being changed again !!! Please note. As a result, we will not have a FAX available for the next few weeks. You can phone us if you have any questions or suggestions. The number is (FTS/202) 382-7109.

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**NPS NEWS-NOTES**  
**Nonpoint Source Information Exchange**  
**Assessment and Watershed Protection Division**  
**Office of Water (WH-553)**  
**U.S. Environmental Protection Agency**  
**401 M Street, S.W.**  
**Washington, D.C. 20460**



*Nonpoint Source*



*Education Materials Study*

**The Public's Stake in Nonpoint Source Control**

*Public Understanding is Seen as Key to Successful State and Local NPS Control Programs*

*Introduction*

This special center-section of *News-Notes* focuses on Public Information, Education, Awareness and Outreach, as part of State and local nonpoint source control programs. With this special section, we hope to gather the information you need to help you plan and execute State and local public information programs on nonpoint source pollution.

We're asking our readers to assist us in this task by sending us examples of the outreach materials and activities that have worked in State and local situations. We'd appreciate hearing about, and receiving, brochures, buttons, videos, slogans, volunteer programs, bumperstickers, school curricula, or any other methods you or someone you've known has developed to educate or motivate citizens about the causes, effects, or ways to prevent nonpoint sources of pollution. We'd be interested in receiving outreach materials that deal with nonpoint source pollution from mining, agriculture, contaminated sediments, construction, urban runoff, forestry practices, water supply, drainage, flood control, etc.

Once we've compiled the materials, we'll assemble them into a useful resource document for professionals and citizens interested in informing and educating the public about nonpoint sources of pollution. The purpose of this project is to enhance information sharing among all levels of governments that are attempting to develop materials for the public on this subject. Using this catalogue, government agencies will be able to obtain examples of materials already developed and to modify them or use ideas from them for their own publications.

We are confident that there are countless examples of successful public information and education programs and materials that can be documented nationwide, from citizen monitoring in the Chesapeake Bay to Adopt-a-Stream programs around Puget Sound. State and local governments have found creative ways to reach specific audiences and to appeal to the people of their region. In most cases, these outreach campaigns have been the most successful. Continued leadership by State and local governments will be an essential element of future progress in managing and preventing nonpoint source pollution.

Our goal is to help publicize successful outreach activities. Development of an information and education materials catalogue is one of EPA's first steps forward in outreach education. Your participation in the process will be essential to its success. Please help us by submitting outreach materials and tell us a little bit about them on the following sheets. The catalogue will be developed over the coming months, with a final document being ready for distribution by late summer 1990. Watch *News-Notes* for more information.

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## The Need For Outreach Programs

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"Since nonpoint source pollution stems largely from human activity, most watershed plans will require ongoing efforts to change people's understanding and behavior," observed the Puget Sound Water Quality Authority, in its *Managing Nonpoint Pollution: An Action Plan Handbook for Puget Sound Watersheds*, published in June, 1989.

Nonpoint sources find their way into surface and groundwaters, through rainfall, snowmelt and runoff from city streets, farm lands, animal concentrations and manufacturing activities, for example. When this occurs, our rivers and streams, lakes, estuaries, wetlands and groundwater become polluted and hazardous. Nonpoint pollutants threaten human health as well as delicate wildlife habitat and ecosystems.

Public action to control nonpoint sources of water pollution is a relatively new effort on most State and local political agendas.

The challenge involves teaching and educating large sectors of the population not only about the human activities that cause nonpoint pollution, but the need to control it as well.

People are used to, and for the most part, accept the need for public action to protect the public health through the building and operating of sewage treatment plants. The public must also come to accept the need to control and manage nonpoint sources. To achieve our clean water goals, OUTREACH programs need to inform all citizens about the necessity of controlling nonpoint source pollutants as part of any community's public housekeeping program.

### *The Basic Elements of Education Programs*

Education and public involvement in State and local nonpoint source management programs begins with the identification of the information needs of those affected by or those who are the causes of NPS pollution, for example: watershed residents; industrial, agricultural, mining, and forestry groups; developers; public officials at all levels; the hikers, campers, hunters and fishers, and other conservation and nature groups; taxpayers; and ordinary citizens. All have a stake and all need information in order to play effective and informed roles. The techniques and tools of education, communication and public involvement are, at a minimum:

The techniques and tools of education, communication and public involvement are, at a minimum:

- Mailing lists are essential.
- Printed materials - brochures, flyers, fact sheets, and newsletters - are effective in informing people.
- Field trips can provide understanding of nonpoint pollution and watersheds and their resources.
- Displays on local impacts of nonpoint pollution attract attention and provide information.
- Videos are effective ways to educate. Schools and public broadcasting can use them.
- Surveys can educate as well as gather information.
- Meetings and workshops provide unique opportunities for two-way communications.
- Local media involvement is one way to give NPS program planning an important boost.
- Projects involving school children educate one of the most important audiences - youth.
- Adults, too, can become involved citizens monitoring of streams and lakes, an important and helpful project.
- One-on-one education provided by conservation district personnel, health districts, and other public officials is a critical element of any effective education and outreach program.
- Speaking engagements can reach large audiences with information about nonpoint pollution.



**Nonpoint Source**  
*Education Materials Study*

*Tell Us About Yourself*

**I. Contact Information**

Name \_\_\_\_\_  
 Title \_\_\_\_\_  
 Agency/Organization \_\_\_\_\_  
 Address \_\_\_\_\_  
 City/State/ZipCode \_\_\_\_\_ Phone #: \_\_\_\_\_

**II. Information/Education Materials Inventory**

Please list the NPS Information/Education materials you are submitting to EPA for its inventory and catalogue. Please photocopy this sheet and attach additional pages as necessary.

Title \_\_\_\_\_  
 Author (Name and/or Organization) \_\_\_\_\_  
 Medium (e.g., Brochure, Videotape) \_\_\_\_\_  
 Primary Subject Matter \_\_\_\_\_  
 Target Audience \_\_\_\_\_  
 Ordering Information (Name, Address, and Phone number) \_\_\_\_\_

Title \_\_\_\_\_  
 Author (Name and/or Organization) \_\_\_\_\_  
 Medium (e.g., Brochure, Videotape) \_\_\_\_\_  
 Primary Subject Matter \_\_\_\_\_  
 Target Audience \_\_\_\_\_  
 Ordering Information (Name, Address, and Phone number) \_\_\_\_\_

**Please attach one copy of each of the materials listed above and submit them to:**

**Lynne Kolze**  
**NPS News-Notes (WH-553)**  
**Assessment and Watershed Protection Division**  
**U.S. EPA**  
**401 M Street, S.W.**  
**Washington, DC 20460**

