

River Crossings

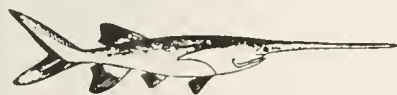
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Paddlefish/Sturgeon Closure Lies in State Hands

The issue of whether or not to close commercial fishing seasons for paddlefish and sturgeon species in the Mississippi River Basin was referred back to the respective states by MICRA's Executive Board at their 5/12-13 meeting in St. Louis. The



"paddlefish"

Board recommended, however, that the MICRA Chairman send a letter to all member states calling their attention to the possible increased harvest of these species to satisfy the demand for caviar, and the potential threats of this situation to paddlefish and sturgeon stocks. The Board also directed the MICRA chairman to encourage the states to be proactive with regard to any signs of over-exploitation, taking appropriate action when necessary to protect the species.

MICRA does not have any regulatory authority, but strong recommendations coming from MICRA can have a significant influence on state regulators. MICRA's Paddlefish/Sturgeon Committee at their November meeting had recommended a basinwide closure of

commercial sturgeon fishing, but could not reach consensus on a similar closure for paddlefish. The Committee then referred the issue to the parent organization for action.

Since the recent collapse of sturgeon stocks in the Caspian Sea, concerns have been raised that domestic paddlefish and sturgeon stocks will be over harvested to meet the worldwide demand for caviar -- most of which is centered in this country in Los Angeles and New York City. Paddlefish eggs have already been found to be mixed with Caspian Sea caviar and marketed in this country as the highly desired Caspian Sea *Sevruga* caviar. Consumers should beware!

A national symposium on the harvest, trade, and conservation of North American paddlefish and sturgeon; sponsored by *TRAFFIC North America*, the *Tennessee Aquarium*, and the *Southeast Aquatic Research Institute*;



"lake sturgeon"

was held in early May in Chattanooga, TN to address concerns for the species. Major issues facing resource managers are the lack of good population data, and habitat destruction. Since these species are not considered gamefish in many states and no meth-

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od exists to recover funding from the commercial sale and marketing of their parts and products, it is difficult for State or Federal agencies to access appropriate funding for management actions. Paddlefish and sturgeon thus exist well within the "no-mans land" of interjurisdictional fishery resources.

Dennis Riecke, Fisheries Coordinator, for the Mississippi Dept. of Wildlife, Fish and Parks put it as well as anyone, "...the commercial freshwater species' are in limbo land as far as the federal and state governments are concerned. They are not a high priority in the USFWS unless they become rare and NMFS is not really concerned about them as there are too many marine stocks at risk. There needs to be a funding source for states to use...I think the caviar companies need to fund some research on paddlefish and sturgeon and/or use whatever political clout they have to advocate for funding help. The sad reality in Mississippi is this -- we sold 862 commercial licenses last year to 3 groups of people (anglers, fish dealers and wholesale minnow dealers) versus 500,000 sport fish licenses. Where do you think our priorities should be?" The "...caviar companies who are profiting from our dwindling resource; who complain about the inaccuracy of data, yet they may be the ones supplying it; who are putting nothing back into the resource; who cater to a rich clientele... have not yet realized that in the absence of any solid scientific information, most state agencies will be cautious and close the fishery to preserve the fish, they are as shortsighted as the people fishing the Caspian Sea sturgeon to extinction. It's time for them to be proactive. At least the European firms have formed a trade organization, while the Americans can't agree on who will represent them."

Sport fishing equipment is subject to an excise tax that goes back into improving sport fish management and habitat through the Dingell-Johnson and Wallop-Breaux federal aid programs to the states. No such funding source exists for paddlefish and sturgeon management. Riecke is right, the stake-

holders of the caviar industry are going to have to step forward and be counted if they want to preserve the resource that supports their livelihood.

American Heritage Rivers Panel Named

Saying "America's great rivers are an important link between all parts of our nation's history and culture," President Clinton on 4/8 named a "diverse" panel of 12 members to select 10 troubled rivers for special federal protections and revitalization funding under his American Heritage Rivers Program. Under the Program 10 rivers will be selected from the 126 already nominated. According to the Council on Environmental Quality that list

was to be announced by the end of May.

The Administration has touted the Program as a community-based way to focus federal assistance to river communities that need restoration, economic planning or other help. Emphasis has been placed on the Program's voluntary features. Rivers cannot participate without full community



support, and the Program will not have major budgetary impacts because it is meant only to coordinate

River Crossings

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River Crossings is a mechanism for communication, information transfer, and coordination between agencies, groups and persons responsible for and/or interested in preserving and protecting the aquatic resources of the Mississippi River Drainage Basin through improved communication and management. Information provided by the newsletter, or opinions expressed in it by contributing authors are provided in the spirit of "open communication", and do not necessarily reflect the position of MICRA or any of its member States or Entities. Any comments related to "River Crossings" should be directed to the MICRA Chairman.

agencies and "help cut red tape" to provide river-related resources. Federal "river navigators" will be assigned to the participating communities and will direct them to appropriate resources, such as staff assistance, technical help, and grants. The White House had planned to announce the advisory team nearly a year ago, but the process "dragged on" as the administration tried to find members acceptable to Congress.

The panel includes:

- Chairman: Dayton Duncan of Walpole, NH. Duncan is a writer/producer of documentary films including the public TV series "Lewis and Clark: The Journey of the Corps of Discovery" and "The West";
- Gerald Galloway of Arlington, VA, dean of Faculty and Academic Programs at the Industrial College of the Armed Forces, National Defense University;
- William Graf of Tempe, AZ, professor of Geography at *Arizona State University* and president-elect of the *Association of American Geographers*;
- Anthony Grassi of Wilton, CT, chair of the environmental group *American Rivers*;
- Debbie Jaramillo of Santa Fe, NM, mayor of Santa Fe from 1994 to 1998;
- Charles Jordan of Portland, OR, a former member of the president's *Commission on American Outdoors*;
- Daniel Kemmis of Missoula, MT, director of the *Center for the Rocky Mountain West* at the *University of Montana*;
- David Olsen of Ventura, CA, president and chief executive officer of *Patagonia Inc.* in Ventura and has worked in marketing and business for *Magma Power Co.*;
- Yolanda Rivera of Old Saybrook, CT, chairwoman and chief executive officer of *Banana Kelly Community Improvement Association Inc.* and has been a community organizer for 26 years;
- Donald Sampson of Lake Oswego, OR, watershed department manager for *Columbia River Intertribal Fish Commission* of Portland;
- Maria Teran of El Paso, TX, general manager and vice president of *Sierra Machinery* in El Paso; and

- P. Kay Whitlock of San Jose, CA, assistant general manager of the *Santa Clara Valley Water District*.

Critics in Congress have challenged the rivers plan calling it a "land grab" that will threaten landowner rights and bring unwanted federal regulations. The House Resources Committee approved a bill to block the program, and Reps. Don Young (R/AK) and Helen Chenoweth (R/ID) pushed an unsuccessful lawsuit to kill the initiative.

Sources: Paul Bedard, *Washington Times*, 4/9/98 and National Journal's *GREENWIRE*, *The Environmental News Daily*, 4/9/98

Most Endangered Rivers

A section of the Columbia River in Washington state is the most endangered river in the U.S., according to an annual report released by the DC-based advocacy group *American Rivers*. The report ranks rivers that are threatened by development, dams, pollution and other problems.



American Rivers

The 51-mile Hanford Reach of the Columbia River has been "off-limits" to people since 1943 because it runs through the Hanford Nuclear Reservation, where plutonium was once processed for nuclear weapons. But now "local interests" hope to use the river to irrigate some 90,000 acres that the Dept. of Energy is planning to release from the Hanford Reservation. According to *American Rivers*, "Introducing agriculture and irrigation there would destroy the last of the Columbia River system's viable habitats for salmon" and would degrade the "spectacular landscape."

The other "most endangered" rivers and their key problems, follow in descending order:

- The Missouri River, last year's most endangered river, is threatened by dams and channelization in seven Midwestern states;
- Poultry waste endangers Maryland's Pocomoke River;
- Six small hydropower dams present problems for the Kern River in California;
- A proposed gold mine threatens Montana's Blackfoot River;
- Overuse by cities and farms jeopardizes the Colorado River Delta in Mexico;
- Excessive sewage discharges from the city of Atlanta pollute Georgia's Chattahoochee River;
- The lower Snake River in Washington state is threatened by dams;
- Hog manure endangers the Apple River in Wisconsin and Illinois; and
- Mining threatens Pinto Creek in Arizona.

American Rivers expressed particular concern over the spread of large hog and chicken farms and the "massive" amounts of manure they produce, calling them "the fastest growing, most devastating" threats to waterways.

Sources: *Land Letter* Vol. 17, NO. 8, 4/20/98; Traci Watson, *USA Today* 4/6/98; *Reuters/Washington Post*, 4/6/98; Heather Dewar, *Baltimore Sun*, 4/6/98; and National Journal's *GREENWIRE*, *The Environmental News Daily*, 4/6/98

White House Proposes Missouri River Restoration Plan

The Clinton Administration has proposed a new habitat restoration program for the lower Missouri River, supporting parts of a new program proposed by Sen. Christopher "Kit" Bond (R/MO) and Reps. Kenny Hulshof (R/MO) and Pat Danner (D/MO). The Administration asked Congress to direct the Corps of Engineers to modify riprap, dikes, and other river training structures between Sioux City, IA and St. Louis, MO to create habitat for river wildlife. The request came as part of the Administration's proposed Water Resources Development Act (WRDA) of 1998, which authorizes new water projects.

Sen. Bond and Reps. Hulshof and

Danner introduced S. 1399 and H.R. 2949 respectively, to create a five-year, \$50 million restoration fund for the lower Missouri and middle Mississippi rivers. The Administration's proposal does not set a funding goal, but instead asks the Corps to complete a one-year study to identify restoration projects along the Missouri.

"It's exciting to see the Corps and Clinton Administration support efforts to repair the Missouri River," said Scott Faber, Director of Floodplain Programs for *American Rivers*. "Millions of people will retrace Lewis and Clark's footsteps in the next few years, and I hope they'll be able to see more than a barge canal."

As noted in the previous article, *American Rivers* listed the Missouri as the nation's Second Most Endangered River this year, citing the impacts of dams and channelization on river habitat. Nearly all of the islands, sandbars, and wetlands that characterized the original Missouri River were eliminated to create a barge canal after World War II. "We can't restore the river that Lewis and Clark knew, but we can restore a river that Lewis and Clark would recognize," Faber said.

The new program would comple-

ment the existing Missouri River Mitigation Program, which acquires land from willing sellers and re-opens historic chutes and side channels. Sens. Bond, Bob Kerrey (D/NE), Charles Grassley (R/IA), Tom Harkin (D/IA), and Pat Roberts (R/KS), and Reps. Hulshof, Danner, Doug Bereuter (R/NE), Jon Christensen (R/NE), Tom Lathan (R/IA), Greg Ganske (R/IA), Jim Leach (R/IA), Karen McCarthy (D/MO), Ike Skelton (D/MO), Jim Talent (R/MO), and Bill Clay (D/MO) are all seeking \$10 million for the Mitigation Program for FY99, which starts on 10/1.

Source: Chad Smith, Missouri Monitor Vol. 1, No. 1, May 1998

White House WRDA Stresses Nonstructural Flood Control

The 1998 Water Resources Development Act (WRDA), expected to emerge on Capitol Hill later this year, will begin from a strong environmental stance, with the first proposal favoring ecosystem restoration over man-made structures as the best means of protecting against floods.

Lawmakers last month began consideration of the latest WRDA, legislation crafted every two years to fund Corps of Engineers' projects and of-

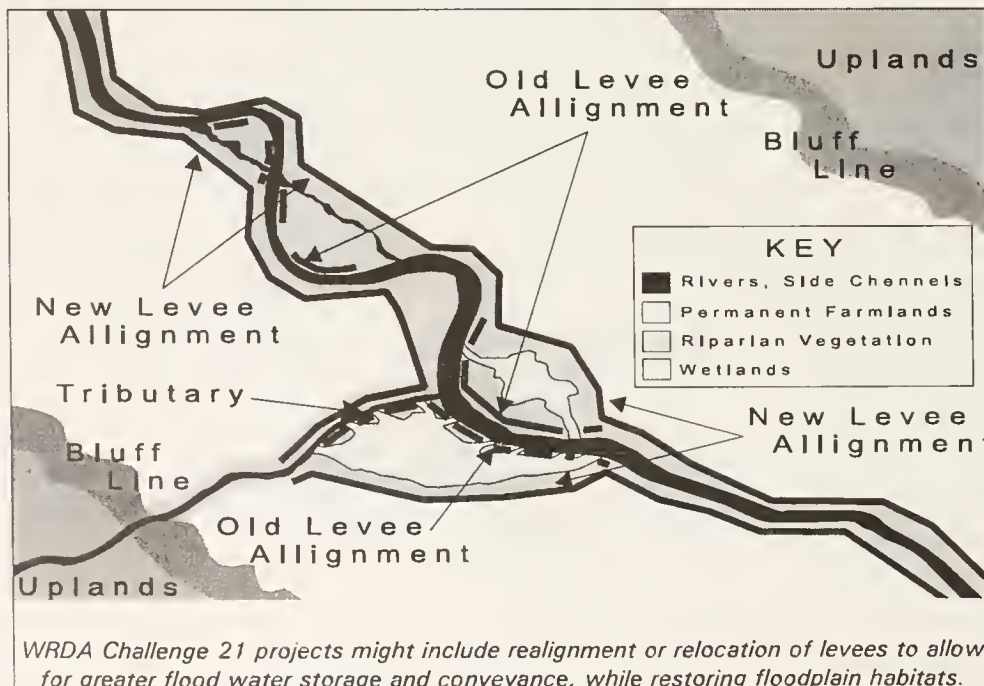
ten to revise policy for federal financing of such projects. The House Water Resources and Environment Subcommittee closed the last of three hearings on the matter on 4/28. Representatives of the *National Association of Dredging Contractors*, *National Association of Flood and Stormwater Management Agencies*, and other national interest groups began the series with their input; followed by House members pitching specific projects in their and surrounding districts; and finally by Army Corps officials outlining the Administration's proposals.

The \$1.46 billion White House version of WRDA, brought to light on 4/22, has as its "centerpiece" *Challenge 21*, a new program that "will provide the nation with a comprehensive tool for reducing flood damages," Acting Assistant Secretary of the Army (Civil Works) John Zirschky told the subcommittee.

Under the program, previewed as the Army Corps' only role in the Administration's Clean Water Action Plan unveiled in February, the use of "non-structural options" would be expanded "to achieve the dual purposes of flood damage reduction and the restoration of riverine ecosystems," Zirschky said. *Challenge 21* is not a top-down approach, but responds to communities who increasingly are calling for reduction or even elimination of flood-related losses and want to improve their environment. The nation is now spending over \$4 billion yearly for disaster recovery due to floods, he added.

The new program is slated to sop up \$325 million of the Army Corps budget over six years. At the same time, the White House plans in its FY99 budget to slash the agency's budget from \$4 billion to \$3.4 billion, and to hack it's construction accounts by half from \$1.4 billion to \$784 million. The Administration budget and WRDA proposal call for new flood control projects only on California's American River and the Red River between North Dakota and Minnesota.

The funding plans combined are already causing lawmakers and interest groups to question what will become of more traditional concrete projects already in the pipeline. A *National*



Waterways Conference official noted that of 66 projects begun in the last few years — 54 added by Congress to 12 put forth by the Administration — only two are funded this year. Rep. Jo Ann Emerson (R/MO), whose district forms part of the Mississippi River's western shore, similarly expressed consternation at the new program in light of unfinished flood control projects.

Tom Chase, an official of the *American Association of Port Authorities*, noted that deep draft harbor projects are slated for about 10% of the funds actually needed. Moreover, many harbor projects include substantial efforts at environmental remediation similar to that called for in Challenge 21. The plan to improve the Houston port includes restoration of 2,000 acres of wetlands, Chase noted.

If the administration gets its way and Challenge 21 goes forward, much Army Corps work would involve relocation of families and businesses out of historic floodplains to allow swollen rivers to resume their natural flow. Additional work would include "floodproofing," flood warning systems and wetlands restoration, according to Zirschky.

The Army Corps has already signed a memorandum of agreement with the Federal Emergency Management Agency, the Agriculture and Interior departments, Environmental Protection Agency and the *Western Governors' Association* to begin coordination of the program. A typical Challenge 21 project might include an urban structure relocation led by FEMA and a rural wetlands restoration led by Agriculture's Natural Resources Conservation Service, Zirschky said.

Source: Tim Breen, *Land Letter*, Vol 17, No. 9, 5/4/98

President Clinton's Clean Water Action Plan

Recognizing that we have not fully achieved the goals of the Clean Water Act, President Clinton and Vice President Gore have announced a

far-reaching plan to protect and restore the Nation's rivers, lakes, wetlands, estuaries, and coastal waters. The Administration's Clean Water Action Plan: "Restoring and Protecting America's Waters", unveiled in February, contains more than 100 recommendations.

The President emphasized that "We must curtail the runoff from farms, from city streets, and from other diffuse sources that get into our waterways and pollute them. Every child deserves to grow up with water that is pure to drink, lakes that are safe for swimming, and rivers that are teeming with fish." To achieve these goals, the President has proposed an additional \$568 million in the FY99 budget and a total of \$2.3 billion in additional funds over the next five years (subject to congressional approval).

Polluted runoff is now the leading cause of water quality degradation in most of our surface waters. For example, 70% of our impaired rivers and streams are polluted by agricultural runoff or discharges and 40% of surveyed waters still do not meet their designated uses. Last October, on the 25th Anniversary of the Clean Water Act, Vice President Gore expressed the need to address these problems with a renewed effort to finally achieve the overall goal of the Clean Water Act -- "to restore the physical, chemical, and biological integrity of the Nation's waters." In this regard, the Vice President directed EPA and USDA, in conjunction with other federal agencies, to develop a Clean Water Action Plan, emphasizing the need to take a holistic, watershed approach.

The Action Plan focuses on (1) promoting water quality protection and restoration on a watershed basis and (2) strengthening core clean water programs to protect human health, increase natural resources stewardship, reduce polluted runoff, and provide citizens and officials with crucial information. It espouses more than 100 actions that will directly benefit people and ecosystems including:

- Restoring 25,000 miles of stream corridors on public lands by 2005;
- Achieving a net increase of 100,000 acres/yr of wetlands by

2005;

- Establishing 2 million miles of riparian buffers on agricultural lands by 2002;
- Establishing nutrient criteria (specifically for nitrogen and phosphorus) tailored to different water bodies and ecoregions; and
- Expanding coastal research, monitoring, and polluted runoff controls.

A watershed approach will encourage federal, state, and local officials to work together and, hopefully, to better understand the interdependence of their programs. Increased cooperation and integration among the different departments and agencies at all levels of government will also result in more effective and efficient implementation of programs and may be instrumental in overcoming some long-standing institutional barriers to achieving goals. The watershed approach also promotes accountability and involves the public, landowners, and business interests in the process.

The federal government will also take an active role in protecting and restoring water quality in the millions of acres of land that it holds in trust for the American people. For example, the Departments of Agriculture and the Interior will work together to develop a Unified National Federal Policy to promote watershed protection in areas managed or overseen by the U.S. Forest Service, U.S. Fish and Wildlife Service, Bureau of Land Management, Bureau of Reclamation, Office of Surface Mining, and other offices.

The Action Plan can be accessed at www.epa.gov/cleanwater or www.nhq.nrcs.usda.gov/cleanwater/, and copies can be obtained by calling (800) 490-9198.

Source: EPA Watershed Events, USEPA Office of Water (4501F), EPA 840-N-98-001, Spring 1998

Dam Removal

Signaling "a new era in how the country views its rivers," small dams "are coming down" across the U.S., reports the *Sacramento Bee*. The *U.S. Committee on Large Dams*, a non-profit professional group, has created

a new panel to meet demand for advice on dam removal. Within the last two years, dams have been demolished on the Clyde River in Vermont, on the Neuse River in North Carolina and on Butte Creek in northern California. In the Sierra Nevada, the U.S. Forest Service recently decided to let 10 low rock dams "crumble." And for the first time in history, the Federal Energy Regulatory Commission last fall ordered the destruction of a hydroelectric dam in Maine against the wishes of its owners.

Phillip Williams of the *International Rivers Network* said, "Just five years ago, you couldn't even get rid of small irrigation diversion dams." The small dams destroyed so far have "had few defenders" and were "the easiest to take down, politically." Whether any larger dams such as those on the Snake and Columbia rivers, will come down could signal whether the U.S. is "truly bent on freeing rivers" for wildlife habitat.

In late April, Sen. Patty Murray (D/WA) said that the Senate appears unlikely to approve the removal of four dams on the lower Snake River to improve salmon habitat. Meanwhile, Sen. Slade Gorton (R/WA) has reiterated his challenge to the Clinton Administration to drop consideration of removing Columbia and Snake river dams "in exchange for his reluctant agreement to demolish one on the Elwha River" to help restore salmon runs on Washington's Olympic Peninsula. Gorton, who chairs the Senate Appropriations Interior Subcommittee, introduced a bill "that he said would move the government a step closer" to removing the Elwha dam. The bill would also require a 12-year delay before a second dam, the Glines Canyon Dam, could be removed on the Elwha.

The Senator "said he already has secured \$11 million for the Elwha Dam and intends to allocate the remaining \$18.5 million needed to complete the acquisition." Gorton said, "I have made major concessions ... even though I find the policy a dubious one. If the Administration is serious about preserving

the effectiveness of the Columbia-Snake system, it will support this proposal." The Administration had "no immediate response, but environmentalists quickly denounced the offer. They blame the Snake and Columbia dams for pushing several Northwest salmon species to the brink of extinction ... [and] are optimistic that a federal judge eventually will rule that changes in the dams are necessary to avert violation of the Endangered Species Act." But "even a court order like that would be subject to congressional approval under Gorton's bill".

Meanwhile, a panel of 26 scientists cannot agree on whether barging juvenile salmon downriver is offsetting the harm of eight dams on the Snake and Columbia rivers. In a draft report, scientists from the National Marine Fisheries Service and



the *University of Washington* say barging has offset the harm of the eight dams on the rivers. But scientists from Northwest states and Native American tribes disagree. A final report "was supposed to be completed" by 11/97, but the "internal debates" delayed the release of even a draft until late March

In Vermont, just as enviros, the state and the state's largest utility decided to go to trial over the environmental impact of a series of hydroelectric projects on the Lamoille River, in early May Gov. Howard Dean (D) asked *Central Vermont Public Service Corp.* (CVPS) to try to reach a compromise out of court. The utility operates four dams on the northern Vermont river, "drastically" altering

stream habitat and blocking spawning grounds once used by endangered lake sturgeon and landlocked salmon. The state *Water Resources Board* on 11/96 canceled the dams' permits, saying the utility had failed to prove they would not endanger water quality. CVPS sued to overturn the decision, arguing that stream flow improvements advocated by the enviro group *Vermont Natural Resources Council* would be too costly. To avert a trial, the Chittenden, VT, Superior Court ordered the parties in the suit -- CVPS, the *Vermont Natural Resources Council* and the state Agency of Natural Resources -- to resolve their differences through mediation. But when they were unable to reach a consensus, the groups agreed to proceed with the lawsuit. A CVPS spokesperson said that "there's still a chance" for compromise, but Christopher Kilian of the *Vermont Natural Resources Council* said he remembered "sitting in a room with CVPS six years ago discussing these same issues" and that "it's time to see the case move forward".

In North Carolina, work began in 12/97 to remove the Quaker Neck Dam located in the Neuse River near Goldsboro. The voluntary watershed restoration project, carried out under a public-private partnership will improve fish habitat along a 75-mile stretch of the Neuse River and help replenish 925 miles of tributary spawning areas. Anadromous species expected to benefit by this project include striped bass, American shad, hickory shad, and shortnose sturgeon. The dam, 260 ft. across and 7 ft. high, was constructed in 1952 to provide cooling water to a *Carolina Power & Light Company* (CP&L) coal-fired electricity-generating plant. CP&L officials were willing to have the dam removed, but needed assurances that their water intake needs would not be jeopardized. In August 1993, studies performed by the U.S. Army Corps of Engineers (USACE) showed that construction of a 75-ft.-long, sheetpile weir dam in the plant's intake canal would provide adequate head for CP&L's pumps and eliminate the need for the Quaker Neck Dam. Shortly thereafter, the USACE completed a cost estimate and design specifications for the weir dam. Over the next

3 years, the project experienced considerable delay due to complex issues inherent with multiagency involvement. The U.S. Marine Corps, willing to demolish the dam as part of a military training exercise, was unable to participate due to procedural constraints. Finally, in October 1997 a contract was awarded to a private vendor for \$181,000 to construct the weir in the plant's canal and remove the Quaker Neck Dam from the river's main stem. The success of this project is a credit to the perseverance and dedication of all the agencies/groups involved, which withstood times of doubt and overcame countless obstacles.

Although new dams have become "the endangered species of public works projects," the *Contra Costa Water District* on 5/2 held a ceremony to officially unveil the \$450 million Los Vaqueros Reservoir, behind the first major dam to be built in northern California in 10 years. Given what state water director David Kennedy calls "institutionalized" environmental opposition to new dams, observers call it "remarkable" that a "big dam could be built at all in California these days".

Sources: Nancy Vogel, *Sacramento Bee*, 4/27/98; *AP/Portland Oregonian* online, 4/25/98; Scott Sonner, *AP/Seattle Daily Journal of Commerce/others*, 4/3/98; *AP/Portland Oregonian* online, 4/1/98; Paul Rogers, *San Jose Mercury News*, 4/24/98; *AP/Boston Globe* online, 5/4/98; EPA Watershed Events, USEPA (4501F), EPA 840-N-98-001, Spring 1998; and National Journal's GREENWIRE, *The Environmental News Daily*, 4/3, 4/29, and 5/5/98 5/12/98 4/20/98

Corps River Restoration Study

President Clinton's FY99 budget for the U.S. Army, Corps of Engineers includes \$25 million for a Riverine Ecosystem Restoration and Flood Hazard Mitigation initiative. The objectives of the program are to expand the use of nonstructural measures to reduce flood losses and to restore the natural resources and

functions of rivers and their floodplains.

Floods have caused a greater loss of life and property and have devastated more families and communities in the United States than all other natural hazards combined. Despite expansive use of "flood control" structures, flood losses have been increasing over the last few decades and now average \$7.5 billion per year. Historically, structural measures such as dams, levees, and channelization projects have also caused significant adverse impacts to riverine ecosystems in watersheds across the country. The \$25 million (which still must be approved by the Congress) will fund studies of potential project sites, coordination with other agencies, and the development of solutions.

Source: EPA Watershed Events, USEPA, Office of Water (4501F), EPA 840-N-98-001, Spring 1998

Snake River Restoration

The U.S. Army, Corps of Engineers is trying to "undo some of the damage" wrought on the upper Snake River in Wyoming, where an extensive system of 40-year-old levees has "dramatically" altered the river's ecology and left long stretches of riverbank with no vegetation. In a "unique" demonstration project this fall, the Corps and Teton County, WY, officials will attempt to reintroduce natural elements into the rivershed and create new islands in the river. The islands were obliterated when levees on the Snake, which once flowed "steeply" through five or six shifting channels, confined flow to one or two high-velocity channels. The Corps plans to excavate those channels in an attempt to recreate the Snake's once slow-flowing, braided effect that gave the river its name.



"cutthroat trout"

Snake River cutthroat trout have suffered from the channelization, and "it is difficult to tell" what effects the levees have had on migratory wildlife. But "for all its ambition, the Corps' project is unlikely to reclaim all that has been lost on the Snake." Corps project manager Bill MacDonald said restoring the natural flow by taking down levees is "not feasible." MacDonald said, "Behind those levees is millions, if not billions, of dollars in real estate".

Source: Jim Robbins, *New York Times*, 5/12/98, and National Journal's GREENWIRE, *The Environmental News Daily*,

Truckee River Trout Restoration

Launching a "dramatic" but "low-tech" effort to restore endangered Lahontan cutthroat trout to the Truckee River Basin, Interior Secretary Bruce Babbitt on 4/18 joined environmentalists and leaders of the Pyramid Lake Paiute Tribe in placing trout-egg incubators made from old refrigerators in a Nevada stream.

The incubators are filled with some 90,000 trout eggs from a Paiute hatchery. But because hatchery-raised fish "rarely" leave the site where they have been stocked, the streamside incubators are part of an effort to make the trout "biologically imprinted" with the Truckee River. Mervin Wright of the Pyramid Lake Paiute Tribe, which depends on the trout as a food source, said the process will make the fish immediately accustomed to the river. They will return to the area to spawn and hopefully build the first wild population in the Truckee River in 60 years.

Veterinarian Fred Eales, who invented the refrigerator incubators, said the process imitates a natural system and has shown a 90% success rate on the 8.2 million trout and salmon eggs so far incubated in Wyoming and Idaho. While area farmers did not object to the use of the refrigerators, "they have made it known that they will oppose any efforts to reduce their water rights or remove dams on the Truckee River"

Source: (Lou Cannon, *Washington Post*, 4/19/98; Scott Sonner, *AP/Portland Oregonian* online/others, 4/19/98; National Journal's GREENWIRE, *The Environmental News Daily*, 4/10/98

Atchafalaya River Restoration

Louisiana state lawmakers and federal officials are developing a long-term plan to preserve the Atchafalaya Basin, "one of the last great river swamps." A state Senate panel on 4/7 approved a measure already passed by the state House to protect "some of the country's most productive fish and wildlife habitats." The bill would create an oversight board to work with the Army Corps of Engineers on swamp (wetland) protection. The Corps expects to spend nearly \$250 million over the next 15 years to buy 50,000 acres of swamp land (wetlands), secure easements on another 338,000 acres and set up water management projects in the basin. Congress has so far appropriated nearly \$50 million for the effort, and Louisiana plans to contribute \$90 million.

Sources: Carl Redman, *Baton Rouge Advocate*, 4/8/98, and National Journal's GREENWIRE, *The Environmental News Daily*, 4/10/98

Stream Corridor and Wetland Restoration Operating System

Scientists from EPA and the states of Oregon and Washington gathered last summer at a workshop in Corvallis, OR, with the objective of exploring ways to increase the effectiveness of stream corridor and wetland restoration projects. What emerged was consensus that the ecological effectiveness of restoration can be enhanced by having practitioners merge their ongoing activities under what can be termed a common operating system. Operating system simply means the linkage of restoration activities through the communication and mapped depiction of restoration activities occurring in particular geographical

areas, with stated rationale for the work.

Efforts are now under way to test the systems approach in the Willamette River Valley of Oregon. The Willamette Valley Performance Tracking System (PTS) is scheduled to produce a "design template" for the construction of Internet web pages. The template will embrace the basic concepts of ecosystem management, depict how the concepts are applied to restoration, and then show how they can be incorporated into existing and new web page development. It is hoped that use of the design template and associated web pages will exert, through communication, an organizing influence on current restoration practices.

The Willamette Valley PTS is also being viewed as a tool for the technology transfer and refinement of existing communication networks. The PTS team will take advantage of other successful efforts that rely on the Internet to organize and depict community-based environmental protection activities.

New innovations being considered for the PTS include (1) integrating the concepts of ecosystem management directly into the architecture of a web page, (2) depicting restoration practices as implemented at varying spatial scales, (3) displaying work load commitments and funding allocations, (4) providing examples of applied methods, and (5) documenting the scientific rationale for applied methods.

For more information, contact Richard Sumner with EPA in Corvallis, OR, at (541) 754-4444 or Cara Berman with EPA Region 10 (Seattle) at (206) 553-6246.

Source: EPA Watershed Events, USEPA, Office of Water (4501F), EPA 840-N-98-001, Spring 1998

TVA Shoreline Erosion and Stabilization

Shoreline soil erosion is a growing concern among lake users and resource managers in the Tennessee Valley. The Tennessee Valley Au-

thority (TVA) and its public and private partners are responding by demonstrating innovative stabilization approaches for reservoir shoreline erosion. "TVA's goal is to stabilize all critically eroding shoreline sites in TVA's lake systems through partnerships," said Ruben Hernandez, Vice President of Land Management.

TVA conducted a comprehensive field assessment of shoreline erosion during 1994-1997 to identify contributing factors. The assessment documented vegetation type, vegetative impacts, land use and erosion characteristics. "We're using such techniques as the environmentally friendly process of soil bioengineering or combining plants with engineering concepts to correct erosion problems," said Jack Muncy, TVA Project Leader.

Native plants, combined with structural designs such as rock riprap and coconut fiber rolls, are used. Some of the major components of this work are:

- Site-specific treatment that minimizes soil disturbance and installs BMPs;
- Reshaping of banks to ensure stability;
- Installation of riprap or other hard armoring techniques in combination with soil bioengineering applications; and
- Construction of exclusion fences to keep livestock from impacting riparian zones.

"In selecting plant materials for shoreline stabilization, we use native woody and herbaceous plants," Muncy added. TVA's "Banks and Buffers - A Guide to Selecting Native Plants for Streambanks and Shorelines" is used as a reference guide. For more information about TVA's shoreline stabilization work, contact Jack Muncy, TVA Land Management, Norris, TN 37828, (423) 632-1750.

Forbes Blasts Navigation

River of Subsidies, an article appearing in the 3/23 issue of *Forbes Magazine* details billions of dollars worth of subsidies given to barge companies and shippers through construction and maintenance of navigation projects on the Mississippi River and its tributar-

ies. Excerpts from that article follow:

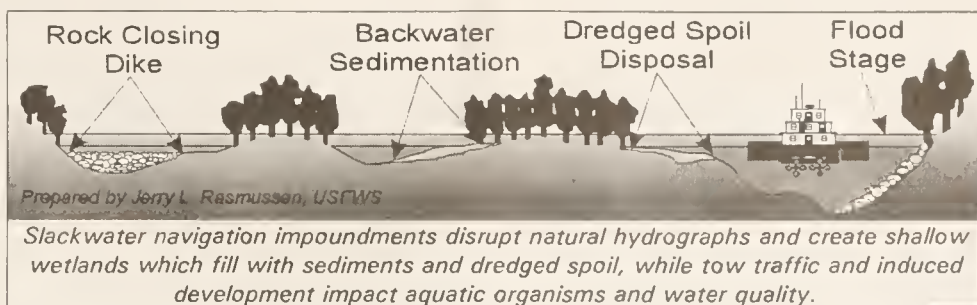
"Shippers and their customers in the coal- and farm-belt want bigger locks. Christopher Brescia, president of *Midwest Area River Coalition 2000*, a lobbying arm for waterway users, is betting seven lock replacements will be needed over the next 25 years. Estimated costs to build bigger locks range from \$250 million to \$1 billion each."

"...the U.S. Army Corps of Engineers has just spent the past six years on a \$49 million study forecasting to 2050 the traffic on the upper Mississippi and Illinois rivers."

"... Barges are the most subsidized form of transport in the U.S. Their fuel taxes cover around 10% of the annual \$674 million that the Corps spends building, operating and maintaining locks, dams and navigation channels. Taxpayers foot the rest. Compare that with railroads, which got a lot of land gifts a century ago but now cover all the costs of maintaining their rights of way. Even trucks repay, via fuel and user taxes, most -- arguably, all -- of the damage they do to the Interstates."

"In the late 1940s the federal government spent \$6 billion (that's \$54 billion in today's money) to make the Missouri River commercially navigable from Sioux City, Iowa to St. Louis, Mo. It justified the cost by estimating annual river traffic of 12 million tons. Last year the Missouri floated 1.5 million tons. In 1985 the Army engineers finished a 234-mile ditch to connect the Tennessee and Tombigbee rivers in Mississippi and Alabama. They forecast annual traffic of 27 million tons. Twelve years later the Tenn-Tom Waterway sees a third of that. Cost: \$1.8 billion, plus \$22 million a year for maintenance."

"Do we really need to widen those locks? Iowa State University economist C. Phillip Baumel says the river could get by with small, much cheaper fixes like extending lock guide walls or replacing the first-come, first-served system with a reservation system to relieve congestion."



"It's a fair question to ask: What in hell is the U.S. Army doing building locks for commercial traffic? For that we can thank the powerful farm lobby, which in the 1930s and 1950s screamed that without free locks and channels they would go out of business. Congress responded by putting the Army engineers into the lock business. Since then, farmers and their friends in the barge industry (notably including the politically ubiquitous *Archer Daniels Midland*) have fiercely protected their turf."

"It would be an interesting exercise to privatize the eight Illinois River locks by simply auctioning them off to the highest bidder, who could then charge whatever toll the traffic would bear. On this hard-nosed basis, the locks may be worthless. A study by a University of Illinois graduate student concluded that the purchase price based on this toll revenue would be less than what the Army spends annually to maintain the things."

Bruce Hannon, *Friends of the Mississippi Basin*, says, "A study to verify these private sector values should be done." Hannon continues, "The U.S. General Accounting Office should be commissioned to calculate these values and compare them to the past and planned Corps expenditures. Such a comparison should verify for the Congress just how much waste of federal revenues is flowing down the rivers of the heartland." Hannon quips, "If navigation were good for the local economy, then Cairo, Illinois would be Chicago." Hannon can be contacted at *Friends of the Mississippi Basin*, 1208 West Union Street, Champaign, IL 61821, (217) 352-3646, or by email at b-hannon@uiuc.edu.

The environmental impacts of navigation have been controversial on the Upper Mississippi ever since the locks and dams were constructed in the 1930's. Prior to their construction, even the top Corps of Engineers official in Washington, D.C. (Chief of Engineers) opposed the project, but he was over-ridden by Midwest agricultural interests, as well as by then-President Herbert Hoover, an Iowa native. The dams impounded vast acres of slackwater habitats that are now filling with fine sediments. Any maintenance, operation, or new construction of these navigation projects should include funding for operation and maintenance of the aquatic environments that the projects created. This would include removal of accumulating sediments in order to permit the survival of the river's native aquatic organisms.

Source: Bruce Upbin, *Forbes Magazine*, 3/23/98

Zebra Mussels Colonizing Mud and Sand

Researchers have found that zebra mussels have built colonies on the sandy and muddy bottom of Lake Erie, a habitat previously thought incapable of supporting them. Since their Great Lakes debut in the mid-1980s, researchers believed that these tiny freshwater bivalves could only colonize hard, underwater surfaces such as rocks, clams and runoff pipes. The new findings are reported in the first week of May's issue of the journal *Nature*.

"In terms of potential zebra mussel habitat, Lake Erie is wide open," said Paul Berkman, senior research associate at *Ohio State University's Byrd Polar Research Institute*. "More than

90% of the Lake Erie floor is a soft substrate. This is a wake-up call. We found that zebra mussels clearly colonize sand and muddy substrates in the lake," he said, adding that the densities of some zebra mussel colonies exceed 20,000 animals/m².

Berkman and his colleagues studied 200 km of the Lake Erie floor from the New York-Pennsylvania border to the lake's western basin. They determined that by 1995, zebra mussels covered about 2,000 km² of the lake bed's soft sediment. "We do know that mussels colonize soft substrates and that they are doing this over a significant portion of the lake," Berkman said.

A zebra mussel starts out as a microscopic larva and can attach itself to a single grain of sand or mud. When the animal becomes a juvenile, it starts secreting byssal threads, which serve as anchors to attach the mussel to a stable surface. It continues sending out these threads, picking up more sand grains and creating a mat of cemented sediment.

"This creates a hard substrate," Berkman said. "By binding sand grains together with their byssal threads, the mussels create a conglomerate, subsequently settled by juveniles, which creates a bed of zebra mussels on the lake bottom."



"zebra mussel w/byssal threads exposed"

Researchers used side scan sonar (SSS), a device that sends out frequencies that can differentiate between hard and soft underwater surfaces. "Since the side scan sonar signal is strongly reflected by hard substrate and weakly reflected by soft substrate, we could profile the lake bottom to determine where the zebra mussels were located," Berkman said.

The researchers then used an underwater video camera attached to a submersible remotely operated vehicle to take pictures of the suspect areas and discovered zebra mussels

had colonized the soft sediment of the lake bed. "In studying patches of zebra mussels, we observed small mussels on the order of millimeters attached to individual sand grains," Berkman said. He says the potential implications for this discovery are great.

Other researchers include Melissa Hultuch and Emily Tichich, both of the *Byrd Polar Research Institute*; David Garton of the *Ohio Sea Grant Program*; Gregory Kennedy and John Gannon of the United States Geological Survey; and Scudder Mackey, Jonathan Fuller and Dale Liebenenthal, all of the Ohio Department of Natural Resources. This study was funded by the *National Sea Grant College Program* under the National Oceanic and Atmospheric Administration and administrated through the *Ohio Sea Grant Program*.

Contact: Paul Berkman, (614) 292-3670; Berkman.1@osu.edu or Holly Wagner, (614)292-8310;

Chemical Control of Zebra Mussels

"Frustrated by a lack of progress in the war against zebra mussels," some researchers are contemplating using chemicals to block invasive species from entering the Great Lakes. Michigan *Sea Grant* Director Russell Moll said the private *Great Lakes Fisheries Trust* will give his research team \$300,000 to study the feasibility of destroying the larvae of zebra mussels and other non-native species in ships' ballast water with glutaraldehyde, a sterilizing agent used by the health-care industry. Moll "said there is little chance the U.S. and Canada would try to kill off existing zebra mussels by spreading the chemical throughout the lakes," but that its application to ships would be an additional measure to ward off future generations of the species.

The mussels, which have clogged Midwestern waterways, are believed to have spread to the Great Lakes through the ballast water of foreign ships. Federal law requires ships to exchange ballast water at sea, but some don't comply with the rule due

to "economic or safety reasons." Moll "said the effectiveness of the ballast water exchange is questionable, even if there is 100% cooperation".

Sources: *Toledo [OH] Blade /Journal of Commerce*, 4/1/98 and National Journal's *GREENWIRE*, *The Environmental News Daily*, 4/2/98

Extinctions, Disease Control, and Biodiversity

Nearly 70% of biologists in the U.S. believe a "mass extinction" of plants and animals is underway, but most Americans are unaware of the problem, according to a survey of 400 scientists released on 4/20. The *Louis Harris* poll, commissioned by the *American Museum of Natural History* in New York City, found that the scientists' concern for the disappearance of species surpassed their concern for pollution, climate change and depletion of the ozone layer. The poll "comes on the heels" of an *International Union for the Conservation of Nature* (IUCN) biodiversity study which found that at least one in eight known plant species is threatened with extinction.

Some 70% of the scientists polled also predicted that up to 20% of all living species could be extinct within 30 years, and nearly all attributed the loss to human activity, particularly habitat destruction. *University of Tennessee* ecologist Daniel Simberloff said, "The speed at which species are being lost is much faster than any we've seen in the past -- including those [extinctions] related to meteor collisions." However, the predicted disappearance of species "appears to have made relatively little impression" on the general public. Of the non-scientists polled, 60% had "little or no" understanding of biodiversity and only half ranked the loss of species a "major threat".

The 862-page IUCN report, titled "*1997 IUCN Red List of Threatened Plants*," was produced by the IUCN in conjunction with the *Smithsonian*, the *World Wildlife Fund*, the *Nature Conservancy*, the *Royal Botanic Gardens* in Kew and Edinburgh, and 10 other government and independent research and conservation groups in a half-dozen countries. Experts com-

pared the latest censuses against decades of field records and combined collections totaling 20 million specimens, one-fourth of them at the *National Museum of Natural History*. Those show a pace of species decline far above the historic extinction rate.

The results of the 20-year joint effort show that habitat destruction and introduction of nonnative species have caused approximately 34,000 species to become so rare that they could easily disappear. That amounts to 12.5% of the 270,000 fern, conifer and flowering species known worldwide. Of the imperiled species, 91% exist in no more than one country. Those statistics, the report emphasizes, "are just the tip of the iceberg" because so little is known about many areas, and "as more information becomes available, the situation will be shown to be even worse."

In the U.S., which probably has the planet's best-studied flora, about 29% of 16,000 species are at risk, according to the report. Similar percentages were recorded for Australia and South Africa. In general, the more detailed a country's species inventory, the higher its proportion of threatened plants. "This is the first comprehensive assessment of threatened species we've ever had," said W. John Kress, chairman of the department of botany at the *Smithsonian's National Museum of Natural History*. "It's a wake-up call to a major extinction event." In some cases, entire plant families are in trouble. For example, 75% of the yew family -- which produces the anti-cancer drug taxol -- is threatened with extinction globally. Even familiar groups are in trouble, including approximately 14% of roses, 32% of lilies and irises, and 29% of palms.

Widespread extinctions might affect medical science, according to the report. More than half of all prescription drugs are modeled on natural compounds, and one-fourth are taken directly from plants or are chemically modified versions of plant substances. "Plants have historically provided some of the most important drugs that we have," said

chemist David G.I. Kingston of *Virginia Tech*. That list includes such celebrated staples as morphine, aspirin and quinine, as well as a number of less common drugs such as anti-cancer medications derived from the periwinkle. "We've screened about 50,000 plant species so far, and gotten about 50 drugs," Kingston said, "so that's about one per thousand." The loss of 34,000 species, therefore, might doom development of 34 pharmaceuticals if the same ratio applies.

Fresh outbreaks of diseases worldwide are possible unless people find better ways to manage natural resources and the environment. The experts "said new menaces like the



AIDS and Ebola viruses and old scourges like malaria were the direct result of interfering with the environment -- destroying forests, wiping out animal species and polluting waters." David Molyneux of the *Liverpool School of Tropical Medicine* in the UK said the clearing of rainforests is causing diseases such as malaria and sleeping sickness to spread through new parts of Africa. Jaap Goudsmit, an AIDS expert at the *University of Amsterdam*, said scientists are worried because studies on monkeys have detected "many viruses ... that humans are susceptible to." And Goudsmit said that as primates are wiped out, the viruses will be forced to seek new hosts, perhaps humans. Goudsmit said, "It is a warning to us [that] we are too active in these areas".

Agriculture could be affected by loss of potential new food strains and ecosystem vigor. "There is an accumulating body of evidence indicating that as biological diversity is lost, there are changes in the way both natural and managed ecosystems function," said ecologist Christopher B. Field of the *Carnegie Institution of Washington*, "and they can often

have negative impacts on goods and services. When there are more plant species present, the recovery from disturbance is faster and total production is greater." Diversity provides a biological buffer "against things like climate change or migrations," said U.S. Fish and Wildlife Service biologist John J. Fay. "Every time we lose a species of plant we're losing a unique gene pool that has undetermined but possibly very significant benefits to mankind."

Two years ago, the IUCN placed nearly a quarter of all known mammal species and 11% of birds on the list. It also added a number of marine species for the first time. The Red List establishes five categories of organisms:

- species not seen in the wild in 50 years and presumed extinct;
- species suspected of having recently become extinct;
- endangered species, those likely to become extinct if the causes of endangerment continue;
- vulnerable species, those likely to become endangered if the causes of vulnerability continue, and
- rare species, those with small worldwide populations not yet endangered or vulnerable.

Of the total number of plants on the Red List, 43% are classified as rare, 24% as vulnerable and 20% as endangered. To be classified as threatened, a species must have reached the point at which there are fewer than 10,000 individuals worldwide, or fewer than 100 locations in which it is found. The study examined only vascular plants -- those with tissues that conduct water and nutrients -- and thus did not treat algae, lichens, fungi and the like.

In the wake of the IUCN report, conservationists are "struggling" with "how to set priorities over what to save." Deborah Jensen of the Virginia-based *Nature Conservancy* said that despite debate within the environmental community over how to preserve biodiversity, it is clear that trying to save endangered species one at a time is unworkable. "The idea is that you focus on the species most at risk and catch the rest later. But that leaves you always behind the curve", Jensen said. "To get ahead of the

curve," *the Nature Conservancy* and other groups are taking a "Noah's Ark" approach -- a strategy aimed at saving "a little bit of everything" -- by targeting representative habitats worldwide. "You have to take the rare species and habitat management approaches together", Jensen said.

A pair of papers by *University of Rhode Island* researchers published in the 4/98 issue of *Conservation Biology* focus on identifying and prioritizing which sites or "hot spots" have the most species and need the most protection. The papers indicate "the link between biological and landscape diversity" and "show that landscape diversity can be used to predict biodiversity across a variety of landscapes." Co-author Peter August says "a number of conservation groups have expressed big interest in the concept".

A *New York Times* editorial says "given the sheer scale" of the threats to biodiversity, "government involvement seems an absolute necessity, requiring the same commitment" that led to the international climate change treaty last year.

Sources: Joby Warrick, *Washington Post*, 4/21/98; Maggie Fox, *Reuters/Mexico City News/others*, 4/19/98; Peter Spotts, *Christian Science Monitor*, 4/15/98; *Society for Conservation Biology* release, 4/15/98; (*New York Times*, 4/12 and 4/14/98; William K. Stevens, *New York Times* 4/9/98; Curt Suplee *Washington Post* Staff Writer, 4/8/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 4/15, 4/21, 4/22/98

Ag Waste Update

State and local officials from across the nation testified before the Senate Agriculture, Nutrition and Forestry Committee in early April, asking for national standards on agricultural waste disposal. Maryland Gov. Parris Glendening (D) and Tulsa Mayor Susan Savage (D) said national standards are necessary to protect waterways that cross political boundaries, and to keep busin-

esses from relocating in areas where there is less environmental regulation. Glendening said farm practices in six states affect the Chesapeake Bay, in whose tributaries the toxic microbe *Pfiesteria piscicida* appeared last summer. Experts suspect ag waste runoff contributed to the outbreak. Glendening said, "As a single state, we can only have a limited impact on overall water quality. We must address the issue of water quality on a broader scale". Savage told the committee about the effects of animal wastes on his city's drinking water supply. High levels of phosphorus from poultry runoff last year were found in Lake Eucha, the city's main water source.

Sen. Tom Harkin (D-IA) has introduced a bill that would set tougher standards on agricultural runoff and give oversight to the Dept. of Agriculture (USDA), but Acting Agriculture Deputy Undersecretary Craig Cox told the Senate Agriculture Committee that the Administration believes the EPA should oversee farm waste regulation, not the USDA. In a statement to the committee, the *American Farm Bureau Federation (AFBF)* said it is unnecessary for the USDA to have jurisdiction over animal waste management and called for "flexible, voluntary and incentive-based conservation programs". Harry Knobbe of the *National Cattle-men's Beef Assn. (NCBA)* told the committee that Harkin's bill would undermine state autonomy and authority for water programs. Joshua Reichert, director of the environment program at *Pew Charitable Trusts*, writes in a syndicated op-ed that the public wants and expects the federal government to protect the environment from livestock runoff. He calls on Congress to get behind the Clinton Administration's new clean water initiative to address nonpoint source pollution. Reichert said, "Presumably ... most lawmakers now understand that the threat is real"

On 5/13, USEPA officials told the House Agriculture Committee that agriculture is the biggest polluter of U.S. waterways, fouling more than 173,000 miles of streams and rivers with chemicals, erosion and animal waste runoff. Agriculture has been blamed for 70% of water pollution,

which has harmed aquatic life and restricted human activity, according to Michael Cook, the EPA's director of wastewater management. However, according to the Maryland Dept. of Natural Resources, fertilizer runoff from lawns contributes an estimated 10% of nutrients that pollute the Chesapeake Bay, while farms contribute only 33% and factories and sewage treatment plants contribute another 33%. Kirk Hurto of *TruGreen-ChemLawn*, the largest lawn care company in the U.S., cites studies that indicate healthy lawns-- helped by ample fertilizer -- are one of the most effective barriers against runoff.

Meanwhile, the EPA in March proposed new pollution standards and waste-management regulations for the 6,600 largest cattle, hog and poultry operations under the Clean Water Act. Cook said, current federal laws "are not adequate to deal with the modern industry." But Rep. Larry Combest (R/TX), chair of the House Agriculture livestock subcommittee, said the proposal "runs counter" to a long-term federal effort to encourage farmers to voluntarily comply with environmental regulations and let states enforce their own rules.

States across the U.S. continue to struggle with how to deal with the 2,000,730,000,000 lbs. of agricultural waste that the Senate Agriculture Committee estimates is produced in the U.S. each year. A summary of issues/actions in various states follows:

Arkansas: Poultry farmers, equipment companies and processors in north-west Arkansas have joined to defend the poultry industry against allegations that it is the source of the region's water-quality problems. *The Poultry Partners of America* hopes to avert government regulation by showing that most farmers voluntarily practice good management.

California: Farmers and state officials are working to stem "rainy season" pollution runoff from southern California's dairy center. Farmers in Orange, Riverside and San Bernardino counties want to reduce the amount of nitrates that wash from their operations into the Santa Ana River watershed. But winter storms damaged the dikes and

holding ponds that they use to control runoff.

Colorado: The Senate Appropriations Committee on 4/13 effectively killed legislation that would have required farms with more than 5,000 hogs to apply for a state permit, develop a waste-management plan, monitor soil for groundwater contamination and undergo state inspections. Meanwhile, the Colorado House Agriculture Committee revived legislation that would impose restrictions on large-scale hog farms. Environmentalists welcomed the action but said they would like odor controls added to the bill. The state legislature, however, failed to take up any of these measures before the session ended in April. Supporters of regulation vowed to include on Colorado's 11/97 ballot an initiative requiring a permit system, water-quality monitoring, bonds to cover the cost of potential environmental damage, and measures to reduce odor from waste lagoons.

Illinois: The DeWitt County, IL, tax review board has ruled that proximity to hog farms lowers property values and justifies reducing taxes on nearby homes. Officials lowered assessments by 30% on homes within 1.5 miles of one facility and by 10% on homes within 2 miles.

Iowa: The Iowa legislature on 4/13 sent Gov. Terry Branstad (R) compromise legislation that would place new restrictions on hog farms, including imposing tougher penalties for farmers with a pattern of environmental violations and requiring greater distances between feedlots and residential properties. The bill, expected to be signed into law, would also raise permit fees for large feedlots and allot money to a \$3 million state fund to clean up lots that are abandoned or pose environmental risks.

Kansas: The Kansas House on 4/10 agreed to a compromise bill, expected to be signed into law, that would boost regulation of corporate hog farms. House and Senate negotia-

tors had agreed to legislation that would require county-wide votes whenever a county commission considered a corporate hog farming proposal, but they voted down an attempt to eliminate a loophole that allows the expansion of family farms. Critics say the loophole would still allow *Murphy Family Farms*, the largest hog company in the U.S., to operate in counties that have banned corporate hog farming. Reversing a position taken last year, the Great Bend, KS, City Council has voted against a plan by Kansas City-based *Seaboard Corp.* to build a slaughtering and processing plant in Great Bend. Four new members of the eight-person council were "swept into office" recently "in an anti-hog write-in campaign". Despite the Great Bend vote, *Seaboard* is proceeding with its search for a site on which to locate a \$100 million plant. Meanwhile, researchers from *Kansas State University* on 4/29 told the environment committees of the state House and Senate that their study of *Seaboard Corp.* waste lagoons indicated they did not pose a threat to groundwater. However, nitrate pollution in groundwater in Dodge City, KS, has been attributed to a defunct hog farm that closed there in 1984. Environmentalists are pushing for cleanup of the groundwater before the current feedlot owner is allowed to expand.

Kentucky: Kentucky imposes no restrictions on its 2,500 poultry farms, but Fulton County recently enacted the state's first local-control ordinance. The county now requires permits for new chicken houses and hearings to determine the project's impact on soil, air, water and property owners. Meanwhile, fearing regulations like those that have "stymied" corporate hog farms, the state's poultry trade association has

adopted voluntary construction guidelines for poultry houses.

Maryland: Gov. Parris Glendening (D) on 5/8 signed "landmark legislation" to curb runoff pollution in the Chesapeake Bay, "cap[ping] a nearly year long effort to adopt a strategy for battling" the toxic microbe *Pfiesteria piscicida*. The "sweeping" water quality initiative targets agricultural pollution and requires farmers to develop nutrient-management plans within seven years. A *Washington Post* editorial praises the legislation as well as a recent \$6 million penalty imposed on an Eastern Shore poultry plant owned by *Tyson Foods Inc.* "[I]n tightening runoff controls, studying *Pfiesteria*, exacting large fines and shifting financial responsibility to the big players, the federal and local governments are pressing with new effectiveness to maintain the health of the bay." A *Baltimore Sun* editorial said "If these *Tyson* programs show positive results, pressure will increase to require similar measures throughout the *Delmarva* chicken industry." The \$6 million water-pollution settlement against Springdale, AR-based *Tyson Foods Inc.* will "...speed up pollution controls, reducing potentially harmful runoff faster than a new Maryland law requires," reports the *Baltimore Sun*. The agreement, the largest water pollution settlement in Maryland history, involved charges that *Tyson's* Berlin, MD, plant discharged high levels of fecal coliform bacteria, phosphorus and nitrogen into the Kitts Branch, a tributary of Chincoteague Bay. Under the agreement, the USEPA will require the company's 240 mid-Atlantic contract farmers to adopt nutrient management plans. The settlement accelerates some controls and includes some not addressed by Maryland. The State requires that farms using animal waste as fertilizer implement nitrogen-control plans by 12/1 and

phosphorus-control plans by 7/4, while the *Tyson* settlement requires such plans to be adopted within two years. Maryland requires that poultry producers treat manure with phytase, an enzyme that reduce manure's phosphorus content, by 12/00, while the *Tyson* plan calls for phytase use within six months of a



judge's approval of the settlement. While the Maryland bill does not address denitrification, the settlement requires *Tyson* to install equipment to reduce nitrates in waste by 15% at the Berlin plant and by 30% at two plants in Virginia and one in Pennsylvania. Federal and state regulators said the settlement could establish a precedent for enforcement actions against poultry producers. Carol Amend of the EPA said future settlements would probably be "consistent" with the *Tyson* case. Lois Schiffer of the Justice Dept. said, "This action shows that it's more expensive to not to comply with the law than to comply with it".

Despite a \$1 million effort and the special attention given to reducing agricultural runoff into the German Branch tributary of the Chesapeake Bay, the stream now contains more nitrogen and phosphorus than when the effort began in 1989, reports the *Baltimore Sun*. After a 1985 water-quality survey indicated the German Branch had "excessive levels" of the harmful nutrients, officials launching the Chesapeake Bay restoration effort a decade ago made the stream a "targeted watershed" where they hoped to reduce nutrient pollution by 40% and show what could ideally be done with intensive planning and monitoring. But according to a recent report by the Maryland Dept. of Natural Resources, efforts by farmers, scientists, and federal, state and local agricultural and environmental agencies to reduce fertilizer use and improve water quality have failed to meet expectations. The DNR analysis reported that "it is difficult to identify any positive water quality results obtained from [improved management practices] in the watershed." Levels of nitrogen and phosphorus have been increasing, largely due to unexpected changes in the agricultural industry since the restoration effort began. Increases in the number of crops grown, a shift toward raising wheat instead of corn and poultry instead of cows, and an increase in the use of sewage sludge as fertilizer have raised the amount of harmful runoff, "negat[ing]" improvements made by reducing fertilizer use.

Meanwhile, Pokomoke City, MD, physician Ritchie Shoemaker, who last year treated "several dozen" people with ailments allegedly related to exposure to the toxic microbe *Pfiesteria piscicida* in the Pocomoke River, in early May reported that he had treated a man who had developed similar symptoms last month while fishing in the Pocomoke. But biologists from the DNR said none of the 799 fish they tested in the area this Spring had the lesions characteristic of previous *Pfiesteria* outbreaks. Also on the positive side, "Baby oysters in amazing and mysterious abundance" have appeared in the eastern part of Chesapeake Bay, prompting hopes that they "could contribute to a potential turnaround for the struggling fishery and improve the overall health of the bay".

Minnesota: The Minnesota Pollution Control Agency (MPCA) determined that hydrogen-sulfide gas levels exceeded state limits near 5 of 10 hog, poultry and dairy feedlots tested over a two-week period. The findings, including one measurement that reportedly was 600 times the state standard, indicate that air-quality problems near feedlots "may be more serious and widespread" than previously thought. State officials said they hope to avoid imposing fines or other punitive actions by working with facilities to correct the problems. Meanwhile, the MPCA has approved a 2,000-hog feedlot that will be built between two Stearns County, MN, lakes. Area residents denounced the decision, saying the MPCA approved the facility even though it had not visited the site and the farmer violated state law by failing to notify residents of his application. Arguing the MPCA cannot keep up with the enforcement demands of the state's growing agricultural industry, Minnesota counties are increasingly depending on themselves to regulate large-scale feedlots.

A federal judge on 4/7 sentenced a former wastewater-treatment operator at a livestock-processing plant to six months in prison for conspiring to violate the federal Clean Water Act. U.S. District Court Judge James Rosenbaum found Gary Keck of *Darling International's* Blue Earth, MN, plant guilty of illegally discharging

pollutants into the Blue Earth River. *Darling International* paid a \$4 million fine for the violation.

North Carolina: A "long-awaited" report released in late April by the state Agriculture Dept. recommended that taxpayers underwrite the costs of replacing the open waste lagoons on North Carolina's hog farms. The report, ordered last year by the North Carolina General Assembly, was welcomed by the hog industry, but attorney Michelle Nowlin of the Chapel Hill-based *Southern Environmental Law Center* said the proposal "phased out ... any concern for the safety and health of citizens".

Ohio: Gov. George Voinovich (R) on 4/14 introduced a proposal that would impose greater state oversight over animal waste disposal, improve state enforcement powers to correct operating problems, and require farms to implement a plan to control rodents and pests before receiving a state permit. Meanwhile, the Ohio EPA on 4/15 approved plans by *Buckeye Egg Farms* to add 4.5 million chickens to its Licking County facility. On 5/7 a coalition of environmental groups again called on Gov. George Voinovich (R) to order a moratorium on corporate farms until the Ohio EPA or legislature acts to tighten farming regulations. Voinovich spokesperson Michael Dawson said the governor does not have the authority to issue a moratorium. Morral, OH, officials on 5/10 planned to introduce an amendment to a new ordinance banning the use of animal waste as fertilizer that would allow farmers to use waste generated by their own livestock.

Oklahoma: The Oklahoma Senate on 4/15 rejected a state House bill that would have banned future corporate hog and poultry farming. But on 5/11 they approved a poultry regulation bill that requires taxpayers to pay the state's \$300,000 cost of regulating the industry. The bill's author, state Sen. Paul Muegge (D), had originally proposed a measure that would have required large-scale poultry farmers to pay a fee to cover regulation, but the state House objected to the provision. Meanwhile, Gov. Frank Keating (R) recently signed sweeping, permanent regulations that will govern corporate poultry and hog operations. The pro-

visions prohibit the spreading of poultry manure whenever it rains and limit the total amount of phosphorus from poultry manure that can be applied. The hog rules bar construction of large operations without public hearings and building permits. State Rep. Terry Matlock (D) continues to push a bill that would negate the poultry rules signed by Keating. Keating said that hog and poultry companies should pay the cost for regulation, but he has not said whether the absence of such a fee will prompt him to veto the bill.

South Carolina: *Clemson University* researchers have reported that turkey farmers in north-central South Carolina have tainted fields with excessive poultry manure. All but one of 25 fields in the Fork Creek watershed showed high levels of phosphorus, according to their report.

Utah: Construction of two new 10,000-sow barns at the *Circle Four* hog farm -- the nation's largest -- is underway in Iron County, UT, and applications for groundwater discharge permits are "coming fast and furious," according to Utah environmental official Mark Novak. Meanwhile, state air quality officials are assessing the emissions from the corporate farm to determine if they might, when carried by rainfall, pose a threat to groundwater.

Sources: Curt Anderson, *AP/San Francisco Chronicle/Examiner online/others*, 4/2 and 5/14/98; P.J. Lassek, *Tulsa World*, 3/29/98; *CongressDaily/A.M.*, 4/3/98;; *AFBF release*, 4/2/98; *NCBA release*, 4/2/98; John Lang, *Scripps Howard/Little Rock Arkansas Democrat-Gazette*, 5/10/98; Shari Venema, *Little Rock Arkansas Democrat-Gazette*, 5/10/98; *AP/Sacramento Bee*, 4/17/98; Mark Eddy, *Denver Post*, 4/14 and 4/23/98; and *Denver Post*, 5/6/98; *Chicago Tribune*, 5/7/98; *AP/Minneapolis Star Tribune*, 4/15/98; *St. Paul Pioneer Press*, 4/8/98; Steve Painter, *Wichita Eagle*, 4/11, 4/26, and 4/30/98; Painter/Hays, *Wichita Eagle*, 4/9/98; Jean Hays, *Wichita Eagle*, 4/28/98; USA Today, 5/12; James Malone,

Louisville Courier-Journal, 5/4/98; Michael Dresser, *Baltimore Sun*, 5/9 and 5/12/98; Heather Dewar, *Baltimore Sun*, 5/10 and 5/12/98; Chris Ison, *Minneapolis Star Tribune*, 4/26 and 4/27/98; *AP/Minneapolis Star Tribune*, 4/27/98; James Eli Shiffer, *Raleigh News & Observer*, 4/30/98; Vindu Goel, *Cleveland Plain Dealer*, 4/15/98; *AP/Cleveland Plain Dealer online*, 4/16/98; *AP/Cleveland Plain Dealer online*, 5/8 and 5/11/98; Mick Hinton, *Oklahoma City Daily Oklahoman*, 4/22/98; *Oklahoma City Daily Oklahoman*, 5/8/98; John Greiner, *Oklahoma City Daily Oklahoman*, 5/12/98; Sammy Fretwell, *Columbia [SC] State*, 4/22/98; Mike Carter, *AP/San Francisco Chronicle/Examiner online*, 4/20/98; *Gainesville [FL] Sun*, 4/17/98; Tom Horton, *Baltimore Sun*, 5/8/98; Peter Goodman, *Washington Post*, 5/20/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 4/3, 4/9, 4/17, 4/24, 5/1, 5/8, 5/11, 5/12, 5/13, 5/12 and 5/20/98

Miscellaneous River Issues

California Farmlands Retired: "For the first time in California history," farmland in the San Joaquin Valley will begin to be permanently retired from production over the next few months because it has become too salty due to irrigation. The federal Bureau of Reclamation plans to retire 12,000 acres this year, "the first step in a plan to gradually set aside tens of thousands of acres for a wildlife refuge." An estimated 4 million acres of California farmland — almost half of the irrigated acreage — suffer from salt buildup. The water used in a single irrigation season on the west side of the San Joaquin Valley deposits 1.2 tons of salt and selenium/acre, according to the Sacramento-based *Water Education Foundation*. Many CA farmers blame the government for their "ruined lands and their tainted reputations as the villains behind the environmental disaster." A proposed drainage system that would have sent salt and agricultural wastes to the Pacific Ocean was never built "first because the state's farmers refused to pay for it and later because of environmental concerns about dumping untreated

farm wastewater into waterways." Though the government has spent millions of dollars to study salinity management, it will be "difficult, if not impossible," to resolve the competing interests of agriculture and the environment. Terry Young of the *Environmental Defense Fund* said, "The only really long-term solution is to create a market for the salt and the selenium". Sources: Karen Brandon, *Chicago Tribune*, 3/30/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 3/31/98

Florida Mining/Wetland Funding:

Florida limestone miners have agreed to donate five cents towards wetland conservation for every ton of rock they mine, under a "landmark" deal heading for approval by the state legislature. The 50-year fee plan, negotiated between mining companies and state environmental regulators, will be adjusted annually for inflation and is expected to raise \$300 million by 2049. The funds will be used to buy "ecologically important" land in the Lake Belt, a "soggy" 89 mi² region adjacent to Everglades National Park. The area provides drinking water for Miami and could become "the largest link" in a proposed chain of wetlands to buffer the Everglades National Park from suburban development. Under the fee scheme, which could affect 15,000 acres proposed for mining, the companies will set aside up to 2.5 acres of the "choice wetlands" for every acre mined. Source: Cyril Zaneski, *Miami Herald*, 4/27/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 4/28/98

Forest vs Farmland Streams:

"Streams draining forested areas in the Ozark Mountains are among the cleanest in the nation, but Ozark farmland streams contain more nutrients from animal waste than most other streams in the nation, according to a USGS study" released on 5/1. The study of waters in Arkansas, Missouri, Oklahoma and Kansas from 1992 to 1995 "is considered the most comprehensive scientific assessment yet of the water quality in the Ozarks Plateau area". The study found fewer darters and nearly three times fewer sunfish in agricultural streams than in forested streams. USGS hydrologist Jim Peterson said, "There's at least seven species of darters that are

found only in the Ozarks. If something does happen to eliminate those fish from the Ozarks, they're eliminated from the entire world". The study also found that concentrations of heavy metals such as lead and zinc in streams near old mining sites in Missouri are among the highest in the nation. High levels of lead and zinc were also found in the tissue of downstream fish. But Peterson said animal waste from cattle and poultry production "is probably the biggest concern" because it has "far-ranging effects" and is present in a large area of the Ozarks. The USGS will conduct a duplicate study of the Ozarks in 2001 to determine whether water quality is improving. Sources: Seth Blomeley, *Little Rock Arkansas Democrat-Gazette*, 5/2/98; Michael Mansur, *Knight-Ridder/Oklahoma City Daily Oklahoman*, 5/4/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 5/5/98

Kansas Oil Spills: Marking the "largest oil pollution penalty in the history of the US [EPA's] Region VII," Denver-based *Texaco Pipeline Inc.* and its subsidiary, *Texaco Trading and Transportation Inc.*, agreed to pay \$925,000 to settle federal lawsuits related to 17 oil leaks in Kansas since 1991. The spills involved discharges of more than 266,000 gallons of oil into state waterways. Source: *USA Today*, 4/22/98; Michael Mansur, *Kansas City Star*, 4/21/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 4/23/98

Louisiana Pollution: The federal government and Louisiana announced in early April details of a \$7 million agreement to settle allegations that *Borden Chemicals and Plastics* of Geismar, LA, contaminated soil and groundwater with hazardous waste. The \$3.6 million civil penalty included in the settlement, filed on 4/9 in U.S. District Court in Baton Rouge, is the largest penalty for a hazardous waste violation in Louisiana history and the second largest nationwide. Under the settlement, *Borden* will also spend several million dollars to clean up contamination around its plant and construct a groundwater containment and monitoring system



to protect an aquifer that supplies drinking water to the area. The federal government in 1994 sued *Borden* to make the company pay to clean up contaminated ground water. *Borden* agreed to the settlement after two days of trial on charges that it violated the federal Resource Conservation and Recovery Act, which governs the handling and disposal of hazardous wastes. Sources: Dept. of Justice release, 4/9/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 4/15/98

Maine Hydro-dam: Federal regulators on 4/14 rejected a proposal to build a new hydroelectric dam on the Penobscot River in Maine, saying it would have "significant adverse effects" on recovery efforts of the Atlantic salmon. *Bangor Hydro-Electric Co.* had asked the Federal Energy Regulatory Commission to license the Basin Mills Project, arguing that it is necessary to meet the region's electricity demand. But the commission ruled that the plant's "modest" electricity benefits did not outweigh the impact it would have on Atlantic salmon, which environmental groups say have nearly "disappeared" on the 240-mile river which already houses 12 dams. The Interior Dept., US EPA and National Marine Fisheries Service, as well as environmental groups and members of the Penobscot tribe "strongly opposed" the project Sources: *AP/San Francisco Chronicle/Examiner* online, 4/15/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 4/16/98

Michigan Amphibians: Volunteers for

the state Dept. of Natural Resources (DNR) are trying to quantify Michigan's amphibian population to gauge water quality. The long-term findings could indicate where water quality might need to be improved, because amphibians are "like the canary in the mine," providing early indication of environmental degradation, according to Ray Rustem of the DNR. Sources: *AP/Las Vegas Sun*, 5/18/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 5/19/98

Minnesota Underground Tank Leaks: The Minnesota Pollution Control Agency has granted *Koch Refining Co.* a new five-year permit aimed at improving oversight of the facility's tanks and pipes and preventing environmental damage, following a "series of tank leaks that have caused extensive pollution" over the past 10 years. The Minnesota Legislature on 4/9 approved a bond measure to fund wildlife habitat, parks and other natural resource initiatives. Tim Sullivan, a spokesperson for Gov. Arne Carlson (R) said, "It clearly will be the biggest benefit for outdoors interests and conservationists ... in Minnesota history". Sources: Dennis Lien, *St. Paul Pioneer Press*, 4/10/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 4/14/98

Montana Mining: More than five years after receiving federal and state permits for a "massive" platinum and palladium mine near Nye, MT, *Stillwater Mining Co.* is now beginning work on the project. The company's existing mine has a "good environmental record," and the rock surrounding the ore does not create acid mine drainage or cause heavy metal pollution in waterways. Sources: *AP/Billings Gazette*, 5/12/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 5/14/98

Mercury in New York Fish: Wind-borne pollution from the Midwest appears to be the cause of elevated levels of mercury in some fish in a New York reservoir, according to federal geologists and New York environmental officials. A study of 47 fish from the Neversink Reservoir in Sullivan County, NY, conducted by the New York Dept. of Environmental Conservation, found that tissues from four out of six smallmouth bass and one

brown trout contained mercury at concentrations up to twice the federal limit. Geologist Peter Murdoch of the USGS said it is likely that mercury is being carried from Midwest power plants and factories to the reservoir by the same winds that cause acid rain in the Adirondack and Catskill mountains. Small amounts of the toxic heavy metal can accumulate in predatory fish as they feed on smaller fish that contain the element. Charles Sturcken of the New York City Dept. of Environmental Protection suggested that nearby reservoirs did not contain fish with elevated mercury levels because they collect runoff from lower land that is less likely to be threatened by windborne pollution. Although officials said the mercury does not pose a threat to people drinking water from the reservoir, the New York Dept. of Health plans to issue an advisory against eating more than one meal a month that includes fish from the reservoir. Sources: Andrew Revkin, *New York Times* [NY edition], 5/19/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 5/20/98

New Orleans Sewage: The city of New Orleans will spend more than \$200 million as part of a settlement with the federal government to address charges that its sewage system for years spilled raw sewage into waterways. Under the settlement filed on 4/7 in the U.S. District Court in New Orleans, the Justice Dept. and the USEPA said the city will work to improve water quality in the Lincoln Beach area. The agreement requires the city to renovate its sewage collection system to prevent future spills into the Mississippi River and Lake Pontchartrain. New Orleans will also pay \$1.5 million in civil penalties. The settlement closes a case brought in 1993 by the USEPA, alleging violations of the Clean Water Act and the Clean Air Act. New Orleans has long struggled with sewage overflow because the area, six feet below sea level, often receives large volumes of rainfall within a short period and because the sewage system has been in disrepair for more than five decades. Source: DOJ release, 4/8/98; and

National Journal's GREENWIRE, *The Environmental News Daily*, 4/9/98

New York Environmental Law

Enforcement: Under Gov. George Pataki (R), New York State employees "are spending far less time than they once did on crucial functions like enforcing environmental laws and managing resources like forests, wetlands and fisheries," according to a report by the state Assembly's environment committee. The report, written by Assembly Environmental Conservation Committee Chair Richard Brodsky (D), "gives ammunition to environmentalists" who allege the state Dept. of Environmental Conservation (DEC) has been soft on corporate polluters and "could help Democrats tarnish his image as an environmentalist" in this year's gubernatorial race. It found that in FY94, the first full fiscal year before Pataki took office, the DEC referred 1,544 cases of environmental law violations for enforcement action, while it referred only 722 cases in FY97. Total fines and penalties for pollution cleanup dropped from \$7.2 million in FY '94 to \$5 million in FY '97. Time sheets from nearly 4,000 DEC employees indicate that the hours spent investigating oil spills, monitoring wildlife populations and planning land acquisitions also dropped. DEC spokesperson Gary Sheffer said the figures reflect Pataki's effort to be "more fair to the regulated community" and his interest in helping companies comply with the laws rather than punishing them. Sheffer noted there was no indication that air, water and soil had become more contaminated, which he said would be evident if the DEC had failed to do its job. Regarding the time sheets, Sheffer said the report's methodology is flawed because the codes used for noting employees' activity are loosely defined. Sources: Richard Perez-Pena, *New York Times*, 5/18/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 5/18/98

North Carolina DOT Fined: The North Carolina Division of Waste Management has levied a \$100,000 fine on the state Dept. of Transportation (DOT) for intentionally dumping hazardous chemicals near a DOT facility in Buncombe County last year. The fine is "thought to the highest

ever against a state agency for a chemical spill". Sources: Stephanie Gibbs, *Charlotte Observer*, 5/7/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 5/12/98

St. Croix River Bridge: In a "significant victory for environmentalists," a federal judge on 4/13 upheld a National Park Service (NPS) decision that halted a proposed "freeway-style" bridge across the federally protected St. Croix River dividing Minnesota and Wisconsin. Federal District Judge Ann Montgomery in Minneapolis found proper the NPS's determination that the bridge would harm the qualities that earned the river protection under the Wild and Scenic Rivers Act of 1965. Bridge construction also threatened several species of mussels. The *Sierra Club North Star Chapter* and the *Voyageurs Region National Park Assn.* had filed the suit. Curt Johnson, chair of the Twin Cities-area regional planning agency that had endorsed the project, said the problem of how to move a growing number of commuters over the river won't go away. However, a *Minneapolis Star Tribune* editorial praised the ruling saying it "was an important victory for environmentalists and anyone concerned for sensible urban planning and growth". Meanwhile, Minnesota Gov. Arne Carlson (R) and Wisconsin Gov. Tommy Thompson (R) are lobbying Congress to override the NPS decision and authorize construction of the bridge. In a letter to a House-Senate conference committee working on the federal transportation bill, the governors asked conferees to exempt the project from the law's prohibitions. They said a judge's ruling upholding the NPS decision has "broad national implications". Thomas Cassidy of *American Rivers* said, "The St. Croix is about to be mugged behind closed doors without and public debate". Sources: (Mike Kaszuba, *Minneapolis Star Tribune*, 4/14/98; Karl Karlson, *St. Paul Pioneer Press*, 4/14/98; Philip Brasher, *AP/St. Paul Pioneer Press*, 5/18/98 and National Journal's GREENWIRE, *The Environmental News Daily*, 4/17 and 5/20/98

Virginia Composting Violation: The Virginia Dept. of Environmental Quality (DEQ) has issued six citations to *Ticonderoga Farms* in the last month

for violating environmental laws and allowing pollutants from a yard waste composting area to flow into a tributary of Ellick Run. Although Loudoun County and DEQ officials have criticized the facility in the past, these are the "most serious" citations levied against *Ticonderoga*. Charles Williamson of the DEQ said, "[The runoff has] pretty well wiped out the naturally occurring organisms that live in the stream." Neighbors of the nursery and composting operations "say they fear for their health and that of their animals." But state regulators "said they haven't seen evidence" of a health risk, even though the stream "often looks black as oil, emits a pungent odor and contains a bacterial growth with the consistency of cotton." Douglass Johnston of *Ticonderoga* said the substances leaching into the stream do not pose a serious environmental threat. DEQ officials say that water is running though the yard waste and carrying acids and other materials into the stream. Gregory Clayton of the DEQ said the agency is drafting a proposed agreement in which *Ticonderoga* would correct problems and possibly pay a fine. Sources: Justin Blum, *Washington Post*, 5/9/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 5/11/98

Virginia River Pollution: Nearly 2,200 miles of Virginia rivers are polluted with fecal bacteria, contaminated storm water or toxic chemicals, according to a state Dept. of Environmental Quality (DEQ) report released on 4/19 to the USEPA. State officials said the figures, an increase of about 700 miles since the last study in 1996, are a reflection of more accurate testing rather than an indication that the rivers are getting dirtier. The DEQ and the *Izaak Walton League* on 4/29 signed an agreement establishing the Virginia "Save Our Streams" program, an effort to augment the DEQ's monitoring of water quality in the state. Sources: Rex Springston, *Richmond Times-Dispatch*, 4/30/98; *Washington Post*, 4/30/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 4/30/98

Washington Irrigation Water Sales: Gov. Gary Locke (D) on 3/31 vetoed a "water-spreading" plan that would have allowed farmers to sell irrigation water saved through conservation measures or use it on new tracts of land. Farmers advocated the plan as a way to bring more land under cultivation without using more water, but Locke said the excess water should be available for "other important uses". Sources: David Ammons, *AP/Portland Oregonian* online, 4/1/98 and National Journal's GREENWIRE, *The Environmental News Daily*, 4/2/98

Wisconsin Pesticide Database: A coalition of environmental, agriculture and health groups is calling on Wisconsin state lawmakers to establish a statewide database of pesticide use. The Strategic Pesticide Information Project says such a database could help researchers understand better the possible links between the chemicals and environmental and health problems. Supporters say connections between pesticide use and disease have remained "tenuous" because data is lacking. Sources: *USA Today*, 4/28/98; Ron Seely, *Madison Wisconsin State Journal*, 4/28/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 4/30/98

Wisconsin Mining Laws: Companies that want to open mines in Wisconsin must prove they have operated a similar mine elsewhere in the U.S. for 10 years and been closed for 10 years without polluting, under a bill signed into law on 4/22 by Gov. Tommy Thompson (R). The legislation sets up "another hurdle" for *Nicolet Minerals Co.*, a subsidiary of Toronto-based *Rio Algom* that has sought to open a zinc and copper mine in northeast Wisconsin near the headwaters of the Wolf River. Fearful of the mine's "unproven technology" and potential to do damage to the river, a coalition of anglers, hunters, church groups, students, local legislators, Native American tribes and environmentalists pushed for the bill. Mary Kay Grasmick, a spokesperson for *Nicolet Minerals*, vowed that the company will "find a mine that fits the requirements". Sources: Robert Imrie, *AP/ St. Paul Pioneer Press*, 4/23/98; and National Jour-

nal's GREENWIRE, *The Environmental News Daily*, 4/24/98

Yellowstone Update: The Clinton Administration has presented Congress with an appraisal of the controversial *New World Mine* property in Montana in "an important step toward completing acquisition of the property to protect Yellowstone National Park from the potential impacts of mining". The assessment of the mine site, owned by *Crown Butte Mines Inc.*, "is essential" to completing a 1996 agreement between the firm and federal government, under which *Crown Butte* would receive \$65 million to abandon its mining plans. The appraisal, conducted for the Dept. of Agriculture by Spearfish, SD-based *Hall-Widdos & Co.*, put the value of the 1,625-acre mine site at \$69 million. The White House said the buyout from *Crown Butte* should occur this summer. Sources: Erin Billings, *Billings Gazette*, 4/30/98; White House release, 4/30/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 5/1/98

Climate Change

The years 1997, 1995 and 1990 were the warmest in the Northern Hemisphere since 1400, according to a study published in the journal *Nature*. The findings "provide the clearest and most dramatic evidence that the world is experiencing global warming caused by human activity. Climatologists Michael Mann and Raymond Bradley of the *University of Massachusetts* and Malcolm Hughes, director of the *University of Arizona, Tree Ring Research Lab*, used data from trees, ice cores and coral reefs at more than 100 sites around the world to reconstruct a 600-year climate record. Other scientists called the research "solid" and "valid" but said further research was needed to verify the findings.

Meanwhile, 35 scientists posted on a ship 350 miles north of Alaska are working to understand the Earth's climate system better by studying how the sky, snow, ice and water exchange heat in the Arctic region. According to the *Washington Post*, the scientists in the SHEBA program have found "surprisingly large

amounts of melt-water under the ice," which is "worrisome," because Arctic sea-ice is believed to be "especially sensitive" to atmospheric changes. The extent of Arctic sea ice has already been shrinking at a rate of 2-3% per decade over the last 20 years, and the amount of melt in 1997 "was fairly stupendous," says SHEBA Project Director Richard Moritz of the *University of Washington's Polar Science Center*. Over a 13-month period, the SHEBA project will gather data from a "representative cylindrical 'column' of Arctic environment" that extends from 15 mi. above the Earth to 500 ft. or more below the ice. Relatively little is known about the Arctic environment, but it is thought to be "a disproportionately important factor" in the Earth's climate.

"Bucking the prevailing wisdom, two of America's best-known weather experts have sharply criticized the theory that people are causing harmful global climate change." William Gray, a professor at *Colorado State University* who is "famous" for his hurricane predictions, on 4/10 told weather and emergency service officials at the National Hurricane Conference in Norfolk, VA, that "the changes in climate that the world is experiencing are natural." He said most of the global climate change can be explained by shifts in ocean currents and temperatures. Neil Frank, former director of the Miami-based *National Hurricane Center* and now a meteorologist with KHOU-TV in Houston, said that climate change "has nothing to do with carbon dioxide," the gas most often blamed for global warming. He said the "atmosphere is too complex, and the computers are too slow" to make long-term climate forecasts, and added that he has not seen any data that should "force" the U.S. into quick decisions on CO² emissions.

Meanwhile "The *National Academy of Sciences* (NAS) has taken the extraordinary step of disassociating itself from a statement and petition circulated by one of its former presidents that attack the scientific conclusions underlying" international efforts to reduce green-

house-gas emissions. The petition, which was purportedly signed by more than 15,000 scientists and released on 4/20, said that there is "no convincing scientific evidence" that global warming is occurring or will occur, and described the growing accumulation of greenhouse gases in the atmosphere as a benefit that would spur plant growth. The petition was accompanied by a letter from Frederick Seitz, a past president of the NAS and currently president emeritus of *Rockefeller University* in New York; Seitz's letter was attached to an article "described by its authors as a review of research literature of global warming." The article concluded that global warming is no threat.

"Many" scientists who believe global warming is a serious threat "expressed anger and alarm over the article because it was printed in a format and typeface similar to that of the academy's own journal." So the academy's governing council, "citing 'confusion' created by the petition and the unpublished article," on 4/20 issued a statement that the NAS had "nothing to do" with the effort and that the article "does not reflect the conclusion of expert reports of the academy." The petition that accompanied the article, and supposedly was signed by more than 15,000 scientists asserting their skepticism of global warming, included some "surprising" names. DC-based *Ozone Action* "scoured" the list and found "dozens" of names that are "unlikely to be scientists," including Perry Mason ("the fictitious lawyer?"), Michael J. Fox ("the actor?"), Robert C. Byrd ("the senator?"), Drs. "Frank Burns," "Honeycutt" and "Pierce" (the trio from the TV show MASH?), and even Geraldine Halliwell, better known as Ginger Spice, a member of the *Spice Girls* music group.

The article's lead author was Arthur Robinson, a physical chemist at the *Oregon Institute of Science and Medicine* in Cave Junction, OR. Robinson said the article had been circulated for peer review and for publication in a scientific journal, but he went ahead and released it because "copyright considerations" would have prevented it from being used in the petition drive. In an interview,

he said he "never intended to imply" that the NAS endorsed the article, and he described his institute as "devoted mostly to the study of biochemistry". Robinson "says the questionable names are the work of pranksters and shouldn't take away from the fact" that thousands of signatories are experts qualified to express an opinion on climate change. Robinson acknowledged he made little attempt to verify the credentials of those who responded to the petition by mail.

"The great war over global warming ... is more about values than it is about science," writes Robert Park, a physics professor at the *University of Maryland*, in a *New York Times* op-ed. There are "gaps aplenty" in the science supporting the global warming theory, he notes, and in such situations, "scientific judgment has a way of conforming to the religious and political views of the scientist. As for me," he adds, "my mother taught me to keep the thermostat down." Park speculates that the petition effort was underwritten by the petroleum industry.

Meanwhile, the *Royal Dutch Shell Group* on 4/21 "dealt a blow" to the *Global Climate Coalition (GCC)*, a DC-based group of oil companies, automakers, electric utilities and others opposed to the Kyoto global warming treaty, by announcing that it plans to quit the group at the end of the year. Mark Moody-Stuart, who will become *Shell's* new CEO on 7/1, said the company would not renew its membership in the GCC because *Shell* supports ratification of the treaty, which calls for cutting fossil fuel emissions thought to be linked to global warming. The "lobby group's opposition to the protocol was in conflict with *Shell's* commitment to help reduce carbon dioxide emissions", said Moody-Stuart.

Also, with support from a "dozen major companies", one of the nation's largest philanthropies will establish an organization "to study global warming and promote public understanding of the issue." The Philadelphia-based *Pew Charitable Trusts* said it has approved a \$5.2 million grant for the creation of a Washington-based *Pew Center on Global Climate Change* to be headed by former Clinton Adminis-

tration official Eileen Claussen. The center will not lobby for legislation but will underwrite economics research and advertising campaigns to raise public awareness of the issue. "Claussen said she hoped the center would bridge the gap between environmentalists and business interests ... by providing credible and persuasive evidence that solving the problem would also prove economically beneficial."

"What makes the effort unusual is that some of the world's biggest companies ... have endorsed the idea and agreed to let the center use their corporate logos in literature supporting it". The companies include *Boeing, Lockheed-Martin, Toyota, Maytag, Whirlpool, United Technologies, 3M, British Petroleum, Sun Oil, American Electric Power, US Generating and Enron*. "The companies are not contributing financially to the new center, but they are promising ... to reduce their own [greenhouse gas] emissions ...and to invest in new, more efficient products and technologies."

Sources: (*Investor's Business Daily*, 4/23/98; David Chandler, *Boston Globe*; 4/23/98; Jim Erickson, *Tucson Arizona Daily Star*, 4/23/98; Curt Suplee, *Washington Post*, 5/11/98; Peter Bacque, *Richmond Times-Dispatch*, 4/11/98; William Stevens, *New York Times*, 4/21/98, *AP/Las Vegas Sun*, 5/1/98; Robert Park, *New York Times*, 5/2/98; Martha Hamilton, *Washington Post*, 4/22/98; *Dow Jones Newswires*, 4/21/98; Traci Watson, *USA Today* 5/7/98, Chris Mondics, *Philadelphia Inquirer*, 5/7/98 and National Journal's GREENWIRE, *The Environmental News Daily*, 4/14, 4/22, 4/23, 5/4, 5/8, 5/11/98

Fish Consumption Warnings

Although state performances in monitoring waterways "vary widely," states are issuing "far more frequent" advisories about consumption of contaminated fish, according to a report released in early April by the *Natural Resources Defense Council* (NRDC). The advisories recommended limiting or avoid-

ing eating certain fish species that may have been contaminated by mercury, PCBs or toxins in the waterways. States in 1996 issued 2,194 warnings -- an 80% increase from 1993. The 1996 warnings accounted for 15% of all lakes, 5% of river and stream miles and all of the Great Lakes.

The NRDC attributed the increase to improved monitoring, but report author Amy Kyle said states vary in the extent of monitoring and how they warn the public. The NRDC has called on the federal government to develop a national monitoring standard and ensure that all states advise consumers of potential contamination. Although the USEPA has said it wants to conduct a national survey of fish contamination levels, develop a strategy for removing pollutants from waterways, and require states to improve monitoring practices, the FY99 budget approved by the Senate provides no funding for the program. More information on the NRDC report is available at <http://www.nrdc.org/nrdcpro/catch/ccsum.html>.

Source: National Journal's GREENWIRE, *The Environmental News Daily*, 4/9/98

Eco-Friendly Hemp

For the first time in 60 years, Canadian farmers this Spring planted legal hemp crops. Possible wood-fiber shortages and tighter environmental rules favoring natural fibers have increased farmers' interest in the crop, which requires no pesticides and little fertilizer to grow. Industrial hemp cultivation is prohibited in the U.S., as drug officials point out that the crop and illegal marijuana come from different varieties of the same plant. Canada has vowed to ensure its farmers seed only an industrial variety of hemp, which is prized for its versatility of use "in everything from paper to auto parts." Canadian hemp growers will be licensed by the federal government and monitored by police "to prevent abuses." Hemp plants must have no more than 0.3% of the psychoactive element THC.

Meanwhile in the U.S., a first of its kind lawsuit has been filed by a coal-

ition of farm and trade groups to challenge the federal policy that bans the cultivation of hemp. The basis of the suit in U.S. District Court in Lexington, KY, is economic, as "thousands" of farmers throughout the South and Midwest hope to include the crop in their annual rotations. Imported hemp products have been "abundant" in the U.S. for years. The plaintiffs, including the *Kentucky Hemp Growers Council*, argue that Congress in 1937 determined that hemp is chemically different from marijuana and that the ban on hemp production by the U.S. Drug Enforcement Administration therefore violates the constitutional doctrine of separation of powers of government.

Hemp may also make a desirable alternate crop for floodplain farmers.

Sources: John Urquhart, *Wall Street Journal*, 4/24/98; Michael Janofsky, *New York Times*, 5/14/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 4/24 and 5/15/98

FWS Approves Cormorant Control

The U.S. Fish and Wildlife Service (FWS) recently announced a depredation order, allowing catfish farmers and other commercial aquaculturalists to kill double-crested cormorants. "The order will be one component of an integrated program to reduce cormorant depredation losses at aquaculture facilities," the FWS said. By allowing farmers to kill double-crested cormorants, the depredation order will save an estimated \$20 million in fish taken each year in a national aquaculture industry worth \$714 million, the FWS said.

Cormorants consumed an estimated 18-20 million catfish in the Mississippi Delta during the winters of 1989-90, according to the FWS. That, the FWS said, was the equivalent to about 2 million pounds. Based on the cost of replacing these fish, annual losses to the catfish industry were estimated at \$1.8-\$2 million. Since then, the numbers have continued to rise, said Phil Mastrangelo of the U.S. Department of Agriculture's Wildlife Service based at *Mississippi State University* in

Starkville. He said a February survey showed 67,000 cormorants in the Mississippi Delta. Those numbers are about two-thirds higher than they were five years ago, he said.

Cormorants are long-necked, large-bodied diving birds and often can be seen standing on rocks with their wings spread. Their webbed



"Double-crested Cormorant"

feet and hooked beaks are adapted for chasing and capturing fish under water.

The order is not intended to control the cormorant population, the FWS said. It is directed at site-specific problems in which cormorants are eating channel catfish and other commercially important fish species, such as hybrid striped bass, Chinese grass carp and baitfish. FWS director Jamie Rappaport Clark said, "With this depredation order, the Service is letting aquaculturalists take action to protect their livelihood when nonlethal methods are ineffective."

The FWS order applies to the States of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Minnesota, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee and Texas. The order states that cormorants can be killed by shooting (nontoxic shot) only during daylight hours; shot only in conjunction with an established nonlethal harassment program; decoys, taped calls or other devices may be used; a log must be kept recording the date and number of birds killed each month and the log must be maintained for three years; aquaculturalists must possess the appropriate state permits (where required).

Source: Larry Rea, *Scripps Howard News Service*, 4/4/98

Environmental Concern Spans Generations

"Teenagers and baby boomers agree that government and industry are falling short of their environmental obligations and that time is running out to protect the Earth from permanent environmental damage," according to a nationwide poll released on 4/21 by DC-based *Earthview*. The poll, commissioned by the *National 4-H Council* and *Honda*, also found that both generations say they would pay to guarantee clean air and water, and that technology will help solve environmental problems. The telephone survey of 1,000 teens aged 13-18 and 1,000 baby-boomers aged 40-55 "was designed to compare environmental attitudes among today's youths with those who were teenagers or young adults at the time of the first Earth Day in 1970."

Historian Neil Howe, an expert on generational studies, said the study shows that "teens are as committed to the environment as boomers ever were, though their choice of issues has shifted a bit to more emphasis on global warming and biodiversity, less on smog and overpopulation. This research rejects the old stereotype of apolitical kids who think the environment was just a personal, voluntary thing. In the late 1990s, we're seeing new teens with a whole new attitude."

The study, conducted by *Fleishman-Hillard Research* between March 11-19, has a margin of error of +/-3%. Some of the poll's findings follow:

- Boomers and teens agree time is running out to save the environment from permanent damage:
 - Teens: 77%, Boomers: 67%
- The greatest barriers to improving the environment in the U.S.:
 - "Lack of individual concern:"
 - Teens: 45%, Boomers: 32%
 - Corporations:
 - Teens: 20%, Boomers: 32%
 - Government leaders:
 - Teens: 19%, Boomers: 22%
- Agree that corporations are not concerned about the environmental

impact of their practices or products:

- Teens: 71%, Boomers: 67%
- Agree that government leaders are not concerned about the future impact of today's environmental problems:
 - Teens: 63%, Boomers: 64%
- Willing to pay more for environmentally friendly products:
 - 50 cents more per gallon for less-polluting gasoline:
 - Teens: 70%, Boomers: 51%
 - More for less-polluting cars:
 - Teens: 80%, Boomers: 69%
- Agree government leaders should do more to control pollution from the oil and chemical industries, even if oil and gas prices go up:
 - Teens: 82%, Boomers: 76%

Sources: *Earthview* release, 4/21/98 and National Journal's *GREENWIRE*, *The Environmental News Daily*, 4/21/98

Religion and Forest Conservation

Catholics, Jews, Protestants and members of other faiths in early May formed a "broad-based religious coalition" aimed at promoting forest conservation. The Santa Rosa, CA-based *Religious Campaign for Forest Conservation* noted that although other environmental groups have organized to promote general "Earth stewardship," until now "the forest conservation movement has not been closely linked to religion." Owen Owens, director of the ecology ministry of the Valley Forge, PA-based American Baptist Church and responsible for the campaign's declaration on forests said, "In the heavenly city of the Lord, trees not only provide food, but their leaves heal the nations."

Representatives of the group will meet in 7/98 to draft a national statement to identify the "spiritual values of ancient forests" and to promote public policies that protect forests on public lands. An editorial said, "It's one thing to base debates about logging policies on dollars and cents. But if this campaign succeeds in bringing biblical values to the debate, it will be intriguing to watch the profit-and-loss mentality try to counter concerns about God's regard for 'the prayer of the juniper'".

Source: *Philadelphia Inquirer*, 5/16/98; *Baltimore Sun* 5/17/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 5/18/98

Forest Paints, Herbicides, and Miscarriages

Female foresters who used tree marking paint or herbicides for the U.S. Forest Service (USFS) from 1986 to 1996 were at higher risk for miscarriages and having children with birth defects than other women employed by the agency, according to a report by the *National Institute for Occupational Safety and Health* (NIOSH) obtained by the AP on 5/13. Although the study, based on a 1996 survey of 6,000 USFS employees, "stopped short" of concluding that exposure to paints and chemicals caused the miscarriages and birth defects, it found that the use of *Southern Coatings Boundary Paint* was associated with a 177% increased risk of miscarriage. *Nelson Paint* herbicides and paint were linked to 82% and 81% increased risks, respectively. Compared with non-foresters, foresters also had a 17% higher risk of having a child with a birth defect.

Epidemiologist Richard Driscoll, who led the NIOSH study, said that although "strenuous" forestry work is a risk factor for miscarriages, "even after controlling for other potential things, the relationship held up for the paints." USFS spokesperson Chris Wood said the agency expects "to go well beyond" the report's recommendations to protect workers' health. The USFS no longer buys *Nelson Paint*, and *Southern Coatings Paint* is no longer made. Kingsford, MI-based *Nelson Paint Company* did not comment because it had not yet reviewed the report.

Sources: Scott Sonner, *AP/Portland Oregonian online/others*, 5/14/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 5/15/98

Pollution Investigation Website

The *Environmental Defense Fund* (EDF) on 4/15 launched a free World Wide Web service that will allow users anywhere in the U.S. to investigate pollution sources in their communities and send questions "straight to the sources themselves". The *EDF Chemical Scorecard* combines scientific, technical and legal information from more than 150 electronic databases. Users can get toxics reports using zip codes or the names of states, counties or individual industrial facilities. Its health-based ranking system allows pollution releases to be weighted and displayed by the severity of the hazards they pose. The service includes street maps, so users can see where sources are located, and "take action" options to send free faxes directly to some polluting facilities and e-mail to the USEPA. The site can be found at www.scorecard.org.

Sources: *EDF release*, 4/15/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 4/15/98

DOI Recreation Website

A new way for visitors and travelers to learn about the many recreational opportunities available to them on America's public lands is being provided through www.recreation.gov -- a one stop shopping Website for information about recreation activities on federal lands. The "recreation.gov" initiative is part of Vice President Gore's multi-agency effort to improve customer service. Gore announced the availability of the new



website on 4/21 at a federal management conference in Washington, D.C.

The website was created by a small team of federal land management agencies including the Interior Department's National Park Service, Fish and Wildlife Service, Bureau of Land Management, and Bureau of Reclamation; the U.S. Department of Agriculture's U.S. Forest Service; and the Department of Defense's U.S. Army Corps of Engineers. Interior Secretary Bruce Babbitt noted that, "We'll keep improving America's recreational areas, and we'll continue to build on new ways for the public to get the information needed to have an enjoyable experience as they visit our public lands and historic sites."

The system was developed through a partnership approach that included the Interior Department's U.S. Geological Survey's *National Digital Atlas* mapping program, and the Department of Commerce's National Weather Service, which provided weather information. The system is housed on an HP NetServer donated by *Hewlett-Packard Co.* to the *National Park Foundation*. The gift from Hewlett-Packard is an excellent example of partnership and commitment to support innovative projects that use technology to benefit the public.

Each land management agency is responsible for maintaining and updating its own information on the database. Future stages of [recreation.gov](http://www.recreation.gov) will include links to agency campground reservation systems, and may include links to other partners, such as state parks and tourism offices and local chambers of commerce. Visitors and users of America's public lands will also find the [recreation.gov](http://www.recreation.gov) website very useful in their search for recreation sites by state, by agency or by recreational activity. The system will provide users with a list of all federal recreation sites meeting the search criteria, as well as a list of the activities available at each site. The system will also provide access to more detailed information about individual recreation sites by linking to agency web pages.

Source: U.S. Dept. of the Interior News Release, 4/21/98

Meetings of Interest

June 23-28: First International Ictalurid Symposium - Catfish 2000
Davenport, IA. Contact Steve Eder, Missouri Dept. of Conservation, P.O. Box 180, Jefferson City, MO 65109-0180, (573) 751-4115, FAX(573) 526-4047, <http://www.fw.umn.edu/ncdafs/cf2000>.

July 7-9: Monitoring: Critical Foundations to Protect Our Waters, Sciences - Politics - Management, Reno, NV. Contact: Joanne Kurklin, Water Quality Specialist, USGS, 202 Northwest 66th, Building 7, Oklahoma City, OK 73116, (405) 843-7570

July 9-12: 4th Annual Mississippi River Basin Alliance Conference, University of St. Louis, MO. Con

tact: Mississippi River Basin Alliance (612) 870-3441

August 23-27: 128th Annual Meeting of the American Fisheries Society, "Challenges for the New Millennium: Shaping the Future of Fisheries Science and the Fisheries Profession, Harford Civic Center, Hartford, CT. Contact: Paul Brouha, (302) 897-8617, Ext. 209.

September ? : 88th Annual Meeting of the International Association of Fish and Wildlife Agencies, Savannah, GA. Contact: Georgia Department of Natural Resources.

September 27-30: Peaks to Prairies: A Conference on Watershed Stewardship, Rapid City, SD. Contact the Throne Ecological Institute, 5398 Manhattan Circle, Boulder, CO

80303, (303) 499-3647, dir@thorneecoinst.org.

September 21-24: 6th National Nonpoint Source Monitoring Workshop, Cedar Rapids, IA. Contact Lynett Seigley or Carol Thompson, Iowa Dept. Of Natural Resources, Geological Survey Bureau, 109 Trowbridge Hall, Iowa City, IA 52242-1319, (319) 335-1575, FAX (319) 335-2754, lseigley@igsb.uiowa.edu or cthompson@igsb.uiowa.edu.

WETLANDS '98 - Integrating Wetlands and Floodplain Ecosystems Into Watershed Management, St. Louis, MO. Coordinated by the Association of State Wetland Managers and the Institute for Wetland Science and Public Policy. Contact: Jon Kuslar, ASWM, P.O. Box 269, Berne, NY 12023-9746, (518) 872-1804

Congressional Action Pertinent to the Mississippi River Basin

Endangered Species

- The Senate voted in early April to sell public lands in the West to fund endangered species programs.

- An effort by Sen. Harry Reid (D/NV) to block the auction of Bureau of Land Management (BLM) property to pay for tax breaks for landowners who cannot develop their property because rare plants or animals reside there was defeated. Instead, senators backed a measure by Sen. Dirk Kempthorne, R/ID, that allows use of proceeds from BLM land sales for these tax breaks -- if another source cannot be found. These tax breaks are a key part of the overhaul of the Endangered Species Act.

- Senate action on S. 1180, a bill to reform the Endangered Species Act, is still on hold. The bill, which used to have strong bipartisan support but has since lost some Democratic backing, has been awaiting Senate floor action as legislators try to work out concerns. Senators Kempthorne, Reid, John Chafee, (R/RI), and Max Baucus, (D/MT), have worked almost two years to

rewrite the endangered species law, the first bipartisan compromise on this controversial issue and the first to win White House support. But the battle over money has threatened to rip apart the hard-won compromise even before the endangered species bill gets to the full Senate for a vote.

- The House, which is waiting on the Senate before moving on ESA reform, held an oversight hearing on reform matters in the Resources Committee on March 5.

- A status report from congressional staffers says that the law "probably will remain" funded on a year-to-year basis, as it has since 1992. Industry and conservation groups say they believe the opportunity to revamp the law "has passed, probably for several years." And as fall elections approach, "congressional leaders will grow less interested in holding a vote on a measure that could lead to some members being labeled anti-environment by opponents".

National Forests

The House on March 27 voted 181-201 to defeat House Agriculture

Chairman Bob Smith's (R/OR) Forest Recovery and Protection Act (H.R.2515, H.Rpt. 105-440). The bill would have created a five-year program of identifying and treating portions of national forests damaged by disease or insect infestations and under the threat of wildfires. A scientific panel would have identified these "recovery projects" for the Forest Service to treat through logging or restorative means. The legislation had passed the House Agriculture Committee on March 4.

House Forests Subcommittee Chairwoman Helen Chenoweth's (A/ID) H.R. 2458, the Community Protection and Hazardous Fuels Reduction Act of 1997, passed her subcommittee on March 5 by a voice vote. The bill would direct the Interior and Agriculture secretaries to require the removal of overgrown areas of forests in danger of igniting forest fires near communities when entering timber contracts. And it would give logging companies a credit toward timber sales when they undertook overgrowth reduction projects.

Sen. Larry Craig's (R/ID) bill, S. 1253, to restructure federal forest manage-

ment policies while emphasizing a multi-use outlook underwent another hearing Feb.3 with Wilderness Society President William Meadows. Craig went through the bill section by section, questioning environmentalists' opposition to the legislation.

Rep. John Peterson (R/PA) offered H.R. 3297 to suspend the Forest Service's roads proposal until public hearings are held at each forest unit and a report is issued on the impacts of the proposal on factors such as forest health

Parks and Refuges

The Senate Parks Subcommittee began a series of hearings, April 1, on Subcommittee Chairman Craig Thomas' (R-Wyo.) S.1693, called the Vision 2020 National Parks Restoration Act, intended to change management and funding requirements for the national park system. The four scheduled hearings in April and May concentrated on several sections of the bill at a time.

The Senate Parks Subcommittee on Feb. 12 held a hearing on several bills that would add congressional and state oversight on some national monument designations and United Nations land protection program nominations, including two

bills that passed the House. H.R. 1127, S.477 and S.62 deal with amending the Antiquities Act that now allows the president to designate national monuments without Congress' approval. H.R. 901 would change the procedure of enrolling land under the U.N. World Heritage Site and Biosphere Reserve programs. S.691 deals with national monuments and U.N. programs. A markup has not been scheduled.

Sen. Ben Nighthorse Campbell (R/CO) introduced S. 1614 to mandate a permit for commercial filming in national parks and wildlife refuges.

Property Rights

The House on March 12 passed another controversial property rights bill, H.R.992. The bill would allow property owners to bring their "taking" claims to either a federal district court or a U.S. claims court, thereby eliminating jurisdictional uncertainties about which court has authority to oversee takings claims. The Senate which has held a committee markup of H.R. 1534, which incorporates the House-passed H.R. 1534 as well as H.R. 992 is holding off on a floor vote to seek consensus among senators.

Public Lands

Sens. Craig Thomas (R/WY) and

Spencer Abraham (R/MI) offered S. 1693 to make management and funding changes in the national parks system.

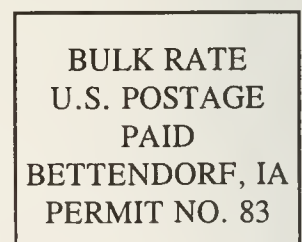
Rep. Bob Smith (R/OR) sponsored H.R. 3187 to amend the Federal Land Policy and Management Act of 1976 to exempt non-profit agencies holding right-of-ways on public lands from certain strict liability requirement connected to the rights-of-way.

Senators Max Baucus (D/MT) and Conrad Burns (R/MT) presented S.1913 to order Interior to sell leaseholds at the Canyon Ferry Reservoir in Montana and set up a trust fund for fish and wildlife conservation, hunting and fishing.

Water Rights

Rep. Bob Smith (R/OR) introduced H.R.3557, on March 25 that would require the federal government to pay fees and costs in proceedings related to state water rights adjudications. The bill was referred to the Judiciary Committee, but no hearings have been scheduled.

Sources: *Land Letter*, *STATUS REPORT*, Vol. 17, No. 6 (2/28/98), No. 7 (4/2/98), and No. 9 (5/4/98); Fredreka Schouten, *Gannett News Service*, 4/3/98; and National Journal's *GREENWIRE*, *The Environmental News Daily*, 5/18/98



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