River Crossings

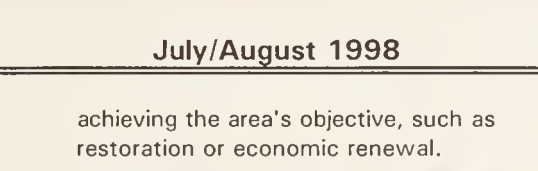
Volume 7 July/August 1998 Number 4

Ten Heritage Rivers Picked

The advisory committee for the *American Heritage Rivers Initiative* (AHRI) on 6/16 recommended 10 rivers to President Clinton to receive concentrated federal assistance. These include the:

- Connecticut River in Connecticut, Vermont, New Hampshire and Massachusetts;
- Detroit River in Michigan;
- Hanalei River in Hawaii;
- Hudson River in New York;
- New River in North Carolina, Virginia and West Virginia;
- Rio Grande River in Texas;
- Potomac River in Maryland, Pennsylvania, Virginia and West Virginia;
- St. Johns River in Florida;
- Upper Mississippi River in Iowa, Illinois, Minnesota and Wisconsin; and
- Willamette River in Oregon.

The selected rivers came from a pool of 126 nominations and are meant to represent a cross-section of the nation with unique natural, cultural, historical, economic, scenic and recreational aspects, according to the Council on Environmental Quality (CEQ) -- the agency heading the program. About a dozen other agencies, including the departments of Agriculture, Interior, and Housing and Urban Development are participating in coordinating river-related services, from grants to staff assistance. As part of the nomination process, the communities provided an action plan for achieving the area's objective, such as restoration or economic renewal.



President Clinton will finalize the *American Heritage River* designations later this summer, and sponsoring communities will receive focused federal support for restoration and revitalization of their river communities. These "communities" can be towns, cities, sections of rivers, or entire watersheds.

Each designated *American Heritag River* community will receive Presider tial recognition, and within 90 days c their official designation, the ten com munities, assisted by local offices c federal agencies, will complete a frame work document, or Memorandum c Understanding, that defines participar roles -- as these roles relate to the pla of action submitted under the nomina tion process.

Under Executive Order 13061, entitle *Federal Support of Community Effor Along American Heritage Rivers* an signed by President Clinton on 9/11/98 agencies within the Executive Branc are authorized to coordinate existin federal plans, functions, programs an resources to preserve, protect an restore rivers and their associated re sources important to our history, cu

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ture, and natural heritage. Accordingly, each *American Heritage River* will be provided a *River Navigator* — a federal employee who will serve the community for a period of up to 5 yrs. as a liaison to the federal government, helping people better understand how to access existing federal resources. River Navigators will be senior level federal employees with the depth of experience necessary to help access existing federal resources. They will come from existing staff resources, and may hold permanent or term status, or may be a professional paid from federal funds. It is anticipated that the ten River Navigators will be identified in the beginning months of FY99.

The AHRI has been criticized by some legislators, but Clinton Administration officials have stressed that the initiative does not mean new regulations but instead involves a focusing of existing services. Participation in the program is purely voluntary and contingent on full community support, according to the CEQ. Because of this early criticism a revision was added to the AHRI allow legislators to cancel a river's nomination in their district. However, Sen. Gordon Smith (R/OR) said shortly after the selected rivers were disclosed that he had sent two letters to the Administration objecting to the inclusion of any Oregon river in the program, yet the Willamette River was chosen.

However according to CEQ officials, since Sen. Ron Wyden (D/OR) supported the Willamette's designation, it's removal from consideration was not automatic. The program's guidelines say in a case where senators disagree, the advisory committee continues to judge the strength of the application in light of other members of the delegation's views. As for the Willamette decision, Reps. Earl Blumenauer (D/OR) and Elizabeth Furse (D/OR) had also given their OK, said a CEQ source. One House member may withdraw a river's nomination as long as it is in the lawmaker's jurisdiction, the rules say.

The Willamette River connects Eugene to Portland and therefore affects more than half of the state's population and two-thirds of Oregon's economy, said Curtis Robinhold, natural resources policy coordinator for Oregon Gov. John Kitzhaber (D). It also lately has borne the brunt of the region's growth, Robinhold added. In the early 1970s, the Willamette River underwent a massive clean-up effort when high-level industrial dumping from paper plants was halted. Now, the river needs the same protection in the area of non-point source pollutants, he explained. "It's generally a good idea to focus federal energies on rivers," since landowners do not always know which services the different government agencies provide, he said.

Across the Nation, twelve of 126 communities who applied for the designation will not be considered because of opposition by their local Congressman or U.S. Senator. Stretches of 14 other nominated rivers may also be out of the running. CEQ Chair Kathleen A. McGinty said her office received 45 letters from members opposing specific nominations, and 197 Congressional letters supporting nominations. "Comments by Members of Congress have run more than four-to-one in favor of the *AHRI* and we are pleased by this overwhelming show of support," said McGinty.

Source: Larisa Epatko, *Land Letter*, Vol. 17, No. 13; and Scott Faber, Staff Writer, *Missouri Monitor*, Vol. 1, No. 2, June 1998

Missouri River Dropped From Heritage Contest

Congressional opposition from Senators Sam Brownback (R/KS), Conrad Burns (R/MT), Chuck Hagel (R/NE) and Representatives John Thune (R/SD), Kenny

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Hulshof (R/MO), Rick Hill (R/MT), Ike Skelton (D/MO), Jim Talent, (R/MO) and Pat Danner (D/MO) to designation of the Missouri River as an *American Heritage River* persuaded the White House to eliminate Lewis and Clark's Big Muddy from consideration as an "American Heritage River".

"They want nothing to do with the program," Rep. Talent said of voters in his St. Louis-area district. He vetoed portions of both the Missouri and Mississippi rivers. "Frankly, I think it is a very sad statement that my constituents have so little trust in their government that they are willing to lose out on a potentially beneficial program than face a repeat of the bureaucratic nightmares they've dealt with in the past," Talent wrote in a letter to the White House.

Antagonism comes both from farm interests, who fear the initiative could divert money from agricultural programs, and property rights groups, who worry it could spawn new regulations. But, government documents reveal that the program will authorize no new spending, no land acquisition, and no new regulations.

Opposition to the AHRI has been led by a property-rights group called *Liberty Matters*, which warns that "this program has nothing to do with preserving America's rivers, but has everything to do with federal encroachment onto private lands and the destruction of individual liberty." The group warns that riverside communities along designated rivers will be subjected to "aerial photography and satellite surveillance" to police the program.

"This program is designed to make government more responsive to local needs, not more bureaucratic," said Chad Smith of the conservation group *American Rivers*. "Unfortunately, a few people with an anti-government agenda have ruined a terrific opportunity for riverside communities." He urged members of Congress who opposed the designation to do more to help local communities redevelop their riverfronts. "In the past, communities turned their back on the river. But today, communities are trying to re-establish the Missouri as a community center, creating riverside parks and natural places connected by trails and greenways."

Source: Scott Faber, Staff Writer, *Missouri Monitor*, Vol. 1, No. 2, June 1998

National Focus on Wetland Restoration

Federal and state efforts to restore drained wetlands to their original condition is being driven by the "vital" role that marshes play in protecting drinking water, preventing floods and sustaining wildlife. "After decades of bitter wrangling over protecting wetlands with laws,...a new environmental movement" is taking shape to voluntarily restore these "dwindling and once-maligned natural systems."

U.S. Department of Agriculture (USDA) officials have been "roaming back roads ... persuading farmer after farmer" to flood fields and woodlands, and Pres. Clinton in 2/98 outlined an ambitious initiative calling for a net increase of 100,000 acres of wetlands/yr. by 2005.

Meanwhile over the past decade; along the Mississippi River in the Midwest, in Louisiana's bayous, and in the Florida Everglades; large scale restoration efforts have been "launched in the name of flood control or pollution clean up". Also in Maryland last year Gov. Parris Glendening (D) pledged to create or restore 60,000 acres of state marshland. Government officials there hope that by creating wetlands in the watershed they can revive the Chesapeake Bay, the nation's largest estuary, which is polluted with fertilizer from farm runoff.

An article in the *Baltimore Sun* points out the benefits of natural wetland restoration, saying that efforts to replace wetlands lost to development are often "disappointing" because it takes many years for man-made marshes to "match natural ones in the richness of their plant and animal life." "Restoring wetlands where they used to be is usually faster, easier and cheaper than trying to create marsh out of upland." One Maryland project to replace wetlands lost to development cost the state nearly $100,000/acre. But under the USDA Wetland Reserve Program, more than 100,000 acres are restored annually at a cost of only $1,000/acre.

Sources: Timothy Wheeler, *Baltimore Sun*, 6/7/98; National Journal's GREENWIRE, *The Environmental News Daily*, 6/9/98

States Enhance Protection of Riparian Areas

While most states are still banking on voluntary measures to reverse streambank degradation and Non-Point Source (NPS) pollution impacting water quality, others are starting to take more aggressive action.

Massachusetts recently finalized regulations for implementing its new *Rivers Protection Act*, which establishes a 200 ft. wide buffer zone along the state's perennial rivers and streams. Developers who wish to build in the zone must demonstrate that there is no reasonable alternative to construction in the protected area. They must also outline how their proposed project will minimize impacts related to flooding, water supply, ground water, shellfish, aquatic habitat, storm drainage, and fishing. Convened by the Massachusetts Department of Environmental Protection, an eight member advisory board drafted the *River Protection Act* regulations. Board members included environmental advocates, farming interests, property owners, developers, and real estate interests. State officials hope that the new law will address most of the state's water resources (nearly 67%) that are currently listed as impaired, and will promote a more proactive approach to protecting water quality.

North Carolina adopted a riparian protection measure in June 1997, when Governor Jim Hunt, members of the *Environmental Management Commission*, North Carolina Department of Environment, Health and Natural Resources Secretary Jonathan Howes, and state legislators teamed up on a

plan to reduce nitrogen pollution and riparian destruction along the Neuse River. The plan, announced after exhaustive research and consensus-building, established a 50 ft. protected, vegetated zone on each side of the river. Tough new rules for stormwater management in urban areas, fertilizer applications, and sewage treatment plant discharges were also enacted to reduce the amount of nitrogen and phosphorus polluting the river.

New Hampshire implemented a comprehensive shoreland protection act last year to manage activities within 250 ft. of lakes, ponds, rivers, and coastal waters. The new shoreland rules are targeted at maintaining effective buffers of trees, shrubs, and ground cover to filter and absorb pollutants and runoff. A minimum 20 ft. setback is required for construction of sheds, garages, or other structures, with a mandatory maximum "footprint" set at 150 ft^2. Coordinated review of riparian activities will eliminate unplanned and piecemeal development in the state, according to Department of Environmental Services Commissioner Robert W. Varney.

Illinois sweetened the pot for voluntary protection of riparian areas by adopting a five-sixths property tax exemption for vegetated buffers managed in accordance with a plan approved by the county conservation district. The protected zone must be at least 66 ft. wide, meet USDA Natural Resource Conservation Service standards, and contain vegetation that "has a dense top growth, forms a uniform ground cover, has a heavy fibrous root system, and tolerates pesticides used in the farm field."

The **USDA** recently approved plans, designed by **Minnesota** and **Illinois** with *Environmental Defense Fund (EDF)* assistance, to restore up to 420,000 acres of wetlands, forests, and native grasses along the Minnesota and Illinois rivers. The new programs will pay farmers to retire flood-prone or eroding cropland along the rivers and to recreate natural buffer zones to prevent runoff of farm chemicals. The plans combine state funds with the $2 billion annual

federal Conservation Reserve Program. EDF attorney Tim Searchinger worked closely with officials in Illinois and Minnesota to design the model plan. "Each plan will restore far more natural area around a river than any previous river restoration plan in the country," Searchinger said. "By comparison, the Kissimmee River project in Florida, often considered the largest river restoration plan in the U.S. will recreate 25,000 acres of wetlands." "The Minnesota plan will turn the Minnesota River back into one of the few large rivers in the United States with an intact floodplain," Searchinger said. "The two plans will nearly double the floodplain habitat on the upper Mississippi River system," he added. Total costs of the Illinois and Minnesota plans will exceed $800 million, with roughly 75% coming from federal agriculture funds. State funds will help the farmers replant forests and restore wetlands and will extend temporary federal agreements into permanent conservation commitments for most of the restored lands. EDF is now helping other states; including New York, North Carolina, Oregon, and Pennsylvania; to develop enhancement programs.

Wisconsin is proposing a plan to preserve prairie along the Chippewa River that provides habitat for several birds on the state endangered species list. The 2,000 acres of bottomlands and slopes along the river encompass the "largest concentration of prairies we know of anywhere in the state," according to Department of Natural Resources biologist Randy Hoffman. Officials hope to encourage land preservation in a 250,000 acre area by giving financial aid to landowners. Six endangered birds inhabit the targeted land: the red-shouldered hawk, acadian flycatcher, cerulean warbler, hooded warbler, Kentucky warbler and yellow-crowned night heron. In addition, the lower Chippewa River provides habitat for the endangered paddlefish and the crystal darter.

Sources: *Nonpoint Source News-Notes,* April/May 1998, Issue #51; *EDF Letter,* Vol. XXIX, No. 3, June 1988; *AP/St. Paul Pioneer Press*, 7/14/98 and National Journal's GREENWIRE, *The Environmental News Daily*, 7/17/98

Missouri River Habitat Restoration - Nebraska Style

The Nebraska Game and Parks Commission's 1,637 acre, 3.5 mile long Hamburg Bend Wildlife Management Area (WMA) is restoring a remnant of the Missouri River channel near Nebraska City to near-natural condition after 85 years of human modification.

Hamburg Bend WMA is the first of six or more such sites to be developed in Nebraska, and among the first of 25 to 30 planned by the four lower Missouri River states between Sioux City, IA and the river's mouth near St. Louis. Many sites are being restored to near natural conditions, while others are enhancing specific habitat features. The U.S. Army Corps of Engineers is undertaking the restoration as "mitigation" to undo some of the damage done to the river ecosystem in 85 years of channelization. Although this effort represents only a tiny fraction of the Missouri River, restoration of this area and of others to follow provide reasons to hope for a brighter future for the beleaguered river.

The River's problems date back to the early 20th century when policies of the federal government and the Corps of Engineers reflected the prevailing attitudes of the time -- Nature was to be subdued to serve humans and their economic needs. Significant river modification began in 1912, when Congress authorized *the Missouri River Bank Stabilization and Navigation Project* --, calling for channelization between St. Louis and Kansas City to accommodate commercial navigation traffic. The project was modified over the years to

create larger navigation channels and, in 1945, to extend navigation upstream to Sioux City. Meanwhile, in Montana, North Dakota and South Dakota, the river was dammed and its valley flooded by a series of reservoirs built primarily for flood control.

Before those modifications, the Missouri wound through its floodplain, flowing in several channels separated by islands and sandbars. Chutes carried smaller flows in shortcuts across the bends, and some chutes and old channels no longer connected to the river during low flows formed lakes and marshes of standing water replenished only when the river rose. Those components of the natural river offered a variety of habitats for fish and wildlife.

Fish could find water that was fast or slow, deep or shallow, according to their needs. Bare sandbars surrounded by flowing water afforded security to migrating ducks and geese in spring and fall and to nesting shorebirds in summer. Wooded islands and banks were havens for beavers, deer, foxes, owls and dozens of other species. Marshes and sloughs harbored raccoons, muskrats, bullfrogs and broods of ducklings. Between Sioux City and St. Louis, 300,000 acres of flowing water, wetlands, sandbars, islands and timber lay between the river's high banks. Besides providing habitat, the marshes and sloughs along the river absorbed the annual spring and summer high water and more severe floods as well, releasing excess water gradually when the river could accommodate it.

Before its valley was settled, the Missouri's floods were not destructive, as we now view them, but beneficial events that rejuvenated the river. Floodwaters, especially those carrying ice, scoured out wetlands and chutes, created deep water and shallows, moved sandbars and sometimes even cut an entirely new river course. Floods sculpted aquatic and terrestrial habitat, interrupted plant succession and created great habitat diversities. As it spread out across the landscape, the flooding river replenished its food chain by picking up organic nutrients from all the forests, marshes and prairies it touched.

Missouri River near Rulo, NE showing progressive habitat loss caused by development of the Missouri River Bank Stabilization and Navigation Project.

Since 1912, "improvement" projects have concentrated the river into a single narrow, deep navigation channel, and attempted to contain its floodwaters within levees. Dikes and revetments eventually squeezed the river into its present channel. But in the process, the sloughs, chutes and wetlands that gave the old river its diverse fish and wildlife habitat were cut off from the river and left to wither and die. Protected from scouring floods by dikes and levees, chutes and wetlands filled with silt carried in by high water and eventually became high and dry enough, at least some of the time, for agriculture, commerce and other uses.

Today, the original 300,000-acre channel below Sioux City has shrunk to 112,000 acres, the 188,000 acres of water surface has declined to just under 88,000 acres, and the river channel has been shortened by 127 miles! The river has lost nearly all of its diversity; most of the remaining water flows in a single deep, swift channel. In addition, 68,000 acres of islands, woods and sandbars disappeared, becoming almost nonexistent -- only a thin band of cottonwoods lines the river bank in most areas. With many of its fish and wildlife species declining or listed as threatened or endangered, the decline of Missouri River habitats has become a national issue. In 1997, the conservation organization *American Rivers* placed the Missouri at the top of its list of the nation's most endangered rivers.

A 1981 report and environmental impact statement compiled by the U.S. Army, Corps of Engineers tallied habitat losses along the river and proposed remedies. The report was followed by the *Water Resources Development Act of 1986*, the Corps' latest environmental mandate from Congress, making possible Hamburg Bend and other projects in Nebraska, Iowa, Kansas and Missouri.

Preliminary studies and planning began in 1989, and the Hamburg Bend project began in 1992. Then came the floods of 1993, and little mitigation work took place that year. But the flood generated public awareness of the Missouri, and demonstrated the folly of encroaching too heavily on the floodplain and the futility of trying to control the river only with expensive structures. Many landowners who built or farmed on accretion ground saw their property destroyed and farm ground stripped of topsoil or covered with sand.

The flood also showed that people had a false sense of security about the Missouri River, as recognized in a report on the flood of 1993 by the Clinton Administration's *Interagency Floodplain Management Review Committee*. "Local and federal flood damage reduction projects were constructed to minimize the annual risk.... Some of these programs, however, attracted people to

Aerial view of Nebraska's Hamburg Bend Wildlife Management Area. Note development of the complex network of off-channel waters on the floodplain.

high-risk areas and created greater exposure to future damages," the report stated. "Since 1993, more attention has been given to non-structural aspects of floodplain management," said Larry Buss, chief of Floodplain Management Services for the Corps of Engineers' Omaha District. "We can deal with floods in two ways. We can take the water away from people and buildings with channels, levees and dams. That's called the 'structural approach', Or, we can take the people away from the water and the floodplain. That's the 'non-structural approach.' The flood of '93 showed us that the 'structural approach' is not the total answer."

When fair market price was offered for the land by various federal and state agencies in an effort to remove people from areas subject to flooding, many sold, including those who farmed the land that is now Hamburg Bend WMA. The Hamburg Bend restoration, like all the mitigation projects in the program, is funded entirely by federal money administered by the Corps. Land purchased will remain Corps property, but the Nebraska Game and Parks Commission will lease and manage Hamburg Bend as well as other mitigation sites in the state. The Corps also surveyed and designed the project and contracted excavation and construction.

Hamburg Bend is the most innovative and most natural of the mitigation projects on the river so far. Like other sites planned for Nebraska, it features re-establishment of the river's flow through the upper and lower ends of an old chute. "We must reconnect the river to its floodplain. Floods regenerate floodplain habitat," said Commission biologist Scott Luedtke.

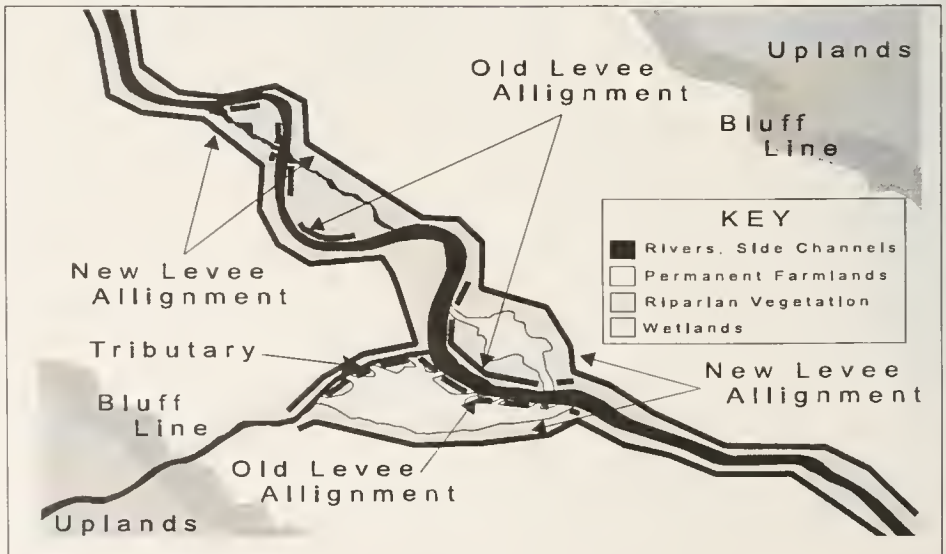
The Corps re-created the original chute at Hamburg Bend using old maps and photographs for reference. Commission biologists hope the river will enlarge the chute, creating a variety of depths and establishing new bends, side-channels and sandbars. The chute and connected waters will provide fish with velocities and depths of water not available in the channelized river.

Biologists believe it is important for the entire area to remain "active," always subject to change at the hands of the river. The chute must move laterally and be subject to flooding to re-create habitat and to pick up nutrients from the land and return them to the river. Biologists believe that the flow-through approach is the best and most natural because it allows the river itself to create habitat diversity.

Because of high flows in the river, much of Hamburg Bend was underwater during the summer of 1997, and the area has been wet much of the time since 1993. When drier years come, as they inevitably will, biologists expect the main chute to remain, but side chutes, wetlands and backwaters are likely to be smaller. The river will vary year to year. Whether water is high or low will matter little for Hamburg Bend, restored as closely as possible to what it was before channelization. Occasional flooding will help keep it a wild place, with no development beyond that necessary to provide access for waterfowl hunters, anglers and others who appreciate wild places.

Nebraska's other planned restorations include:

- Blackbird-Tieville-Upper Decatur Bends: Restoration of three chutes on the east bank along 8 mi. of river north of Decatur. Targeted are 2,485 acres in Iowa and 1,502 acres in Nebraska. Planning and land acquisition are under way.



Schematic diagram of "natural" floodplain restoration concepts being employed by some state and federal habitat restoration projects along the Missouri River.

• Middle Decatur Bend: Planned restoration of a chute on a tract with 3.5 mi. of river frontage on the east bank below the Blackbird-Tieville project. The area will total 812 acres. Planning is under way.
• Tobacco Island: Restoration of a chute on a 1,604-acre tract with 3.5 mi. of river frontage southeast of Plattsmouth. Planning and land acquisition are under way.
• Kansas Bend: Chute restoration on a narrow tract along 5 river miles northeast of Peru. The project targets 1,247 acres. Planning and land acquisition are under way.
• Langdon Bend: Chute restoration on a site with 4 mi. of river frontage extending from near the Cooper Nuclear Power Station east of the village of Nemaha. Land acquisition for the 1,149 acre project is nearly complete and planning is under way.
• Rush Bottom Bend: Chute restoration along 3 river mi. on 1,139 acres on the east bank northeast of Rulo. Planning and land acquisition are under way.

Nebraska's river restoration effort dovetails nicely with similar work being proposed and developed in the neighboring states of Iowa, Kansas, and Missouri. Also, the U.S. Fish and Wildlife Service's Big Muddy National Fish and Wildlife Refuge complements the states' projects by proposing to create a string of restored floodplain habitats from Sioux City, IA to St. Louis, MO. These restored state and federally sponsored habitats will not only address wildlife management and endangered species issues, but will also provide a margin of enhanced flood protection for floodplain landowners and communities located nearby. The beauty of these restorations is that land acquisitions have all been from willing sellers, and in cooperation with local landowners.

This is not a government land grab! It is truly a success story that came as the result of the 1993 flood, and as the product of many years of hard work by an interdisciplinary team of state and federal biologists, working together to restore some semblance of the historic Missouri River's aquatic ecosystem. This project is creating a legacy that will be left for future generations to enjoy just in time for celebration of the 200th Anniversary of Lewis and Clark's "Exploration of Discovery" into the Louisiana Territory.

If Captain Lewis were here today, he would likely recognize many of the habitats being restored within the "string of habitat beads" that state and federal wildlife management agencies are working together to restore along the entire length of the lower Missouri River!

Source: Ken Bouc and Michael Forsberg, *NEBRASKAland*, Vol. 76, No. 2, March 1998

Missouri River Reservoir System Creel Survey/EIS

For the first time ever, anglers fishing the five largest Missouri River System reservoirs (Ft. Peck, Sakakawea, Oahe, Sharpe and Francis Case) in Montana, North Dakota and South Dakota were systematically surveyed in 1997. Creel surveys are conducted periodically on many water bodies to assess fishing effort, harvest and angler preferences. Each of the six Missouri River System reservoirs have creel surveys conducted ranging from every year to once every six or so years. However, a special effort was made in 1997 by the respective state biologists to coordinate creel surveys so that system-wide estimates of use and harvest of different species could be made for most of the Missouri River System reservoirs during the same year.

Results of this multi-state creel survey revealed that anglers spent over 5.3 trillion hrs. fishing during the open water daylight time period in 1997. Nearly 1.7 million fish were harvested including more than 1.4 million walleye. Northern pike were the second most harvested species followed by white bass, smallmouth bass, and channel catfish. Close to $92 million worth of direct economic benefits were generated by Missouri River System anglers in 1997 and the overall economic impact created by anglers would be considerably higher.

"walleye"

For comparable reservoirs, fishing effort in 1997 was nearly 60% higher than that experienced in the early 1990's. This significant increase differs from the national trend of relatively stable fishing participation. The leading cause for this notable increase in fishing effort is an increase in reservoir fish populations, especially walleye. During the late 1980's and early 1990's fish populations were hurt by a six year drought which caused 10-25 ft. reductions in water elevations. Fish populations rebounded quickly when the reservoirs began refilling in 1993 resulting in the good fishing in recent years.

Reservoir water elevations are determined by the management practices of the Army, Corps of Engineers (Corps). And now after "nearly a decade of struggling" over a new Missouri River management plan, the Corps says it may change its practices to benefit fish and wildlife. Three of eight options included in a new draft Missouri River Basin management plan would control releases from six dams to improve wildlife habitat. The Corps will seek public input throughout the 10-state basin in August through the scheduled release of their *Preliminary Revised Draft Master Manual EIS*. A preferred alternative is expected to be selected by October.

Significant issues at stake in the Manual for recreation and fish and wildlife are:
• the importance of keeping water in the reservoirs to serve the needs of recreational use which generates significant benefits to several states and a wide geographic area vs draining the reservoirs to serve the needs of what most consider to be an insignificant Missouri River Navigation Project;
• the importance of managing reservoir pool elevations to meet the needs of the significant recreational fishery and to meet the needs of several threatened and endangered species; and
• the need, ability, and willingness to alternately (i.e. on a three year rotation) manage water elevations of the three big reservoirs for periodic drawdown, followed by flooding of vegetation to enhance recruitment and growth of

aquatic organisms. These draw downs would be much smaller than those seen during the late 1980's drought, but large enough to stimulate extensive growth of the shoreline vegetation needed to enhance fish production during high water years. Drawdowns would also be coordinated (on a similar three year rotation) in order to supply the flows needed for fish spawning and recruitment below some of the dams.

Such changes in reservoir operation would help to guarantee sustained reservoir fisheries like those presently being enjoyed in the large Missouri River reservoirs. The current fishery is a direct result of water storage during the 1993 flood that followed the drought of the late 1980's. Under the recommended scenario (i.e. three year rotation described above) the drought/flood cycle would be artificially reproduced, alternately recharging the fisheries of the three large reservoirs with large year classes of fish once every three years.

Readers are encouraged to review the Corps' *Preliminary Revised Draft Master Manual EIS* and provide comments.

Sources: Patricia Stockdill, *Bismark Tribune*, 5/20/98; National Journal's GREENWIRE, *The Environmental News Daily*, 5/22/98; *and Missouri River Natural Resources Committee*, c/o DeSoto National Wildlife Refuge, 1434 316th, Missouri Valley, IA 51555-7033; For more information contact: Greg Power, North Dakota Game and Fish Department (701) 328-6323 or Jim Riis, South Dakota Game, Fish and Parks Department (605) 773-6770

Illinois River Restoration

A Restoration Project for the Illinois River is being developed and implemented by the *Illinois River Strategy Team*, chaired by Lieutenant Governor Bob Kustra. It is described as a project that will:

- demonstrate that restoration of aquatic landscapes in the Illinois River Basin can produce benefits for the entire river valley that are greater than the costs of the restoration;
- show how to incorporate restored wetlands into the watershed in ways that others can emulate that do not penalize the private landowner; and
- show how restored wetlands can generate revenue by producing alternative crops, providing recreational opportunities and performing other useful functions.

Drainage patterns of the modern Illinois River were formed over the course of 10,000 yrs. by the interaction of varying climatic and hydrologic conditions with glaciation, precipitation, topography, soils, vegetation and wildlife. Wetlands were everywhere. At least 18% of the 30,000 mi^2 basin was once covered with wetlands. As trappers and settlers spread across the region, the prairie was drained, beavers and their dams were destroyed and the humus-rich soils gradually wore out. Only 2% of the basin retains wetlands today.

Restoring wetlands involves more than just plugging a ditch or removing a levee. These simple techniques are useful, but it takes much more to recreate all the functions and components of a wetland ecosystem. Through careful engineering design, certain features can be enhanced to make the site most useful. Restoration concepts being employed by the Illinois River Restoration Project include the following:

Landscape Restoration: Restoring the hydrology, topography and plant communities can recreate entire landscapes in the same or similar arrangement and scale as they were prior to settlement. Landscape restoration provides easy access to the functions that wetlands performed-- water quality improvement, stormwater detention, flood damage reduction, soil stabilization, groundwater recharge, nutrient cycling, and food chain support.

Habitat Restoration: Habitat restoration is a component of landscape restoration that is designed to attract targeted wildlife. Targeted species may include mussels, snails, crustaceans, insects, fish, birds, reptiles, amphibians and mammals. The species' natural habitat requirements are replicated on the site, including identified and appropriate plant communities and species that provide shelter and food.

Sediment Control: High-energy flood flows carry large loads of sediments that can damage ecosystems, smother cropland and clog flood storage areas. Wetlands are excellent mechanisms for reducing flood flows and removing sediment loads.

Upland Watershed Management: The most effective way to control downstream flood flows is to hold and absorb rain and snowmelt in the upper watershed with the widespread application of soil conservation techniques, controlled drainage and networks of small holding ponds and check dams. These techniques, planned in a complementary and consistent way, make up a watershed management plan.

Economic Enhancement: The best restoration sites are usually on converted cropland that floods frequently and receives government disaster aid, levee repair subsidies and crop insurance payments. Alternative crops and other income-producing activities developed on these marginal lands, when combined with the savings in federal payments, provide benefits that exceed the costs of restoration.

The Illinois River Restoration Project will include a set of demonstration projects placed strategically along the river channel and within the watershed. A description of some of those projects follows:

Wildlife Habitat Restoration: Two projects being developed cooperatively with *The Nature Conservancy* include one in the Little Creek Drainage District in Brown County and the another at the Emiquon National Wildlife Refuge in Fulton County. These projects will restore the natural flood pulse of the river to the floodplain in order to improve wildlife habitat and provide recreation and water quality benefits. They will demonstrate how to successfully manage a wetland environment adjacent to the Illinois River, dealing with such problems as summer floods and high sediment loads.

Tributary Creek Restoration: This project will illustrate the benefits of reducing the high flows and sediment loads associated with tributaries to the

mainstem Illinois River and backwater lakes by replicating beaver activity with a series of check dams. Behind each dam, built on the deposited bedload materials, wetlands will be created that would provide wildlife habitat or be suitable for grazing livestock. Work is being initiated in the Senachwine Creek Watershed in Bureau and Putnam counties.

Backwater Lake Revitalization: This project will demonstrate the feasibility of reducing turbidity, restoring aquatic and emergent plant communities and diversifying fish and macroinvertebrate populations in a backwater lake. Techniques that are being considered for testing include the consolidation of bottom sediments, controlling the resuspension of silt by carp and manipulation of soil chemistry. Swan Lake, in Putnam County, will be a demonstration site.

Water Pollution Abatement: This project will divert a portion of the river to create a constant shallow flow over a restored wetland for water treatment purposes. It will demonstrate the capability of the wetland to reduce turbidity and remove nitrogen and other pollutants from the river. The project will explore the feasibility of economic incentives such as a water pollution trading program.

Floodplain Flood Storage: This project will test the feasibility of purchasing flood easements on land located behind levees. It will show how a floodplain can be managed, through the use of a water control device, to reduce flood peaks by providing additional flood storage during large flood events, without negatively impacting the property owners behind the levee.

Alternative Farming Practices: This project will experiment with a variety of income-producing crops and economic uses of natural floodplains that can tolerate moist soil conditions and periodic inundation of water. This will be done by working directly with farmers to assist them in testing new farming methods.

Source: *The Wetlands Initiative*, 53 West Jackson, Suite 1015, Chicago, IL 60604, (312) 922-0777, FAX (312) 922-1823, wetlands97@aol.com

Iowa River Floodplain Restoration

Wildlife and natural resources officials are pleased with wetland restoration efforts along the Iowa River. "We are beginning to see the benefits of letting floodwater spread out and letting the flood plain function as a flood plain," said Tim Julison, refuge operations specialist with the U.S. Fish and Wildlife Service at Wapello, Iowa. With natural wetlands re-establishing themselves, "we are seeing tremendous benefits to waterfowl, especially during the spring migration," Julison said.

Besides providing wildlife habitat and cushioning the impact of flooding for landowners, Dave De Geus, wetlands coordinator for the Iowa County Soil and Water Conservation District , said the corridor should function as a giant filter, improving water quality in the Iowa River and its tributaries.

For at least a month this Spring the Iowa River again spilled out of its banks and onto its floodplain between Tama and Marengo drowning cornfields that stood in the way. This was yet another in a long string of costly disappointments to adjacent landowners. After the 1993 flood some of these frequently flooded lands were set aside as part of the *Iowa River Corridor Project*. It has taken about 12,000 acres of farmland out of production along a 30 mi. stretch of the Iowa River, said De Geus.

The project is part of the Emergency Wetland Reserve Program made available in Iowa and other Midwestern states after the 1993 flooding. Through the reserve program, landowners with flood-prone cropland received a one-time federal payment to permanently retire high-risk cropland and restore it to wetlands, timber or native grass.

The U.S. Fish and Wildlife Service has since purchased the remaining interest (i.e. the difference between the dollar amount of the easement and the full market value of the land) in about 7,500 acres of these easement lands, making them available for public recreational uses such as hunting and hiking. The privately owned easements, while beneficial to wildlife and the environment, are not open to the public.

Virgil Head, who farms near Marengo, IA and owns some of the easement lands, said he thinks the corridor project is "definitely a decent program." "With the river bottoms flooding three out of five years, it allowed some people to get out of a bad situation," he said. Head's only criticism of the program is that to protect wildlife, the easement bans haying or grazing before July 15. That late date, he said, hampers his ability to recover enough forage from the property to pay the taxes on it. The latter is one reason some landowners have opted to sell their remaining interest in easement lands to the U.S. Fish and Wildlife Service for placement with the National Wildlife Refuge System.

Source: *Omaha World-Herald*, 7/6/98

Everglades Restoration Plan

In what water managers are calling "the largest, most complex ecological restoration ever," the Army Corps of Engineers has crafted a $7.5 billion plan to create a "healthier, more natural" Everglades over the next half century. The plan, selected during a meeting in early June of Federal, State and local officials, would aim to overhaul the nearly 50 yr. old, 1,600 mi. long drainage system the Corps built through central and southern Florida. It also calls for creating 286 mi^2 of reservoirs and marshes and "hundreds" of storage wells, as well as for bulldozing some Everglades canals and levees to restore natural water flows to area marshes.

Supporters say the plan would aid a "wide variety" of wildlife by adding months to the nesting season of wading birds, some numbers of which have declined by 90% in recent decades. But some State and Federal scientists are skeptical, saying the plan goes too far in serving cities and farms without fully restoring the Everglades's natural water flow. A revised version of the proposal, expected to be released in 10/98, will be followed by public hearings. If approved by Congress, Corps officials expect the federal government to pay for half of the project, with the

rest coming from state and local sources.

Sources: Robert King, *Palm Beach Post*, 6/5/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/11/98

Snake River Restoration

A new report by the *Oregon Natural Resources Council* (ONRC) shows how retiring four dams on the Lower Snake River will result in an annual savings of $87 million for the region, as well as save important fisheries. *Restoring the Lower Snake River: Saving Snake River Salmon and Saving Money* (1998) clearly explains the economic and environmental benefits of removing the four dams, which are blamed for killing 81% of ocean-bound juvenile fish and 40% of returning adults. The report notes that the government has already spent $1.7 billion attempting to bring salmon runs back to health.

"We have paid to transport salmon for hundreds of miles in trucks or barges just to get them past dams. We have built multi-million-dollar dam bypass systems, and supported hatcheries just so a few young salmon will survive the gauntlet of dams. We have been poor stewards: our fish are still dying. It is time to stop treating the symptoms and address the root cause of their decline. Dams kill salmon. Perhaps even more significantly, dams destroy rivers, and salmon need rivers."

The authors estimate that dam removal could result in sustainable populations of salmon within 20-25 years. This highly recommended reading is available for $5 from ONRC, 5825 North Greeley, Portland, OR 95217-4145, (503) 283-6343, FAX (503) 283-0756, info@onrc.org.

Source: *World Rivers Review*, Vol. 13, No. 3, June 1998

UMR Navigation Plan Will Waste Billions/Threaten Environment

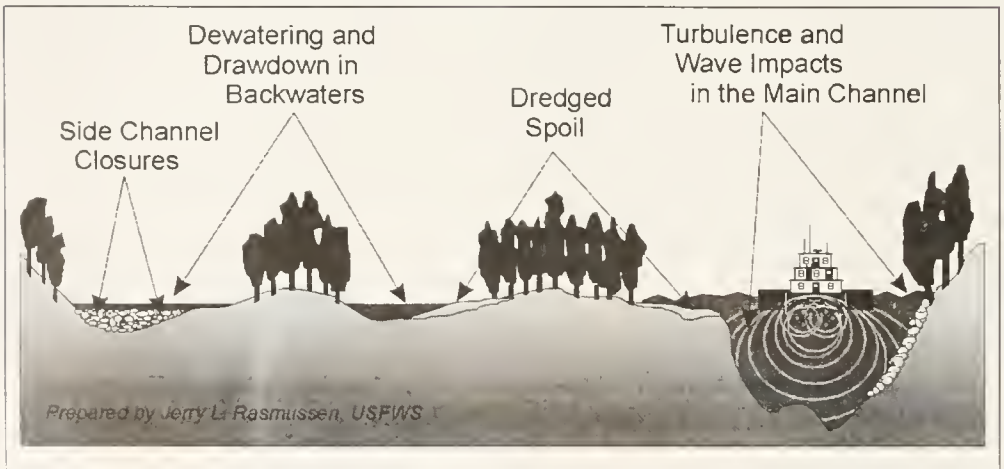
Paul W. Hansen, Executive Director of the *Izaak Walton League of America* (Ikes) in a 5/21 *Minneapolis Star Tribune* editorial, said the U.S. Army Corps of Engineers' six-year, $50 million study of the navigation infrastructure of the Mississippi River will propose billions of dollars in wasteful and unnecessary spending for the Upper Mississippi River (UMR). Hansen, calling the project the largest public works project in American history, said the study will be released to Congress and the public this summer.

Hansen described the UMR navigation project as "...the most expensive, highly subsidized and unreliable segment of the inland waterway system." On the other hand, he described the UMR ecosystem as "the most ecologically valuable...home to...50 species of mammals, 45 species of reptiles and amphibians, 37 species of mussels and 241 species of fish. The most ancient lineage of freshwater fishes in North America, including sturgeons and paddlefish, are found in the river. It is the migration corridor for up to 40 percent of North America's waterfowl, in addition to millions of other birds. More than 267,000 acres of national wildlife refuge lands are located on the river between Minneapolis and St. Louis, as are more than 60 state conservation areas. This natural splendor of the Upper Mississippi River attracts 12 million visitors a year -- more than Yellowstone National Park. The river supports a growing recreational economy estimated at $1.2 billion and 18,000 jobs a year. With recreation demand skyrocketing, this value will only increase."

Hansen said, "According to river biologists and managers, 'the ecological collapse of one of the world's great rivers may be just around the corner -- unless steps are taken to change the way the river is managed.' The impoundments or 'pools' created by the navigation system are trapping contaminated sediment and pollutants, which are choking the productivity of the entire ecosystem. River barges resuspend contaminated sediments, which reduces plant and animal growth."

Hansen said, "Twenty years ago, when the Corps proposed a billion-dollar replacement of Locks and Dam 26, the *Izaak Walton League* charged in U.S. District Court that this was just the beginning of a major expansion. The judge found the Corps' denial to be 'unworthy of belief.' Today we know he was right, and today history is repeating itself."

"The billions the Corps is asking for



Navigation projects impact aquatic ecosystems in many ways. Some impacts include the following: (1) Side channel closures isolate and lead to sedimentation in off-channel waters in order to maintain adequate navigation depths in the main channel; (2) Dredging is required to remove main channel shoals, and dredged material is often side cast into adjacent off-channel waters; (3) Toxic and chemical spills occur periodically from leaking barges and barge accidents; (4) Intermittent water drawdown along shorelines and in backwaters is caused by the water displacement of passing barges; and (5) Turbulence reaching all the way to the main channel bottom is caused by the 9 ft. diameter propellors of modern towboats which displaces and destroys organisms and reduces water clarity by stirring up bottom sediments.

now", Hansen said, "is also just a down payment on much more spending that it is not telling us about. The waterway system includes 29 locks and dams on the Mississippi and another eight on the Illinois River. Most were built in the 1930s, with an anticipated 50-year life span. Today, much of the system needs repair or replacement and the safety of several dams is being questioned. Most of the system will need to be replaced if it is to continue to operate into the 21st century."

Hansen said, "The barge industry gets more than $600 million per year in subsidies, but pays absolutely nothing for the operation and maintenance of the river, and very little for new construction projects. If you visit a Corps recreation site for a day with your family, you pay more in user fees for operation and maintenance than the entire barge industry. At the *Izaak Walton League*, we think that the $600 million subsidy could be much better spent on environmental restoration projects or reducing the federal debt. The special interests are lining up at the pork barrel on this one. Congress should stand behind the basic concepts of users pay, budget reduction and responsible environmental protection by rejecting this proposal."

Contact: Paul W. Hansen, *Izaak Walton League of America*, 707 Conservation Lane, Gaithersburg, MD 20878, (301) 548-0150

Miscellaneous River Issues

Alabama Waterway Pollution: Alabama Attorney General Bill Pryor in May filed a notice of intent to sue a Dalton, GA-based company for allegedly polluting Alabama waterways by discharging improperly treated waste with high concentrations of nitrogen, phosphorus and raw sewage. The *Dalton Utilities Board*, which accepted waste from "several" carpet mills, does not have a State permit to treat and discharge waste, according to the environment division of the attorney general's office. In early June state officials warned residents not to eat fish from some Alabama waters after an annual state Dept. of Environmental Management survey found chemical PCBs, mercury and other toxics in several lakes and rivers. The health advisories primarily affect the Fowl River and Lay and Logan Martin lakes. Sources: Alabama Attorney General's Office release, 5/20/98; Garry Mitchell, *AP/Birmingham Herald* online, 6/4/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/30/98

Alaska Salmon Pollution: Industrial and agricultural pollutants that have contaminated isolated Alaska lakes may have been introduced by migrating salmon, according to a study reported in the 3/98 issue of the journal *Arctic*. A team of scientists led by Goran Ewald of Sweden found that salmon absorb and accumulate PCBs,

"Chinook Salmon"

DDT and other pollutants while at sea and carry the toxins to the lakes when they return to spawn. After spawning the salmon die and the toxins are released to the environment by their dead and decaying bodies. Sources: Don Hunter, *Anchorage Daily News*, 5/22/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/30/98

Arkansas River Flows: The Arkansas River flowed continuously across Kansas from Colorado to the Oklahoma State line for 331 of 365 days in the 1997 water year (10/1/96 to 9/30/97) — the most since the early 1970's. The Arkansas River at Garden City gaging station, which was dry the entire year in 1992, flowed 331 days in 1997. The mean annual streamflow at this gaging station for 1997 (196 cfs) was higher than the mean annual streamflow (183 cfs) for any year since records began in 1923 for the second consecutive year. Above normal precipitation in northwest Kansas and releases from reservoirs in Colorado probably account for the continuous and increased flow at this gaging station. Two gaging stations in western Kansas, which are normally dry October through May — Beaver Creek at Cedar Bluffs and Smoky Hill River at Elkader -- flowed the entire period. Above normal precipitation during the last part of the 1996 water year may explain this flow pattern. A record high water level occurred on 2/25/98, in Keith Sebelius Lake near Norton in northwest Kansas (34-year record). Source: USGS Water-Data Report KS-97-1. Contact: Jim Putnam, U.S. Geological Survey, WRD, 4821 Quail Crest Place, Lawrence, KS 66049-3839, (785) 832-3573

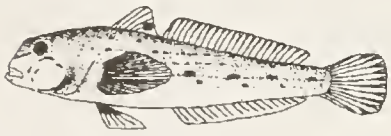
Atchafalaya River Wetland Project: A "massive" two-part wetlands project that will create about 4,000 acres of wetlands in the Atchafalaya River Delta is nearing completion. The project aims to create more than 900 acres of wetlands with dredged sediments and set in motion the "natural processes" that will create another 3,000 acres over the next 20 yrs. Sources: Louisiana Dept. of Natural Resources release, 6/23/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/11 and 6/25/98

From Sewage Water To Tap Water: Tampa, FL's plan to use highly treated wastewater to augment the area's drinking water supply is safe but would require constant monitoring, according to a study released on 6/14 by a panel of eight scientists. The scientists, who studied the Tampa Water Resource Recovery Project, said that the treated wastewater from the city's sewer plant would meet all health requirements for drinking water quality. But they recommended that the city constantly monitor and test for potential health risks. John Rose of the *University of South Florida*, who led the panel said, "Any time you're recycling wastewater, even if not for potable use, there are concerns that need to be addressed". Meanwhile, a California citizens group has persuaded the state Department of Health to postpone its decision on whether to approve two projects that involve pumping highly treated waste water into the Livermore-Amador Valley drinking water supply. A report by the Safe Water Committee raised concerns about the

possibility of hazardous substances escaping the sewage treatment process and polluting the aquifer. Sources: Neil Johnson, *Tampa Tribune*, 6/14/98; Lisa Vorderbrueggen, *Walnut Creek [CA] Contra Costa Times*, 6/11/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/16/98

Georgia Pollution Guidelines: The Georgia Board of Natural Resources has adopted "controversial" guidelines that will give the public input on how environmental rules will be enforced. The new rules require the director of the state Environmental Protection Division (EPD) to notify the public of plans to issue consent orders against businesses that allegedly polluted the environment. Strong public reaction during 30-day comment periods could force the EPD to impose stricter penalties against violators. Sources: Charles Seabrook, Atlanta Constitution, 5/21/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 5/26/98

Gobies May Be Toxic: Scientists warn that a non-native fish in the Great Lakes raises toxin levels in indigenous fish and could pose "a serious health risk" to humans who eat gamefish. The round goby, a



"round goby"

small fish native to the Black and Caspian Seas, feeds on non-native zebra mussels -- which often carry concentrated amounts of toxics because they act as water filters. The gobies in turn bring those toxics "up the food chain into the top predator fish and into man," according to David Jude, *Center for Great Lakes and Aquatic Sciences* at the *University of Michigan* in Ann Arbor. Scientists from the U.S. Geological Survey *Great Lakes Science Center* in Ann Arbor are experimenting with an electrical barrier to block the goby from spreading into the Mississippi River system. Meanwhile, the USEPA has issued an advisory recommending people not eat more than one Great Lakes fish/week. Sources: Gene Schabath, *Detroit News*, 3/23/98; Dean Rebuffoni, *Minneapolis Star Tribune*, 3/25/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 3/26/98

Indiana *Visa* Card: A new *Visa* card for "nature lovers" being promoted in Indiana will give a "small portion" of each transaction to the *Indiana Natural Resources Foundation* to buy and protect public lands. Sources: Kyle Niederpruem, *Indianapolis Star-News*, 7/14/98 and National Journal's GREENWIRE, *The Environmental News Daily*, 7/16/98

Kishwaukee River Pollution: Environmentalists have filed an appeal to void a permit issued by the Illinois EPA (IEPA), which allows a Woodstock sewage plant to discharge ammonia into the Kishwaukee River. Environmentalists say ammonia levels are more than double the IEPA's standards. Sources: Mitch Martin, *Chicago Tribune*, 6/25/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/30/98

Louisiana Water Program Threatened: A court-appointed expert is recommending that a federal judge order the USEPA to enforce "more stringent" water quality standards for 255 polluted river segments, lakes and waterways in Louisiana. If the judge follows the recommendation, the EPA for the first time would be compelled to intervene because a state regulatory agency failed in its water-protection duties, EPA Region VI spokesman David Bary said. Eric Huber, attorney for *Earthjustice Legal Defense Fund* said, "This is tantamount to calling in the National Guard." The EPA, however, has argued it has no responsibility to intervene. Louisiana environmental groups in 1996 sued the EPA in U.S. District Court in New Orleans, claiming the agency failed to ensure that Louisiana's Dept. of Environmental Quality (DEQ) enforced the *Clean Water Act* provisions. The law requires states to set pollution limits for all waterways that fall beneath quality standards, but the DEQ has limits for only 17 waterways, according to the *Sierra Club*. DEQ Secretary Dale Givens said the agency is working toward compliance and has secured the state legislature's approval to hire 37 employees to set pollution limits. Sources: *Baton Rouge Advocate*, 6/18/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/19/98

Mississippi Water Quality Study: Mississippi officials are "plowing ahead" with a statewide water-quality study "despite mixed signals from the federal government on what ought to be done." The Dept. of Environmental Quality (DEQ) has launched a study to determine the amount of pollution, or total maximum daily loads, that each waterway can support. The *Earthjustice Legal Defense Fund* in 1/98 sued the USEPA, seeking to force the agency to do the study itself or force Mississippi to do so. DEQ Executive Director Jimmy Palmer said the agency has begun to assess Gulf Coast waterways, but "he said the work is complicated by the federal agency's failure to provide the states with a blueprint to follow" in determining the amount of pollution allowed in each stream. EPA regional offices "have taken some different, contradictory approaches toward states in their regions," he said. The DEQ plans to study 10 watersheds over a 12-13 yr. period. Source: Jack Ellicott, *AP/Biloxi Sun-Herald*, 7/13/98 and National Journal's GREENWIRE, *The Environmental News Daily*, 7/17/98

Mississippi/Missouri Confluence Acquired: The Missouri Dept. of Conservation has sealed a deal to buy more than 4,300 acres of undeveloped land at the confluence of the Missouri and Mississippi rivers in St. Louis County -- the largest tract of green space remaining in the metropolitan region. This tract of land was formerly farmed, but received significant damage during the Flood of 1993. Acquisition by Missouri will ensure that such damage does not occur during another great flood, while restoring this rich floodplain to a productive area for fish and wildlife management. Sources: Tom Uhlenbrock, St. Louis Post-Dispatch, 6/18/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/19/98

Missouri Lead Mining: The federal government will allow *Doe Run Co.* to prospect for lead in the Mark Twain National Forest in southeast Missouri if the company agrees to (1) waive its absolute right to mine if minerals are found and (2) prevent environmental

damage. Missouri Attorney General Jay Nixon (D) and state officials in Arkansas have argued that if mining is ruled out because of environmental concerns, taxpayers could be forced to pay compensation to *Doe Run*. Nixon also is demanding a full environmental impact statement before drilling can begin in the Ozark Mountains' "fragile" watersheds. *The Sierra Club* "will settle for nothing less" than the denial of any prospecting rights in the region. Company officials said they were continuing to negotiate with federal officials, but they declined to provide further details. Sources: Tom Uhlenbrock, *St. Louis Post-Dispatch*, 6/18/98; Michael Mansur, *Kansas City Star*, 6/17/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/22/98

Montana Gold Mine: Montana's Blackfoot River has become "a battleground" between environmentalists and a company that wants to build a "huge" open pit cyanide gold mine near the river's banks. *Canyon Resources Corp.* of Colorado "says it has designed a mine that won't degrade the environment." The 8 mi.^{2} *McDonald Gold Mine* could generate nearly $5 million a year in taxes and state land trust royalties, much of which would go to the *Montana College of Mineral Science and Technology*. But cyanide mining has a "sullied record." Geoff Smith, a staff scientist with the *Clark Fork-Pend Oreille Coalition*, a conservation group working to preserve the Blackfoot's watershed said, "No major gold mine that used cyanide has been able to contain it. The river is in grave danger of being changed forever, all for the love of gold." Environmentalists "fear toxic leaks will poison the river" that served as the "breathtaking backdrop for the Norman Maclean story and hit movie *'A River Runs Through It'*" Mindful of the mining dispute, the DC-based *American Rivers* this year named the Blackfoot as one of the nation's ten most endangered rivers. State and federal agencies are expected to decide whether the mine can go forward sometime next year, following an environmental impact statement. However, state environmental regulators have taken the "rare step" of shutting down the environmental review because *Canyon Resources Corp* has been unable to pay for the study. The Dept. of Environmental Quality on 7/2/98 issued a "stop-work order" to the analysts performing the study, until *Canyon Resources* pays the $163,723 bill due on 7/1/98. The company was also 25 days late on a 6/23 payment for the EIS and has been seeking a partner in its venture since last year. The delinquencies have "raised questions about the financial stability" of the company and the future of the proposed *McDonald Gold Mine*. Environmentalists say the company may not be financially able to operate a sound mine. *Canyon Resources's* Cheryl Martin said, "It's a very difficult time in the mining industry right now. We're having a little cash-flow problem". The *Montana Land Board*, comprised of the governor and four other elected officials, has veto power over the project. Sources: John Ritter, *USA Today*, 5/29/98; Charles Johnson, *Missoula Missoulan*, 7/7/98 and National Journal's GREENWIRE, *The Environmental News Daily*, 5/29 and 7/9/98

North Carolina Herbicide Spraying: After months of negotiations with environmental groups, *Duke Power Co.* and three other North Carolina based power companies have agreed to let customers refuse the spraying of herbicide on their property. The utilities also said they plan to include inserts about herbicide use in customer bills once or twice a year through 2001. Sources: Bruce Henderson, *Charlotte Observer*, 6/11/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/16/98

North Carolina *Pfiesteria* Plan: In his first major policy announcement since recently taking office, North Carolina Public Health Director Dennis McBride said he will ban fishing, swimming and boating on stretches of waterways when 20% of one species exhibit sores or strange behavior associated with the microbe *Pfiesteria piscicida*. McBride's plans "stand in sharp contrast" to past practices by state officials who only posted warnings during fish kills. Sources: Clabby/Shiffer, *Raleigh News & Observer*, 6/9/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/11/98

North Dakota Chemical Disposal: North Dakota officials have kicked off their *"Project Safe Send"* campaign in which state workers will pick up unused and banned farm chemicals for free and ship them out of state. Sources: *USA Today*, 7/15/98 and National Journal's GREENWIRE, *The Environmental News Daily*, 7/16/98

Personal Watercraft Bans: Personal watercraft will be banned on approximately 200 miles of the St. Croix River beginning in 8/98, according to Anthony Anderson, superintendent of the St. Croix National Scenic Riverway. The National Park Service's (NPS) recent proposals to ban jet-propulsion personal watercraft (PWCs) in several parks and recreation areas is "intensifying [the] aquatic culture clash between jet skiers, traditional boaters and shoreline spectators". Responding to complaints about pollution and noise from the PWCs, manufacturers are unveiling quieter, fuel-injected models. But at the same time, Jeff Hoedt of the *National Association of State Boating Law Administrators* predicts that states may begin to crack down on, or prohibit the PWCs in more areas. Washington state's ban on the watercraft in the San Juan Islands, which was upheld in early July by the state Supreme Court, "could be the big opener for more local bans," he said. In Lake Tahoe, officials are "shifting direction" in their effort to limit pollution from PWCs. The Tahoe Regional Planning Agency intends to scrap its proposed ban on two-cycle engines and replace it in 12/98 with "tough" regulations similar to ones in California that are designed to limit emissions. Sources: Laura Bly, *USA Today*, 7/16/98; *AP/Las Vegas Sun*, 7/12/98; *AP/Minneapolis Star-Tribune*, 6/10/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/11 and 7/16/98

Pigeon River Study: Tests conducted in early July by scientists monitoring the Pigeon River in Tennessee showed increases in the numbers of the river's

aquatic species. The findings come seven months after the USEPA issued *Champion International* a new permit requiring the company's Canton, NC, paper mill to reduce its discharge into the river by 50% by 2001. Sources: *AP/Nashville Tennessean*, 7/10/98 and National Journal's GREENWIRE, *The Environmental News Daily*, 7/16/98

Republican River Suit: In the latest move of a "decades-long dispute," the state of Kansas on 5/26/98 sued the state of Nebraska in the U.S. Supreme Court over water rights to the Republican River. Nebraska, Colorado and Kansas in 1943 signed a pact dictating how much water each state could use from the river. But Kansas claims Nebraska has been annually siphoning off nearly 10 billion more gallons than allowed under the compact. The depletion, "Kansas contends, was caused by indiscriminate drilling of water wells" in Nebraska. Kansas Attorney General Carla Stovall says the practice has escalated as many Nebraska farmers hope to be grandfathered in under a possible settlement between the states. Sources: *AP/Las Vegas Sun*, 4/26/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 5/28/98

Susquehanna River Fish Passage: "A record number of spawning American shad returned" to the Susquehanna River in Maryland last year, aided by a $12 million system of fish elevators, lifts, hoppers and traps to move the herring around dams. The number of fish passing the Conowingo hydroelectric dam in 1997 rocketed almost 70% over 1995's count. Dams along the shad's migration route to spawning grounds in New York had caused the population to decline for years. But last year, for the first time since shad recovery efforts began seven years ago, there were more wild shad than hatchery-reared shad in the Susquehanna, according to Scott Carney, a biologist for the Pennsylvania Fish and Boat Commission. Meanwhile, a committee advising the *Atlantic States Marine Fisheries Commission* has proposed closing the Atlantic Ocean shad fishery along the East Coast from South Carolina to New Jersey over the next five years. Sources: Cheryl Lyn Dybas, *Washington Post*, 6/15/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/15/98

Tennessee's Urban Growth Plan: Tennessee communities that want to "cushion" urban growth have been given "better tools" in the form of growth planning regulations recently approved by Gov. Don Sundquist (R). The new program requires that a panel of planners, government leaders and citizens be set up by 9/1 to devise growth boundaries for cities and counties by 1/00. Cities and counties with overlapping boundaries will devise "20-year perspectives" on growth, with adjustments made every three years. Goodlettsville, TN, city planner Bill Terry said, "This bill essentially says that counties and cities are to consider the issue of urban sprawl in their planning. They need to look at and address the impact of urban growth on agricultural land, on forest land and on communities". Sources: Renee Elder, *Nashville Tennessean*, 6/4/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/5/98

Texas Local Water Protection Zones Banned: "In a ruling that could slam the door on efforts to challenge or circumvent" Austin, TX's strict water-quality regulations, a state district judge recently struck down a law allowing large landowners to avoid city rules by developing their own water protection plans. Judge Paul Davis ruled that a 1995 state law allowing independent "water-quality protection zones" was unconstitutional. The city of Austin had sued the owners of 10 such "protection zones" on the edge of the city in a bid to abolish the law. Austin attorney Karl Bayer said, "This litigation has taken on statewide significance and has become very important to all cities and municipalities." Austin Mayor Kirk Watson said the decision reaffirms the right of Austin residents "to plan for their future ... both economically and environmentally." He said that the city will begin to enforce water-quality regulations in the former protection zones, despite the threat of appeal. Sources: Scott Greenberger, *Austin American-Statesman*, 6/18/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/24/98

Virginia Pollution Enforcement Policy: Companies that pollute Virginia waterways will no longer be able to spend money on environmental projects in lieu of some fines, according to a new state environmental policy announced on 5/14/98 by VA Dept. of Environmental Quality (DEQ) Director Dennis Treacy. The change "raises troubling questions for a handful of planned conservation projects." DEQ staff had planned to present four projects for approval, "but withdrew three when Treacy decided to study the program." Officials said the terms of existing projects are being reviewed. Under the new policy, the DEQ would determine a penalty and the polluter would pay at least 25% as a fine with the rest being used for environmental restoration projects. Another new provision specifies that projects must be built near the point of the original violation. Treacy said that he wants *Virginia's Supplemental Environmental Project* program, which was created by the state legislature last year, to be used more consistently across the state. Sources: Rex Springston, *Richmond Times-Dispatch*, 7/15/98 and National Journal's GREENWIRE, *The Environmental News Daily*, 7/15/98

West Virginia River Pollution: "Hundreds of West Virginia's rivers, streams and lakes are polluted beyond legal limits," according to a list of polluted waterways recently released by the state Division of Environmental Protection (DEP). Acidic drainage from coal mines is the main source of the pollution, according to the DEP. Source: Ken Ward, *Charleston [WV] Gazette*, 6/18/98; .

West Virginia Mining Permit Blocked: The USEPA has stopped West Virginia from issuing a water pollution permit for a strip mining project in what "may signal the beginning of increased federal focus on mine permits." The action marks the feds' first formal objection of a new West Virginia mining law that allows firms to bury watersheds of up to 480 acres before they must create new water bodies or pay the state to do so. Under the new law, companies were to pay up to $225,000/acre of stream buried after 480 acres, and the money, which had formerly gone to water projects, would be channeled into the state's general fund. Industry officials and some state lawmakers say the

law would help West Virginia compete for mining projects with neighboring Kentucky, which also uses 480 acres as a starting point for compensation. However, EPA Region III Administrator Michael McCabe has told Gov. Cecil Underwood (R) that the law could lead the agency to rescind the state's authority to issue permits. *Independence Coal Co.*, a subsidiary of *Massey Coal Services*, now "must prove" that valley fills and sedimentation ponds affecting watersheds greater than 200 acres cannot be avoided before the EPA lifts its block on the firm's permit. Meanwhile, the chief of the state Division of Environmental Protection's mine cleanup department has been relieved of his duties there. Leonard Womble has been "under fire" since May, when it was revealed that the former mine operator was on the U.S. Office of Surface Mining's "permit block" list for abandoning a coal mine in Virginia. Also because of his coal industry ties, West Virginia Division of Environmental Protection Director Michael Miano "must distance himself" from the agency's water-quality program, the USEPA has concluded. EPA Region III officials in June determined that Miano "has too much authority" over the DEP's Office of Water Resources. The "long-time coal industry official" has been sued by a coalition of environmental groups who assert that his former business roles bar him from serving as director of DEP. Under the federal *Clean Water Act*, no one who has worked for a regulated industry within the past two years can oversee state water-quality programs. The state says that the prohibition concerning former industry officials does not apply to Miano because a different individual within the DEP has "exclusive authority" over water permits. But EPA attorney William Early rejected the position, saying that it "ignores the underlying, real chain of command." Early recommended that the state transfer authority of several programmatic and personnel tasks related to water quality to someone other than Miano. But Miano said on 7/14 that the DEP does not intend to take any further action to distance him from water program issues. Enviros had assailed the state's "mountaintop removal" strip mines for leveling the state's mountainous terrain, filling in valleys, polluting streams and leaving some areas more prone to flooding. Sources: Steve Myers, *Charleston [WV] Daily Mail*, 6/4/98; Ken Ward, *Charleston [WV] Gazette*, 6/4/98; Source: Ken Ward, *Charleston [WV] Gazette*, 7/15/98 and National Journal's GREENWIRE, *The Environmental News Daily*, 7/17/98
and 6/5/98

Wisconsin Environmental Rulings: The Wisconsin Supreme Court on 6/19/98 ruled that people and businesses that dumped hazardous waste before state law made it illegal can be fined and forced to pay cleanup costs. The Court also ruled that Wisconsin residents can sue to protect waterways when the state Dept. of Natural Resources "refuses" to do so. The unanimous decision was reached on 7/2/98 Sources: Cary Segall, *Wisconsin State Journal*, 6/20 and 7/3/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/23 and 7/7/98

Yellowstone and Clark Fork River Pollution: The state of Montana has ordered the city of Billings to conduct a multi-million dollar groundwater cleanup project at the site of a former landfill, after water samples from the Yellowstone River exceeded state water quality standards for nutrients and metals. Meanwhile, officials representing Montana and *Atlantic Richfield Co.* have reached a $215 million settlement over mining pollution and damage to the Clark Fork River, marking the end to "the biggest civil case ever brought by the state". Sources: Ed Kemmick, *Billings Gazette*, 6/26/98; John Stucke, *Montana Standard*, 6/21/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/9 and 6/30/98

Yellowstone Bioprospecting: The issue of bioprospecting for microbial bacteria and algae from geysers in Yellowstone National Park is pitting the National Park Service (NPS), private firms and conservationists in a debate over preservation and profits. Possible health and technological benefits of bacteria and algae in Yellowstone's hot springs led to a historic agreement between the biotech firm *Diversa Corp.* and the NPS last August. But a coalition of environmental and conservation groups on 3/5/98 filed suit to block the deal, saying it circumvented the park's ban on the commercial use of its creatures. "Equally vexing is the question of profit sharing," as other critics question why money "shouldn't be returned to the cash-trapped park." But *Diversa* contends the public already stands to benefit from the arrangement in the form of greater park revenues and technological advances leading to improved public health and a decreased reliance on toxic chemicals. The outcome of the debate could serve as a precedent for other deals, because "more than a dozen firms are said to be considering a similar agreement with the Park Service". Sources: Joby Warrick, *Washington Post*, 7/12/98 and National Journal's GREENWIRE, *The Environmental News Daily*, 7/13/98

Yellowstone Mine Suit Settled: Environmentalists and the owner of the *New World Mine* property in Montana have agreed to settle the lawsuit that led the Clinton Administration to agree to a buyout of the land near Yellowstone National Park. The suit by the *Greater Yellowstone Coalition* over water quality issues related to *Crown Butte Mine's* operations gave environmentalists "legal leverage" against the Toronto-based firm as they protested the proposed *New World Mine*. The company "consequently buckled" and agreed to give up its mining bid and land in exchange for cash from the federal government. As part of that $65 million deal, the groups represented by the *Earthjustice Legal Defense Fund* had pledged to settle the suit. In a consent decree filed on 6/25 in U.S. District Court in Billings, MT, the firm agreed to spend $22.5 million to clean up mine waste near the northeastern corner of Yellowstone, making the project the largest mine reclamation effort in the region. Sources: Michael Milstein, *Billings Gazette*, 6/26/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/29/98

Western Water Issues

A "massive" new study of water supplies in the Western U.S. recommends that the federal government focus on restoring degraded watersheds and encouraging water transfers from farms to cities to address rapid population

growth. The study by the *Western Water Policy Review Advisory Commission*, mandated by Congress in 1992, "embraced the idea — still heretical in many parts of the West" -- that the needs of agricultural users should give way to natural resource protection and growing cities. Agriculture's consumption of western water has dropped from 86% in 1960 to 78% today, and is expected to decline further as the region adds an estimated 28 million people by 2025, according to the study.

The report, the "most comprehensive study of western water issues undertaken since 1973," recommends that governments charge full-market value for water from any new irrigation projects. To "break a gridlock" among the myriad agencies that control water policy, the study says new policies should be based on watershed, rather than political or bureaucratic boundaries. However, because any reallocation of water "inevitably involves enormous political conflict," there is doubt whether the study can lead to change.

Meanwhile, a group of private investors is seeking water rights and permits to build a 202,000 acre-ft. reservoir on the Green River in Wyoming, in hopes of leasing Wyoming's unused water to fast growing Nevada and other states in the Colorado River Basin. The *Colorado River Compact* allocates 1.2 million acre-ft. of water from the Colorado River watershed to Wyoming. But the state uses about only half of its allocation and sends the rest downstream. Coyne Tibbetts, president of the investor group *New Water Inc.* said, "We are a headwater state. Once it gets away from us, it's gone."

The river compact also bars states from selling or leasing water to other states, although the concept of water marketing has been discussed by Western governors. Despite the prohibition, Wyoming state officials are evaluating the technical aspects of the proposed project. "You never know when conditions may change," said John Barnes, head of the Wyoming Surface Water and Engineering Division.

Also in what "could be one of the biggest water fights the West has ever seen," a New Mexico environmental group is threatening to try to dismantle four multi-state river compacts in an effort to protect rare species. The Santa Fe-based *Forest Guardians* said in early May that it will file a lawsuit challenging water-rights agreements involving the Rio Grande, upper Colorado and Pecos rivers and Costilla Creek. The group wants to help fish and wildlife gain stronger legal rights to scarce water that is now allocated primarily to the West's cities and farms.

At issue is whether the federal government properly analyzed water allocations for their potential harm to the environment. John Talberth of the *Forest Guardians* said the river commissions have never conducted environmental impact studies on their actions. "Right now, it's a good old boy network of irrigators and industry users who play God and don't think the environmental laws apply to them", he said. Talberth also said river managers have never formally consulted with the U.S. Fish and Wildlife Service concerning basin-wide water management plans, nor have they designed water-flow agreements to dilute pollution from cities, oil and gas wells, mines or farms.

Because the decades-old river compacts "hold Solomonic power" over water for Arizona, Colorado, New Mexico, Texas, Utah and Wyoming, the affected states are expected to "send their top lawyers to mount a defense". Utah Assistant Attorney General Mike Quealy said the water compacts among the states cannot be altered without agreement from all parties. And he noted that the agreements merely divide water among states and do not specify how the water should be used -- "a potential hangup for any litigation" because it could force environmentalists to sue over dozens of specific water projects.

Sources: Tom Kenworthy, *Washington Post,* 6/25/98; Elizabeth Davis, *AP/Salt Lake Tribune*, 6/27; *AP/Albuquerque Journal*, 5/6/98; Ian Hoffman, *Albuquerque Journal*, 5/6/98; *AP/Tucson Arizona Daily Star*, 5/7/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 5/7, 6/25, and 6/30/98

Ag Waste Update

Forty percent of the nation's waters remain too polluted for fishing, swimming and other recreation, according to a national water quality survey released in May by the USEPA. The biennial report, which is based on 1994 and 1995 surveys of 19% of the nation's rivers, 40% of lakes and 72% of estuaries, found agricultural runoff to be the largest source of pollution for rivers and lakes. Industrial discharges were found to be the leading source of pollution in estuaries. The report is available at http://www.epa.gov/ 305b/.

The **Clinton Administration** has begun to focus on the issue of agricultural waste by having the USEPA work with states to develop strict pollution discharge regulations for large farms by 2005. Also USEPA and National Oceanic and Atmospheric Administration grants will be used to pay for "scientific trip wires" set up in the waterways of several states to detect possible outbreaks of *Pfiesteria piscicida*, the toxic microbe thought to be fueled by nutrient runoff from farms and cities. Maryland has been awarded $560,000, which compliments the $1 million the state has already allocated for testing for the toxic microbe. Other states receiving grants include Delaware, Florida, North Carolina and Virginia. Meanwhile, U.S. Senators Barbara Mikulski (D/MD), Paul Sarbanes (D/MD) and Lauch Faircloth (R/NC) have introduced legislation that would authorize $15 million for the U.S. Army Corps of Engineers to study the microbe and develop plans to reduce water pollution. The funds would be in addition to $13.5 million approved last fall in the wake of Maryland fish kills.

Meanwhile, the **Roman Catholic Church in the U.S.** has deemed the threat of industrial farms a "major religious and moral issue." Citing the impact of these farms on the environment and rural communities, bishops in Illinois, Ohio, Kansas and North Dakota are calling on states to take steps to limit corporate farming. The Church's stance is based on the Vatican's policies concerning agrarian reform, which has been given new emphasis by Pope John Paul II. Bishop Raymond Burke of the *National Catholic Rural Life Conference* said, "Large-scale animal confinement ... is geared at ever-greater pro-

duction and profit for a few at a lethal cost to the general population through the destruction of the environment".

Claiming that "the growth of massive chicken and hog operations are jeopardizing rivers that people depend on for drinking and recreation," the ***Sierra Club*** in early June called for a freeze on new permits or expansions of corporate livestock operations until the federal government sets up new water quality rules and enforces those already in place.

Meanwhile, the **Colorado** Supreme Court has upheld a ballot initiative that would prevent the separate regulation of hog farms from other livestock, a measure backed by the farm industry to counteract another ballot proposal to strictly regulate large hog farms. Voters are expected to be able to consider both measures this fall.

Sawtooth Farms in early July proposed a $1 billion project to raise 250,000 hogs on state land in southwestern **Idaho**'s high desert. Supporters took "pains" to emphasize the environmental aspects of their plan that differ from other "huge" hog farms.

Inspections of 271 **Indiana** livestock farms found that 73% were in compliance with environmental regulations. Officials said it is too soon to tell if the numbers are representative of the state's 3,800 farms. "Stepped-up" inspections will continue for the next 2-3 yrs., with another 200 farms targeted in the next phase.

The **Kansas** Dept. of Health and Environment (KDHE) in June approved two permits that allow *Murphy Family Farms*, the nation's largest hog producer, to set up operations in the state. The company has pledged that it "will exceed" state pollution requirements. The action comes shortly after the KDHE held a public hearing to get input on a law passed this year regulating the industry. Meanwhile, Kansas gubernatorial candidate David Miller, who is challenging Gov. Bill Graves for the Republican nomination, on 7/7 kicked off a two-day campaign trip by focusing attention on corporate hog farms. Miller said residents should have control over whether such operations are allowed in their communities.

Nebraska, which has "perhaps the nation's toughest" factory farm laws, forbids any corporation from engaging in farming.

USEPA inspectors "paid surprise visits" on 10 **North Carolina** hog farms in May. Nine of the farms, targeted because of their history of problems, were found to be in compliance with clean water rules. Meanwhile, in a move that "could slow the growth of North Carolina's booming pork industry," the state Division of Water Quality is considering a "controversial" plan to limit the size of a Bladen County, NC, hog slaughterhouse. Already the world's largest, the plant operated by Virginia-based *Smithfield Foods* has requested a new permit that would allow it to increase its wastewater discharge into the Cape Fear River by 50%, to 4.5 million gal/day. The new permit under consideration would freeze the plant's capacity at its current level of 24,000 hogs and would not let it discharge any additional wastewater into the river.

In Sampson County **North Carolina**, "the heart of the hog belt" waste lagoons at concentrated hog farms have led to a 100% increase in the amount ammonia rain falling in the area over the past decade, according to a study by *North Carolina State University*. The study shows that the increase began in about 1985, correlating with the growth of the hog industry, according to researcher Viney Aneja. By 1996 the ammonia levels had more than doubled. The North Carolina Division of Air Quality reports that hog farms collectively discharge at least 186 tons of ammonia into the air every day, and that ammonia triggers algae blooms and fish kills. U.S. Agriculture Dept. research indicates that much of the ammonia wafting from farms is used by plant and forest systems. But the *Environmental Defense Fund* has urged state regulators to limit ammonia gases from hog farms. Meanwhile, the state House in early July approved a plan to study new technology to phase out waste lagoons. A *Raleigh News & Observer* editorial says the *North Carolina State University* research "strengthens the case for proceeding cautiously with hog farm expansion, guided by an interest in safeguarding human and environmental health -- not just profit".

The ***Ohio** Environmental Review Appeal Commission* has agreed to hear two appeals in 1/99 against the *Buckeye Egg Farm* in Licking. The *Licking County Citizens for a Safe Environment* and the Hartford Township trustees are concerned that the addition of 4.5 million birds would harm soil, water and air quality in the area northeast of Columbus. "Stung by criticism" surrounding the *Buckeye* farm expansion, the Ohio EPA in June said it will begin informing the public when large-scale livestock farms are planned in their communities. Meanwhile, the Ohio Environmental Protection Agency has told *Buckeye* to "temporarily shelve" plans to raise 18 million chickens at several facilities near Marion, but it gave the state's largest egg producer permission to expand other facilities and build two new ones. The decision "appears to represent a shift in policy by Gov. George Voinovich's (R) Administration.

Oklahoma Gov. Frank Keating (R) signed into law in May guidelines for regulating the poultry industry, making the state one of the first in the country to set such laws. The measure requires all farmers to register annually with the state Agriculture Dept. and before beginning construction on new operations. All commercial applications of

nutrient-rich waste must be certified by the state, and state agriculture officials will have the authority to spot-check all farms and ban the application of waste in some areas. All waste handlers and poultry farmers will be required to attend courses on handling poultry waste. Watersheds at risk of high phosphorous levels will be required to have their soil tested annually, while other areas will require the testing every three years. Opponents of the law say it gives an unfair advantage in the industry to other states without such strict regulations. Then on June 10 Gov. Keating signed what he called "the strictest hog regulation bill in the U.S.," which would lift a 3/98 moratorium on construction and expansion of hog farms, but impose "severe" measures to keep new facilities away from neighbors. Under the bill, farmers will have to install monitoring wells around all future hog-waste lagoons and around existing lagoons by 9/99. And "for the first time," hog operations will have to pay fees to support government regulation of the industry.

A **South Dakota** ballot initiative on corporate farms has become an issue in the governor's race, with challenger Bernie Hunhoff (D) favoring restrictions and incumbent Gov. William Janklow (R) defending big hog farms as "good corporate citizens."

A **Tennessee** strategy drafted by a group of regulators, environmentalists, and agricultural representatives will "buttress long standing state and federal environmental laws". The plan outlines regulations and permits for swine, poultry, beef, and dairy operations. According to a *Memphis Commercial Appeal* editorial, "The new state plan offers the prospect of fairly balancing environmental, agricultural and consumer interests... But much will depend on whether the state can enforce its informal rules without allowing influential special interests to weaken them".

In **Wisconsin**, the Dept. of Natural Resources is working with the Dept. of Agriculture, Trade and Consumer Protection on new rules addressing non-point pollution from farms.

In **Wyoming** new state and county rules could make expansion of the *Ponderosa Ridge* hog farm "impossible." The new rules will look at operations and financial liability, expanding the original focus from the quality of holding ponds and facilities. Water Quality Administrator Gary Beech said, "The rules regulate animal waste from the cradle to grave from the buildings to where they apply it on the land"

Finally, researchers at ***Northwest Missouri State University*** have developed a way to mix hog waste with "switch grass" and turn it into "stink-free, innocent-looking pellets" that can be burned. The school has been experimenting with burning hog manure since last fall and has cut its use of oil and natural gas by 13%.

Sources: EPA release, 5/22/98; *AP/Casper (WY) Star-Tribune*, 6/8/98; Tom McAvoy, *Pueblo (CO) Chieftain*, 7/1/98; Tom Charlier, *Memphis Commercial Appeal*, 6/24/98; Mike Ivy, *Madison (WI) Capital Times*, 6/16/98; Kyle Niederpruem, *Indianapolis Star/News*, 6/23/98; *Baltimore Sun*, 6/30 and 7/2/98; *USA Today*, 5/21/98; Bob Williams, *Raleigh News & Observer*, 5/28/98; Dirk Johnson, *New York Times*, 6/24/98; George Anthan, *Des Moines Register/Detroit News*, 6/21/98; *AP/Durham Herald-Sun*, 6/18/98; Jean Hay, *Wichita Eagle*, 6/19/98; Amy Lignitz, *AP/Wichita Eagle*, 6/12/98; *AP/St. Louis Post-Dispatch*, 6/23/98; Paul Souhrada, *AP/Cleveland Plain Dealer*, 6/22/98; Brian Williams, *Columbus Dispatch*, 6/16/98; Glenn/Williams, *Columbus Dispatch*, 7/7/98; Vindu Goel, *Cleveland Plain Dealer*, 7/8/98; *AP/Charlotte Observer*, 7/6 and 7/9/98; *Raleigh News & Observer* 7/8/98; *AP/Idaho Falls Post Register*, 7/8/98; Roxanna Hegeman, *AP/Wichita Eagle*, 7/8/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 5/26, 5/29, 6/10, 6/12, 6/24, 7/2 and 7/10/98

Climate Change

The first six months of 1998, according to a report released in May by British experts, were the warmest first half of a year globally since reliable records have been recorded. Data analyzed by the UK Meteorological Office and the *University of East Anglia* showed that the average global temperature between 1/98 and 6/98 was 0.6 degrees higher than the 1961-1990 average. And each month this year has been the warmest since the records were started in 1860. The new information "not only extended the record breaking pattern, [but] did so by a degree that scientists described as unprecedented." "Moreover," scientists said that global warming appears to be exacerbating the effects of El Nino, which have included droughts and wildfires in some places and heavy rains in others.

Although the El Nino weather phenomenon has been a "major" factor in the warming trend, and other causes are not fully understood, "there is increasing evidence that human activities, through the release of carbon dioxide from burning fossil fuels, [also] play a part," the Meteorological Office said. Scientist Thomas Karl of the *National Climatic Data Center* in Asheville, NC, who headed the analysis for the U.S., called the temperature jump "really rather spectacular." Climate scientist Kevin Trenberth of the *National Center for Atmospheric Research* in Boulder, CO, who did not participate in the study, said the trend is even more remarkable because it is well above an average that included the effects of a global warming of about 1 degree over the preceding century.

Information presented in June by the *National Oceanic and Atmospheric Administration (NOAA)* indicates that "major" El Nino weather events have become more frequent and severe over the past two decades. NOAA's data shows that during the 1997-98 El Nino episode, temperatures across the U.S. averaged 2.2 degrees above normal, with the Northeast and Great Lakes regions averaging 4.4 degrees and 6.4 above normal, respectively. Maryland, Virginia and three other states recorded their wettest five months in more than 100 years. NOAA Administrator D. James Baker said. "Whether these two things are causally linked is a research

question. But it stands to reason that if you put more energy in the (weather) system, it would change the way the system works," he said.

"Researchers studying the possible regional impact of global warming almost uniformly predict stormier weather across Appalachia and the Ohio Valley during the 21st Century, resulting in more flooding, erosion and landslides." Based on government estimates, rising concentrations of greenhouse gases in the atmosphere will boost average global temperatures 2-6 °F by 2100. "Most" scientists predict this will cause increased rainfall across Appalachia and the Midwest. Although the wetter climate could tend to moderate temperature increases in the region, *University of Miami, OH*, researcher Orie Loucks warns the rainfall could upset the area's infrastructure, such as sludge ponds and containment dams in the coal-intensive Ohio Valley. *University of Cincinnati* geologist Tom Lowell said, "We'll be more susceptible to flooding problems in Appalachia and the Ohio Valley, which will induce mass movements such as debris flows and landslides along steep hillsides." However, some computer models suggest a warmer climate would increase evaporation rates and cause long-term declines in the water levels of the region's lakes, rivers and streams.

Meanwhile, a team of *University of Colorado* researchers has found that global warming is causing glaciers worldwide to melt more quickly than expected. The study, presented at a 5/26 meeting of the *American Geophysical Union* in Boston, is based on data collected on glaciers worldwide during the past century. Over the past 100 years, the largest glacier on Mt. Kenya in Africa has shrunk by 92%, while glaciers in Russia's Caucasus Mountains have shrunk by 50%. At the current melting rate, the researchers say all of the glaciers in Montana's Glacier National Park will disappear within 70 yrs.

A study published in a recent issue of the journal *Science* suggests that the west Antarctic ice sheet collapsed into the sea hundreds of thousands of years ago and could be doing so again today, possibly in response to global warming. If that occurred, sea levels could rise by a "catastrophic" 13-20 ft., the *New York Times* reports. The article by science writer William Stevens is accompanied by maps and photos showing the portions of Manhattan, Florida and the Gulf of Mexico coast that would be inundated in such an event. However, Stevens notes that "few if any experts believe that the ice sheet is likely to collapse in anything less than a few centuries," and no one is sure whether the trend is caused by natural or human forces. Scientists previously had believed that the west Antarctic ice sheet was stable throughout its 8-10 million year history. But researchers at *Uppsala University* in Sweden and the *California Institute of Technology*, led by Reed Scherer, found evidence of tiny marine algae on land beneath the ice sheet, suggesting that the ice sheet may have disappeared during an interglacial period in the past, possibly similar to the one now occurring. Michael Oppenheimer, a scientist with the *Environmental Defense Fund*, said it could take 500-700 years for the ice sheet to disintegrate fully at current rates of global warming. But that outcome could become inevitable as early as the end of the next century, he said.

Finally, a new study in the 7/15/98 issue of *Geophysical Research Letters* suggests that past work has "slightly" overstated the role of carbon dioxide in global climate change, while understating that of some other chemicals. The actual contribution of carbon dioxide to global warming is about 15% less than that estimated by the *Intergovernmental Panel on Climate Change says* the report. But study, leader Gunnar Myhre of the *University of Oslo*, Norway, concluded that other chemicals, including methane and nitrous oxide, have been underestimated. Jerry Mahlman, director of the *Geophysical Fluid Dynamics Lab* at *Princeton University*, said the finding "isn't a stunner, but it's an important contribution if it's true." Mahlman said the study would not "substantially reduce" the range of projected global temperature increases; for example, instead of an average increase of 1.5 - 4.5 degrees, it could mean a range of 1.35 - 4.3 degrees, he said.

Source: *Reuters/Baltimore Sun*, 7/8/98; Curt Suplee, *Washington Post*, 6/9/98; David Lore, *Columbus Dispatch*, 6/1/98; Alison Fitzgerald, *AP/Boston Globe/others*, 5/28/98; William Stevens, *New York Times*, 7/7/98; Judy Silber, *Christian Science Monitor*, 7/3/98; Randolph Schmid, *AP/Tulsa World*, 7/11/98 and National Journal's GREENWIRE, *The Environmental News Daily*, 5/28, 6/4, 6/8, 6/9, 7/7, 7/8, and 7/14/98

World Environmental Concerns

"Majorities of people in the world's most populous countries want sharper teeth put into laws to protect the environment," according to the "largest-ever" international survey on the subject, released to mark *World Environment Day* (June 5). Majorities in 28 of 30 countries surveyed -- all but Nigeria and Finland -- said environmental laws in their countries "don't go far enough." Asked an open-ended question about the most important problems facing their country, some 40% of urban Chinese and 27% in India cited an environmental issue as the most important or second-most important problem. At least 20% of respondents in Australia, Germany, Japan and the UK also cited the environment as a leading concern.

Prompted to describe their level of concern about the environment, those answering "a great deal" or "a fair amount" totaled more than 75% in most countries. Comparing results with a similar question asked by the *Gallup* polling organization in 15 countries in 1992, the percentage of people expressing "a great deal" of concern was higher this year in 13 of the 15 countries, including the U.S. (39%, up 1 point). In 17 countries, researchers sought opinions on the most effective ways to reduce pollution. In 15 of the 17, "strict laws" were the most favored approach, as opposed to economic incentives, voluntary targets or requirements for public reporting of emissions. Support for economic instruments was highest in France (32%) and the U.S. (31%).

The survey also asked whether, "given scientific uncertainty over climate change," we "should not take major

action until we know more because of the great economic costs involved" or "we should assume the worst and take major action now ... even if there are major costs." Majorities or "near majorities" favored action now in 27 of the 30 countries. Compared to a 1997 survey asking the same question, the percentage of U.S. respondents favoring action has risen from 46% to 51%, while those favoring caution dropped from 46% to 42%. The largest swings toward the "action now" position occurred in Russia, up 46 points to 73%, and China, up 24 points to 56%.

The second annual *International Environmental Monitor* survey was conducted by polling firms in 30 countries, coordinated by Toronto-based *Environics International*. More than 35,000 interviews (at least 1,000 per country) were conducted in 3/98 and 4/98 in Argentina, Australia, Brazil, Canada, Chile, China, Colombia, Finland, France, Germany, Greece, Hungary, India, Indonesia, Italy, Japan, Kazakstan, Mexico, New Zealand, Nigeria, Poland, Russia, South Africa, South Korea, Spain, Turkey, the UK, U.S., Uruguay and Venezuela. Each national survey is considered accurate within +/- 3%. Together, the nations represent two-thirds of the world's population.

Over the past century, human impacts on the environment have "risen dramatically as the scope and intensity of human activities have increased," according to the second part of the *World Resources 1998-99* biennial report jointly released on June 4 by the DC-based *World Resources Institute*, the *UN Environment Program*, the *UN Development Program* and the *World Bank*.

The new section, released to mark *World Environment Day*, describes trends in such areas as food production, biodiversity and energy use, and also attempts to illuminate the forces driving current changes, as well as policy solutions. Among the worrisome trends, the report says that one-third of the world's population lives in countries that are experiencing water stress, and that water scarcity is likely to worsen in many parts of the world as human population grows and per capita water consumption "reaches new heights." Excessive use of fertilizers and fossil fuels are "contributing to a global glut of nitrogen," threatening terrestrial and aquatic ecosystems. Part one of the report, which was released in May, can be accessed on the Internet at http://www.wri.org /wri/wr-98-99/.

Sources: *Environics International* release, 6/4/98; *WRI* release, 6/4/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/5/98

Property Rights Poll

The "overwhelming majority" of farmers, ranchers and forest landowners -- 71% -- say their property value has not been reduced by government regulations designed to protect the environment, according to a new nationwide survey. The poll was conducted by J. Dixon Esseks, a professor of public administration at *Northern Illinois University*, on behalf of the *American Farmland Trust* (AFT), a Washington, DC-based conservation group founded in 1980 to stop the loss of productive farmland.

"Designed to probe the opinions of those who own most of the land in the U.S.," the survey consisted of telephone interviews with 1,729 owners of at least 5 acres of farm, ranch, or forest land in 42 states. The margin of error was +/- 3%. Among the other conclusions of the survey:

- A clear majority -- 70-95% depending on the issue — favor some government role in natural resource conservation instead of leaving it completely to the marketplace;
- 75% reject the idea of compensating landowners whenever regulations lower their property value by a certain percentage; and
- Nearly 60% favor zoning to protect farmland from residential development.

AFT Pres. Ralph Grossi said the polarized debate over property rights obscures the moderate views of most landowners. "Agricultural landowners strongly endorse 'hybrid' programs that combine reasonable regulations with cost-share payments to encourage good land stewardship. It should not be all one or the other", he said. "This survey clearly shows that the interests of America's agricultural landowners are not served by legislation designed to undercut environmental protection and sensible land use policy," Grossi said.

The report goes on to claim, "In some cases, landowners seem to be willing to accept regulation without any financial remuneration, believing that the benefit to their livelihood or security is compensation enough. Zoning, to protect farmland from development and farmers from conflicts with neighbors, is a good example. When accompanied by the purchase of conservation easements from willing landowners, it makes an unbeatable combination." The full text of the report is available by calling (800) 370-4879 or on AFT's home page at http://www. farmland.org.

Source: *AFT* release, 6/10/98; and *Land Letter*, Vol. 17, No. 13

Non-Lethal Caviar Harvest

In an effort to spare the lives of endangered sturgeon without reducing caviar harvests, two competing Russian interests say they have developed a way to take caviar from sturgeon without killing them. Extensive poaching operations in the Caspian Sea and its tributaries has contributed to declines in adult sturgeon populations and has brought into question the future of caviar production.

"Lake Sturgeon"

Ecoresoursy and the *Russian Federal Research Institute of Fisheries and Oceanography* say they have developed a method to harvest the caviar that involves injecting the fish with hormones to cause ovulation. A type of Caesarean section is then performed to remove the eggs and the fish is returned to the water to spawn again. But "the caviar industry isn't exactly rushing toward slaughterless caviar," reports the *Wall Street Journal*. Some caviar firms say they have been disappointed by the caviar's quality. Meanwhile, Russia's caviar factories "aren't gung-ho" with the idea they would have to pay to ship the sturgeons back to the Caspian Sea when outlaws are

most likely to catch the fish next time around anyhow".

Sources: Daniel Pearl, Wall Street Journal, 6/30/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/30/98

Bighead and Silver Carp Data Wanted

Bighead *Hypopthalmichthys nobilis* and Silver carp *H. molitrix* length and weight measurements are needed from the Mississippi River Basin. If you or your organization is willing to participate in the development of a relative weight condition index (Wr) on these genera, or can provide information relative to other indicated exotic species, please contact: Jeff Finley, U.S. Fish and Wildlife Service, 608 East Cherry, Columbia, MO 65201, (573) 876-1911 ext. 111, jeff_finley@mail. fws.gov

Mussel Poaching May be Costly

A Muscatine, Iowa based clamming operation was indicted in late April on 59 counts of unlawful transportation and sale of mussels. Darwin "Butch" Ballenger, his wife, Cheryl Roate-Ballenger, and Harry Schultz - all of Muscatine - were named in the federal indictment, along with two Illinois men and a Wisconsin man. The *Mississippi Valley Shell Co. Inc.* and *Great River Shell Inc.*, both run by the Ballengers, were also indicted.

The indictment alleges that the group illegally took mussels from restricted areas in seven Midwestern states from 1993-97. According to the indictment, several of the defendants illegally harvested mussels from restricted areas, including the Rock River in Illinois, the Otter Tail River in Minnesota, the Muskingum River in Ohio and the Sheyenne River in North Dakota. Documents say the mussels were then purchased by Ballenger's Muscatine operation, which resells the mussel shells internationally - usually to Japanese companies for use in culturing pearls.

The Ballengers, licensed as mussel buyers in Iowa, also are accused of making false entries on mandatory Iowa reports and other documents. "This is a very serious violation," said Walt Kocal, special agent with the U.S. Fish and Wildlife Service , who said more indictments may follow. Agents raided the Ballenger operation in April, and the U.S. attorney's office in Rock Island, Illinois said the operation made about $300,000 in illegal mussel sales, and that the defendants face up to 5 yrs. in prison and a fine of $250,000 for each of the 59 counts. Arraignment was scheduled for May 15 in Davenport, IA.

Source: Geoff Cooper, *The Des Moines Register*, 4/28/98

Invasion of the Asian Swamp Eel

Scientists fear that the Asian swamp eel, recently found in a Florida swamp and in small lakes near Atlanta, "could prey on or crowd out native fish" in the Everglades and along the Atlantic Coast as far north as the Chesapeake Bay. The eel, which "could have been tailored by God to take over the Southeast," thrives in ditches, canals and marshes, and it has the ability to breathe air, so it can move across land to find new waterways. Its resistance to waterborne poisons and its slimy, elusive quality make it difficult to control. Wayne Starnes of the *North Carolina State Museum of Natural Sciences* said, "There's no way to control them...except direct clubbing." The eels may have entered the wild by escaping Florida fish farms that grow them as pets.

Sources: Traci Watson, *USA Today*, 7/6/98 and National Journal's GREENWIRE, *The Environmental News Daily*, 7/6/98

Two Different Approaches to Environmental Education

A coalition of nonprofit, government and private entities is offering a training course "to promote the responsible use of the environment." The *Leave No Trace* program, coordinated by the Lander, WY-based *National Outdoor Leadership School*, is a "distillation" of the group's "traditional conservation practices." The goal is to teach some of the reported 89% of Americans who use the outdoors various methods to minimize their impacts on the land. The "masters" course lasts 5 days and costs $650 for participants who are not employees of the U.S. Forest Service (USFS), Bureau of Land Management, National Park Service or U.S. Fish and Wildlife Service. Federal employees receive a discount because of their agencies' financial support of the program. Other partners in the program include the *Sporting Good Manufacturers Assn.*, the *Outdoor Recreation Coalition of America*, 56 retail companies and several state agencies. Promoters hope that the project, which grew out of a program started in the 1970s by USFS personnel in Utah, "will propagate itself" as graduates offer seminars in their own communities.

Meanwhile, about 25 environmentalists in mid June completed the 5th annual *Native Forest Activist Training Week* held in Vermont, where they learned skills to fight the destruction of the world's forests. The goal of the training was to set up "a tree village," where activists could camp in the branches to prevent loggers from cutting, a method rarely used on the East Coast but "common" in the West. There were sessions in banner hanging, civil disobedience, legal strategy and "radical ecology." The group's efforts have earned them the hostility of industry reps. Roberta Borland of the *Vermont Forest Products Association* said "I consider them quite dangerous. They're very extreme, very hostile, very intimidating, ... and not the kind of people I want in my backyard".

Sources: Jeff Tollefson, *Casper (WY) Star-Tribune*, 6/17/98; Jeffrey Krasner, *Wall Street Journal, (Northeast edition)*, 6/17/98; and National Journal's GREENWIRE, *The Environmental News Daily*, 6/19/98

National Library for the Environment - Online

The on-line *National Library for the Environment* (http://www.cnie.org) sponsored by the *Committee for the National Institute for the Environment* (CNIE) contains seven free and very useful information resources:

- Up-to-date objective, nonpartisan issue reports.
- Environmental Education Programs and Resources.
- Environmental Laws -- local, State, Federal and international.
- An in-depth resource on Population-Environment Linkages.
- A Virtual Library of Ecology and Biodiversity.
- Information on environmental conferences and meetings
- Environmental Careers and Jobs

The library was made possible through donations by *Compaq Computer Corporation*, the *David and Lucile Packard Foundation*, the *United Nations Population Fund*, the *Winslow Foundation*, *AT&T*, and members of the *CNIE Associates Programs*. The Library was recently honored with a *Computerworld Smithsonian* award for innovative use of technology. *Rice University Center for Conservation Biology Network* is a major collaborator, while *Pace University Law School* and several other organizations provide significant on-line resources.

Over 300 **Nonpartisan Environmental Reports** are produced by the Library of Congress' *Congressional Research Service* (CRS) exclusively for Members of Congress and their staff. Issues addressed include Agriculture & Grazing, Air, Biodiversity, Climate, Energy, Forestry, International Issues, Legislation, Marine, Mining, Natural Resources, Pesticides, Pollution, Population, Public Lands, Regulatory Reform, Stratospheric Ozone, Trade, Taxes & Economics, Transportation, Waste Management, Water Quality and Wetlands. Reports are reviewed for technical soundness, objectivity and nonpartisanship and many are updated monthly. Yet these reports are not available to the American citizens. As the *National Journal* reported, if anyone other than a Member of Congress asked the CRS for copies of the reports the agency writes, the answer would be an emphatic "no." The Library of Congress is not affiliated with the *National Library for the Environment* and does not cooperate in this initiative. However, as products of Congress, CRS reports are not copyrighted and thus CNIE has legally made them freely available to the public at http://www.cnie.org/nle/crs_main.html

Environmental Education Programs and Resources include:
- Directory of Higher Education Environmental Programs.
- *Starfish*: sustainability courses, bibliographic references, innovative teaching techniques.
- Academic Programs in Conservation Biology.
- Community college and high school environmental technology programs.
- Environmental Impact Assessment Training Courses.

Environmental Education Programs and Resources are implemented in collaboration with *Rice University* and include resources developed by CNIE and others. The *Directory of Higher Education Programs* includes over 150 degree-granting, environmental programs -- many of which train K-12 teachers. The Directory was developed by *CNIE* and *Rice University*. The resources provided on *Advanced Technology Environmental Education Center (ATEEC)* in Iowa address environmental technology education through curriculum development, professional development and the nation's community college and high school environmental technology programs. Complementing the program-focused resources is *Second Nature's Starfish*, with over 200 syllabi and reading lists for sustainability courses, 1600 bibliographic references for sustainability and 21 innovative teaching techniques. Environmental Education Programs and Resources are available at http://www.cnie.org/educate.htm

Population and Environment Linkages contain extensive information and source documents at all levels of complexity in an innovative and simple framework. Areas addressed include: Demographics, Freshwater Resources, Oceans, Land-Use, Coastal Environments, Air, Climate and Atmospheric Change, Food Resources, Biodiversity, Security, Development and Economics, and Environmental Health. Abstracts and full bibliographic information for each article is given. Introductory articles on how human population impacts upon aspects of the environment can be found on the population/environment database home page at http://www.cnie.org/pop/pophome.htm

Environmental Laws and Treaties is maintained by *Pace University Law School* and includes organized links to primary legal sources on International Laws and Treaties, Federal Environmental Laws of the United States, State Environmental Laws, and Comparative Environmental Legislation. These can be found at http://www.cnie.org/nle/nlelaw.htm

The Virtual Library of Biodiversity, Ecology and Environment is maintained by *Rice University Center for Conservation Biology Network* and organizes information around the following topics: Global Sustainability, History of Life, Endangered Species, Captive Breeding, Exotic Introductions, Pollution, Protected Areas, Values of Biodiversity, National Issues (non-U.S.), State Issues (U.S.), U.S. Government and Legislation, International Treaties, Biodiversity and Conservation, and Conservation Education. This library can be found at http://www.cnie.org/biodi/bioframe.htm

Meetings and Conferences is a bulletin board for events of interest to the environmental science and policy communities. These can be found at http://www.cnie.org/conferences.htm

Careers and Opportunities includes Environmental Positions, Counseling, Corporate Research, Job Market Analysis, Salary Determination, Job Databases, E-Mail Headhunters, Resume Preparation, Resume Posting, Cover letters, Interviewing, Education, and links to other career sites (Mega Lists). These can be found at http://www.cnie.org/career/megajob.htm

All of these sites are accessible from the *CNIE* home page at http://www.cnie.org

Contact: Kevin Hutton, *Webmaster, Committee for the National Institute for the Environment*, 1725 K Street, NW, Suite 212, Washington, D.C. 20006-1401, (202) 530-5810, FAX (202) 628-4311, khutton@cnie.org

Meetings of Interest

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

August 24-28: Meeting on Water Quality Standards, Water Quality Criteria, and Implementation, including Water Quality-Based Permitting, Philadelphia, PA. Contact: *The Cadmus Group*, (703) 998-6862; mrm98@cadmus group.com; http:// www.epa.gov/ OWM.

September 10-12: "Fourth Annual Mine Drainage Conference and Workshop." Sponsored by the Office of Surface Mining, Knoxville, TN. Contact: Bob Carvahal, OSM, (202) 208-4633.

September 14-18: "Working at a Watershed Level." Training course for federal, state, and local groups, Lexington, KY. Contact: Barry Tonning, The Council of State Governments, (606) 244-8228, btonning@csg.org, http:// www.epa.gov/OWOW/watershed/wacademy/.

September 20-24: WETLANDS '98 - Integrating Wetlands and Floodplain Ecosystems Into Water Resources/ 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, FAX (518) 872-2171.

September 21-24: Sixth 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.

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

October 11-13, 1998 - North American Water Trails Conference, Shephardstown, WV. The 1998 conference will explain how to develop and manage a water trail, along with highlighting their many environmental, social and economic benefits. Contact: North American Water Trails Conference, c/o the Alliance for the Chesapeake Bay, 225 Pine Street, Harrisburg, PA 17101; Phone 717-236-8825; FAX (717) 236-9019; acbpa@pipeline.com.

October 20-29: River Restoration and Natural Channel Design, Pagosa Springs, CO. One of eight short courses presented by Dave Rosgen with Wildland Hydrology. Contact: Wildland Hydrology, 157649 U.S. Highway 160, Pagosa Springs, CO 81147; (970) 264-7120; FAX (970) 264-7121; wildlandhydrology@pagosasprings.net.

November 16-18: Incentives for the Protection of Nature, Savannah, GA. Contact: Bill Coleman, Manager, Biodiversity Protection R&D, EPRI, 3412 Hillview Avenue, Palo Alto, CA 94304, (650) 855-1084.

Congressional Action Pertinent to the Mississippi River Basin

Conservation

Rep. Bud Shuster (R/PA) introduced H.R.3866 to provide for the conservation and development of water and related resources, to authorize the Interior Secretary to construct various projects for improvements to U.S. rivers and harbors, and for other purposes

Education

Rep. Scott Klug (R/WI) and five Republican and two Democratic cosponsors on 3/11 introduced legislation to **reauthorize the National Environmental Education Act.** The 1990 law, administered by the USEPA, provides grants for training and curriculum development, and helps fund the *National Environmental Education and Training Foundation*, establishing a forum for public/private partnerships in environmental education. Klug's bill would cap funding levels at $14 million, although program appropriations have never run over $7.8 million. No grant money could be spent on lobbying, and funded projects would have to be "balanced and scientifically sound."

Endangered Species

Senate action on **S. 1180, a bill to reform the Endangered Species Act**, is still on hold and has lost some of Democratic support. But lead Republican sponsors "remain hopeful the measure can be brought to the floor for a vote as a stand-alone bill sometime before the close of this year's session." Several players, including co-sponsor Sen. John Chafee (R/RI), discouraged the prospect of trying to pass parts of the bipartisan bill as riders. The measure, which has the backing of the Clinton Administration, "really all hangs together," he said. The bill's supporters also cautioned that attaching ESA-reform provisions to spending bills "could give the impression" that Republicans are attempting to dismantle the ESA through the "back door". The House is awaiting Senate action

Parks and Refuges

The Senate Energy and Natural Resources Committee on 5/20 approved the **Vision 2020 National Parks Restoration Act.** The House Parks Sub-Committee passed **S. 1693** on 6/23. It would overhaul National Park Service (NPS) management and funding sources, and alter the concessions process by setting up an advisory board to help the Interior Secretary on contracts and requiring those contracts to undergo a "competitive selection process." It also would direct NPS to write and regularly update a strategic management plan, follow guidelines to add

park units, extend the recreation fee demonstration program, and start research and resource monitoring programs.

Rep. George Miller (D/CA) sponsored H.R. 3934 to reform concessions in the National Park Service and use revenues for resource protection and visitor use.

Property Rights

The Senate on 7/13 "effectively killed" by a vote of 52 to 42 a major property-rights measure pushed by Republican leaders. The Senate refused to limit debate on the measure, which would have allowed aggrieved landowners to take property-rights disputes directly to federal court, bypassing state courts and local resolution processes. A Republican leadership source "said it was unlikely that the legislation would be brought up again this year." The bill sought to give planners and developers a new tool to fight local restrictions on property use. Landowners currently must exhaust all local and State appeals before heading to federal court, a process that can take years.

Public Lands

Legislation charging new location fees for commercial filming and soundtrack recording on certain federal lands passed a House Parks Subcommittee markup on 5/21. **Rep. Joel Hefley (R/CO) offered H.R. 2993,** which, in amended form, would allow location fees to apply to all Interior land-- based on a "fair return to the government," and allow the Interior Secretary to set fees on a case-by-case basis

Sen. Ben Nighthorse Campbell (R/CO) offered S. 2098 to preserve U.S. sovereignty over public lands and acquired lands owned by the U.S., and to preserve state sovereignty and private property rights in non-federal lands surrounding those public and acquired lands.

Rep. Rick Hill (R/MT.) sponsored H.R. 3963 to set up terms and conditions for the Interior Secretary to convey leaseholds on certain property around Canyon Ferry Reservoir in Montana.

Water resources

Sen. John Chafee (R-R.I.) introduced S.2130 to provide for conservation and development of water and related resources, and to authorize the Army Secretary to construct various improvement projects to U.S. rivers and harbors.

Sens. Ron Wyden (D/OR) and Conrad Burns (R/MT) introduced S. 2189, on 5/18 **to amend the *Federal Water Pollution Control Act*** to authorize use of state revolving loan funds for c struction of water conservation quality improvements.

Sen. Ben Nighthorse Campbell (R/ introduced S.2140 to authorize Interior Secretary to participate in signing and planning the Denver w reuse project.

Wildlife

The House on 5/19 passed by a vo vote a bill, **H.R. 512, concerning de nations of wildlife refuges.** Origin mired in controversy, a consensus emerged in May placating all sides. new bill requires notification of elec of officials and public announceme in local newspapers prior to final de nation of a refuge.

Sen. John Chafee (R/RI) introdu S.2095 to reauthorize and amend ***National Fish and Wildlife Foundat Establishment Act.***

Sens. John Chafee (R/RI) and Wa Allard (R/CO) introduced S.2094 amend the ***Fish and Wildlife Impro ment Act of 1978*** to enable the Inte Secretary to more effectively use s proceeds of certain items.

Sources: *Land! Letter Status Rep* Vol. 17, No. 11, 6/1/98; and Vol. No. 13, 6/23/98; and National Journ GREENWIRE, *The Environmental Ne Daily*, 7/13, 7/14 and 7/17/98

River Crossings

Mississippi Interstate Cooperative Resource Association
P.O. Box 774
Bettendorf, IA 52722-0774

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