

River Crossings

Volume 5

July/August 1996

Number 4

Paddlefish Movements Being Documented

One of the first recorded cases of Mississippi River paddlefish migrating up a tributary river to spawn in Iowa was recently documented by Gary Siegwarth and John Pitlo (Iowa Dept. of Natural Resources).



"paddlefish"

"This finding illustrates the vital role of interior rivers to Mississippi River fish populations," Siegwarth said. "It also indicates that in the days before the dams, tributary rivers served as significant 'highways' for fish populations moving to important seasonal habitat."

As part of MICRA's multi-state paddlefish study, several paddlefish on the Cedar River at Palisades-Kepler State Park were collected in early June and injected with coded wire tags. Additionally, a 30-pound female and a 17-pound male were implanted

with radio transmitters to verify spawning sites. Biologists hoped to not only document this stretch of the river as a paddlefish spawning area, but also to determine if these fish were part of a resident Cedar River paddlefish population or migrants from the Mississippi River.

"The paddlefish remained close to Palisades-Kepler State Park until mid-June," Siegwarth said, "and then we could no longer locate them by boat. An aerial search was set-up through the Civil Air Patrol in Dubuque to find the fish

on the lower river. The search began below the roller dam at Cedar Rapids and continued down the Cedar River to where it meets the Mississippi below Lake Odessa."

"Just when it seemed the fish had simply disappeared," Siegwarth continued, "a radio signal from the female was picked up on the Mississippi, three miles below the mouth of the Cedar River and more than 100 river miles below Palisades Park. This fish had migrated all the way back to the Mississippi in only a couple of

INSIDE THIS ISSUE

Paddlefish Movements	1	AR Logging Injunction	11
Sturgeon/Zebra Mussel	2	Grazing Rules Reversed	11
Fish Advisories Up 14%	3	Electronic Cattle Collars	12
Stickleback Invades	4	Establishing Streambank Veg	12
Freshwater Mussels Imperiled	4	Watershed Tools Directory	13
Teaming With Wildlife	5	Urban Watershed Planning	13
ESA Issues	6	Partners for Wildl Recognized	13
State Biodiversity Graded	6	Ecological Sewage Treatment	14
FWS Director Beattie Dies	7	Green Economics	14
Yellowstone Update	8	Corporate Philanthropy	15
Idaho Stream Agreement	9	WI/MI Property Rights	15
More Natural Salmon Mgmt.	9	Local Property Rights Setback	16
Floodplain Report Released	10	Wise Use Dealt Blow	16
South Platte River Decision	10	Youth Enviro Poll	17
NC-TN Water Dispute	10	Religious Activism	17
NC Ag Wastes	11	Meetings of Interest	17
OH Waste Permits Violated	11	Congressional Action	18

weeks."

"The radio signal, though a simple event, was exciting for John and myself," Siegwarth said. "It represented a big step in our knowledge of paddlefish populations in Iowa."

Meanwhile in Wisconsin's Chippewa River, following the pattern observed in 1995, radio-implanted paddlefish have returned to their overwintering site following a nearly month-long springtime journey downstream to portions of Upper Mississippi River (UMR) Pools 4, 5, and 5A. According to Mark Steingraeber, a prolonged period of high discharge prompted the opening of UMR flood gates this spring that likely facilitated these downstream movements as well as the upstream movements of other radio tagged paddlefish in the UMR system.

In early July U.S. Fish and Wildlife Service biologists of the Carterville (IL) Fisheries Resource Office implanted six paddlefish ranging in size from 10-30 pounds with radio transmitters. These fish were collected from Swan Lake, a major river backwater, and will be tracked in order to identify critical Mississippi River paddlefish habitat in possible need of protection and/or restoration.

According to Chuck Surprenant, the transmitters will also be used to determine paddlefish migration patterns, identify obstacles to paddlefish migration, and to determine if paddlefish will move through an experimental water control structure being constructed at the mouth of Swan Lake which will isolate the lake from the river. The fish will be tracked weekly over an expected period of two years, the life of the transmitters.

(Contact: John Pitlo, (319) 872-4976, Mark Steingraeber (608) 783-8436, and Chuck Surprenant (618) 997-6869.

Sturgeon Being Assisted By Zebra Mussels?

The lake sturgeon, nearly wiped out in Lake Erie, seem to be coming back. Some scientists believe that the zebra mussel may be helping out. Increasing numbers of sturgeon are turning up in western Lake Erie, and fishermen and scientists credit their growth to the zebra mussel.



"lake sturgeon"

"The sturgeon is a bottom feeder, and since the mussel is transferring energy from the pelagic, or free-swimming mode, which prevailed in Lake Erie, to a

benthic, or bottom-oriented food chain, we believed that studying a sturgeon might be profitable," said Dieter Busch, head of the Lower Great Lakes Laboratory of the U.S. Fish & Wildlife Service.

Unfortunately, a Memorial Day fish-kill on Lake Erie saw thousands of fish turn belly up from Dunkirk to Sturgeon Point, but offered one bright spot: a fresh, young sturgeon was netted. Christopher Lowie, a researcher with the Lower Great Lakes Laboratory, found the fish and said the find is good news for studying the species. "We got the DNA samples we wanted and sent them to the lab," Lowie said. "That's good because DNA evidence is important if we are going to restore the lake sturgeon here."

River Crossings

Published by

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

MICRA Chairmen

Mika Conlin, Illinois Department of Conservation, Springfield

Executive Board

Mike Conlin, Member at Large

Marion Conover, Vice Chairman, Iowa Department of Natural Resources, Des Moines

Jack Wingate, Minnesota Department of Natural Resources, St. Paul

Mike Armstrong, Arkansas Game and Fish Commission, Little Rock

Bob Hanten, South Dakota Game, Fish & Parks Department, Pierre

Frank Jernejcic, West Virginia Department of Natural Resources, Fairmont

Gary Edwards, U.S. Fish & Wildlife Service, Washington, D.C.

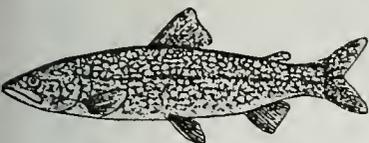
Ron Pasch, Tennessee Valley Authority, Chattanooga, TN

MICRA Coordinator/Executive Secretary and Newsletter Editor

Jerry L. Rasmussen, U.S. Fish & Wildlife Service, Bettendorf, IA (319) 359-3029

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

The federal agency, which has been concentrating on the more profitable lake trout restoration in lakes Erie and Ontario, now wants to help the sturgeon make a comeback even though that plan is fraught with difficulty.



"lake trout"

"The big problem is that the results can take a generation to show up," Lowie said. "Sturgeon don't reach sexual maturity until age 20 or 25 -- when they are five feet long -- and they can live more than 100 years."

The lake's ecology has been changing too rapidly for science to keep up with, or to predict accurately. There is less food for smelt, which, in turn, means less food for trout, salmon and walleye, the three most targeted species in the lakes. But bottom-feeders, like catfish and bass, are booming, as are lake whitefish, another species almost gone, but now bouncing back along with hordes of aquatic insects. This change has occurred simultaneously as the lake waters are filtered clean by zebra mussels.

The sturgeon have a great appeal for biologists because they have survived for millions of years, and while they have been greatly prized through the centuries as table fare -- sturgeon roe makes the finest caviar -- little attention has been paid to them until now.

Another suspected role for the sturgeon may be its use in controlling the sea lamprey. In Lake Ontario, where the parasitic sea lamprey was believed extant for many years, it is possible that the Atlantic salmon and lake trout

thrived because the sturgeon fed on the lamprey's early life stages.

A century ago, lake sturgeon were plentiful, says Henry Regier of the University of Toronto. He said sturgeon were fished commercially by German and Eastern European immigrants who had a booming trade in smoked sturgeon until the fish grew scarce.

Now commercial netters are helping with the sturgeon project, Lowie said. "It started with sighting reports in 1994 -- sports anglers in the lower Niagara River told me about some, but I got more sightings from the drift-diving clubs that swim in the upper river.

"They report a lot of sturgeon in the 5 to 6-foot range." Neither Canadian nor American commercial fishermen can keep sturgeon from Lake Erie, and in New York, sport anglers must release them as well. Across the river they are fair game, and fishermen sometimes hook into them while wade-fishing the upper Niagara on the Ontario shore.

Commercial fisherman Gary Penner of Kingsville, on Pigeon Bay near Windsor, Ontario, said he has seen a boom in sturgeon in recent years. "When I started fishing 15 years ago, we'd catch maybe 10 sturgeon a year," Penner said. "But I believe the zebra mussel is helping sturgeon, they've been coming back as the mussel has been increasing. Last year, I caught almost 5,000 sturgeon from hand-sized to a six-footer."

"The only change in the lake I have seen is due to the mussel," Penner said. "The water is cleaner, so the whitefish are coming back and perch are declining. I once caught a sturgeon, when that was legal, that was stuffed with snails, so I suppose they have shifted to the

mussel now."

Source: Buffalo News, 6-15-96

Fish Advisories Up 14%

The numbers of U.S. lakes, rivers and waterways where consumer advisories have been issued to avoid or limit consumption of trout, salmon or other species because of chemical contamination rose 14% in 1995 over 1994 levels. A recently released U.S. Environmental Protection Agency (USEPA) report said advisories were issued for 1,740 water bodies in 47 states representing 15% of the total U.S. lake acres and 4% of the total U.S. river miles.

In 453 cases, the advisories recommended that everyone avoid eating a certain fish species; in 1,042 instances, they said that children, pregnant women or other vulnerable groups should limit their consumption. The report said salmon, trout and walleye tend to have higher amounts of contaminants because of their high concentrations of fatty tissues, which store the chemicals.

In 1995, 46 contaminants were found in fish. Mercury accounted for 1,308 of the advisories, up from 899 in 1994. Mercury advisories were posted in 35 states; some 90% of those were in FL, GA, MA, MI, MN, ND, NJ, NM, SC and WI.

Advisories for PCBs totaled 438, up from 319 in 1994. Those for chlordane and other assorted chemical compounds increased 16% last year. The warnings for DDT increased 3% even though the insecticide was banned in 1972. The increase "is probably from the persistence of DDT in the environment and to its continued use in Mexico, which shares several bodies of water with the U.S.

Some 47 states now have some form of fish-consumption advisory, and the EPA attributed some of the increase in advisories to improved monitoring by the states. The agency said its report was meant to establish for the first time a "baseline" with which to measure the success of future efforts to protect water quality.

Sources: U.S. EPA and Greenwire Vol. 6, No. 30

Stickleback Invades Lake Michigan

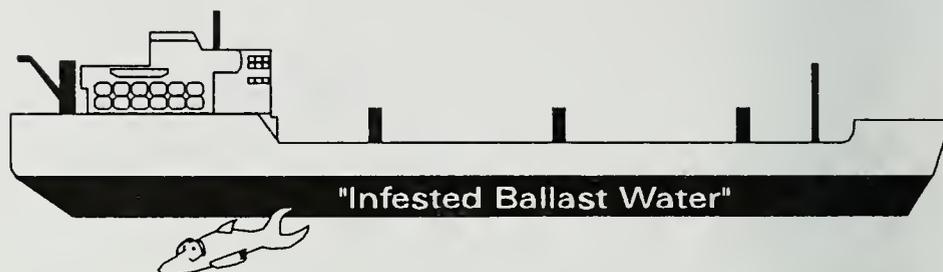
The three-spined, chrome-colored stickleback is among the latest fish species to invade and begin taking over our freshwater lake and river system. The fish has been spotted, caught and documented many times this spring in Lake Michigan from Port Washington, WI, to lower Michigan. Port Washington is just north of Chicago where the Sanitary and Ship Canal connects Lake Michigan to the Illinois River and the entire Mississippi River Basin.

The stickleback's existence in the lake was first noted in 1984 and showed moderate population increases in 1989 and 1993, but no one can remember anything like this. "This just seems to be a big year", said Tom Burzynski, a Lake Michigan fishery biologist for the Wisconsin Department of Natural Resources.

The three-spiner, about the size of an alewife with sharp spike-like spines on top and bottom, is from Europe and Asia. It arrived in ship ballast, as have other invaders such as the zebra mussels and the river ruffe. Ships often load unregulated and polluted ballast water at one port to stabilize their cargo, and then release it when they dock at another port (often far away or even in a foreign country).

The presence of the stickleback

and the continuing debate over ballast water exchange by foreign freighters has some people curious and others very upset. One way to guard against ballast water introduction is to have ships change their ballast water at sea. But since ballast provides stability to a ship, mid-ocean changing can involve risks.



No one is more ticked about that than Jack Vadas, president of Perch America, a group of fishermen dedicated to saving the Great Lakes. "For 10 years, we've been fighting and screaming and nobody has done anything...There is no way in the world you can empty a ship of all its ballast water. It is estimated that there are 150,000 gallons of water in a ship after the exchange is made. That water should be treated with a chemical (to kill foreign organisms) and it's not being done."

"I've been waging a 40-man war since we first saw them last fall," Vadas said. "There were just a few, but then this spring, there were reports that quite a few were being caught in smelt nets." "We started investigating and found out they are all over the damn lake." Vadas is concerned about the impact the three-spined stickleback is having on perch or other fish.

A recent National Research Council report encourages more research on filtration technologies, but recommends using both ballast water exchange and filtration. Governors John Engler (R/MI), Tom Ridge (R/PA) and

Tommy Thompson (R/WI) announced on July 21 a new \$1 million project that will test the efficacy of filtration technology in preventing the intake of unwanted foreign organisms in ships' ballast water.

Source: Chicago Sun-Times, 6-4-96 and Greenwire Vol. 6, No. 58

Sixty-six Percent of Freshwater Mussels Imperiled

Two-thirds of freshwater mussels and crayfish in the U.S. are at risk, according to a new study by The Nature Conservancy (TNC). The report also found that some 37% of U.S. freshwater fish species and 29% of amphibian species are in trouble.

The problem is most severe in the Southeast, where most of the nation's freshwater mussels live, and in the Southwest, home to many endangered fishes and amphibians. Aquatic species "hot spots" such as AL, FL, GA and TN "have the greatest proportion of imperiled aquatic and wetland animals, with more than 15% at risk," according to the report.

Threats to the species in the East include pollution and channelization of streams and rivers, while in the West, species are endangered by large water withdrawals and diversions.

TNC President John Sawhill said freshwater mussels and fish are "indicator species", "When their numbers drop, they provide warning signs of problems with water quality and ecosystem

stability".

Source: Greenwire Vol. 6, No. 32

Teaming With Wildlife

A broad coalition of outdoor enthusiasts has developed a legislative initiative called *Teaming With Wildlife* which proposes an excise tax on outdoor products that would generate funds to be used for wildlife diversity projects focused on conservation, recreation, and education, primarily to benefit the country's vast fish and wildlife resources. The proposed legislation may be cited as the "Fish and Wildlife Conservation Enhancement Act of 1996". MICRA has gone on record in support of this important legislation.

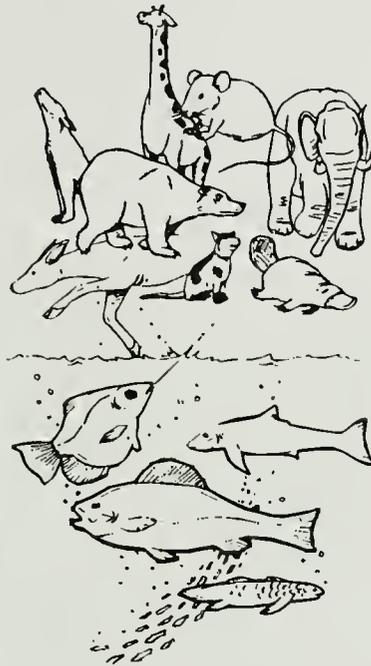
Hunters and anglers have paid similar user fees on hunting and fishing equipment for nearly 60 years. These funds are collected through an excise tax applied by the equipment manufacturer. Key legislation which authorize the collection of this excise tax are known as Pittman-Robertson, Dingell-Johnson and Wallop-Breau. Distribution of these funds to the States and U.S. Territories is accomplished through a mathematical formula based on 60% of a state's licensed sportsmen and 40% on it's land and water area.

Under the proposed *Teaming With Wildlife* legislation, outdoor recreation equipment would be subject to the new excise tax, as would optical equipment. Also included would be photographic equipment and backyard wildlife supplies and guide books, including field identification guides (e.g. wildlife viewing guides); recreational vehicles (RV's) and sport utility vehicles.

It is envisioned that the user fee would be based on a percentage of the manufacturer's price of the product, ranging from a low of

0.25% to a maximum of 5%. These fees would be reflected in an increased retail price paid by the consumer. For example If a field guide's retail price was \$10 and the manufacturer's price was \$6; the tax would be 30 cents [$6 \times .05 = 30$], so the consumer would end up paying \$10.30 for the field guide.

The U.S. Treasury would collect the user fees as excise taxes from manufacturers and pass them through the U.S. Fish & Wildlife Service (USFWS), similar to the procedure used to handle Pittman-Robertson, Dingell-Johnson, and



Wallop-Breau acts. The manufacturer would bill this cost to the retailer, to be paid by the user/customer. Manufacturers would pay these fees through their routine, quarterly IRS reports. Customers would know they are contributing to the *Teaming With Wildlife* program because the fund's green logo would be displayed on the product's tag with a short explanation that the funds are dedicated for wildlife conservation, recreation, and education.

No State or Territory would receive less than 0.5% or more than 5% of the total funds. States and Territories would be required to match these funds with non-federal dollars on a 25% state to 75% federal basis. Matching funds could be cash or in-kind donations. Each state would prepare a federal aid application addressing the specific needs and priorities found within their State, and which meets the "substantial characteristics and design" of the law. A joint agreement would then be signed with the USFWS office of Federal Aid, allowing for allocation of the funds to the State. States would have flexibility to tailor particular programs to meet the unique and varying needs found across the country. A grants program would be created for projects of regional and national significance. Essentially, *Teaming With Wildlife* would adopt the same funding/distribution mechanisms used for the Pittman-Robertson/Dingell-Johnson programs which funnel the funds directly to the States.

Of critical interest to Indian Tribes is the fact that the proposed mechanism for *Teaming With Wildlife* fund distribution makes no provision for Tribal involvement. In response to this situation the Native American Fish & Wildlife Society (NAFWS) is encouraging tribal leaders and others to generate letters to the outdoor product industry and congressional delegations calling for revisions to the legislation that will facilitate funding opportunities on Indian lands.

NAFWS points out that:

- federally recognized Tribes have jurisdiction over a reservation land base of 52 million acres;
- Tribal lands, coupled with Ceded and Usual and Accustomed areas total a natural resource base of over 140,625 mi², including more than a million acres of lakes and impoundments (exclusive of the 21,596,800 surface acres of

the Great Lakes Ceded Area) and thousands of miles of streams and rivers;

- Native Governments of Alaska have over 45,000,000 acres of land which support Native subsistence hunting, fishing and gathering, essential to maintain a traditional lifestyle;

- At least 9 officially recognized threatened and endangered species occur on Native lands including 9 birds, 7 mammals, 11 fish, 12 plants, and one threatened reptile;

- Tribal fish hatcheries produce millions of salmon, steelhead trout, walleye and other species which support large and diverse fisheries;

- Wetlands on reservations total over 20 million acres; and

- 35,508 miles of flowing water occur on Indian land.

Source: From the Eagles Nest - A publication of NAFWS, Vol. 9, No. 2

ESA Issues

In a "little-known overhaul," the U.S. Fish and Wildlife Service (Service) earlier this year pared its list of potential candidates for listing under the Endangered Species Act (ESA) from 4,000 to 182.

The move essentially abolished the agency's three-tiered system for rating and listing candidates. Only certain "category one" species for which the agency had sufficient information to support listing were retained on the candidate list. The other two categories -- those not considered suitable candidates and those with not enough data to warrant listing -- were eliminated.

The Service said the "change reflects reality." According to the Service's Megan Durham, "It was never true that all those candidate species were going to make the endangered species list. This was a scientific scrubbing of the

candidate list that was long overdue."

Many biologists say the change "will damage efforts to protect plants and animals" by reducing federal land managers' incentives to protect the species' habitat. Boise National Forest's Wayne Owen said, "As soon as Fish and Wildlife says we're not interested in all these species, the Forest Service and Bureau of Land Management start putting less effort into protecting the species. We start blowing them off."

Still, ESA foes "say they aren't impressed by the move," noting that it doesn't solve the problem of current land-use restrictions caused by species already listed. According to Pat Holmberg of the Alliance of Independent Miners, "If they were delisting species that have already been listed, I'd do some cartwheels."

The Service decision to remove the potential candidates is being challenged in federal court by the Biodiversity Legal Foundation, which claims as many as 9,000 species are in need of protection.

Meanwhile, Representative Don Young (R/AK), chairman of the Resources Committee has said that he should have followed the advice of first-year Representative Doc Hastings (R/WA) at the beginning of the 104th Congress. "What I should have done is repealed the whole act. If I had done what Doc told me, I would have repealed the whole thing. Right quick. Before anybody realized what had happened."

Young railed against eastern GOPers who he said weren't enviros but still resisted changes in enviro laws because of political pressures, attacking the GOP moderates as "spineless."

Although reform of the ESA is dead in Congress this year, Representative Jim Saxton (R/NJ) said on July 16 that he would

lead a movement in the next Congress to reauthorize it. Saxton, chairs the House Resources Fisheries, Wildlife and Oceans Subcommittee, and has been working to devise a compromise bill that would satisfy both moderate republicans and mainstream enviros.

Source: Greenwire Vol. 6, No. 44, 46, and 54

State Biodiversity Programs Graded

Defenders of Wildlife (DOW) issued a ranking of state-level efforts to protect biodiversity on July 15, concluding that only six states deserve a passing grade. The report placed WY, UT and ID in last place and CA in first. WY, UT and ID scored 39, 40 and 40 points, respectively, out of 100 possible; CA scored 79 points.

The analysis, prepared with the help of the NM-based Center for Wildlife Law, rated each state in ten areas, including the states' efforts to enact biodiversity-conservation policies, conduct biodiversity inventories and protect endangered species.

WY Game and Fish spokesperson Larry Kruckenberg argued that the DOW rating systems relied too heavily on whether states have enacted policies to protect biodiversity, rather than actual levels of species or ecosystem health. Kruckenberg, noting that WY boasts high levels of most native species said, "We put our stock in what we've got, as opposed to the statutes and policies we've put in place to protect them."

DOW acknowledged that its approach did not consider the states' effectiveness in implementing biodiversity laws. Group President Rodger Schlickeisen noted that some members of Congress want to turn some federal species- and

habitat-conservation programs over to the states. But "this analysis shows that most states do not earn a passing grade exercising even their current responsibilities for stewardship," he said. The group noted that WY was ranked as the least ecologically endangered state in a study it released six months ago.

UT officials objected to the DOW study on similar grounds. UT Department of Natural Resources Director Ted Stewart said his state was taking action to preserve biodiversity, pointing to several specific efforts to protect endangered species and habitats.

Only six states received passing grades from DOW, including CA, NY (66), HI (65), MD (64), IL (61) and CT (61). Scores of MICRA states (as ranked by DOW) follow: NY (66), IL (61), MO (59), MN (58), PA (57), CO (55), KY (55), MT (55), NC (55), WI (53), IN (52), NE (51), TX (50), IA (49), SD (49), TN (49), AL (48), LA (46), OK (46), GA (45), VA (45), AR (44), KS (43), ND (43), MS (42), OH (41), WV (41), WY (39).

The full report is on the World Wide Web at www.defenders.org. Another DOW report issued in December 1995 concluded at least 34 states face "extreme" or "high" risks to their natural ecology.

Source: Greenwire Vol. 6, No. 55

Fish and Wildlife Service Director Mollie Beattie Dies

Mollie Beattie, former director of the U.S. Fish and Wildlife Service (FWS), died June 27 in her home state of Vermont after a year-long battle with brain cancer. She was 49 years old.

The first woman ever to lead the FWS, Beattie had been an impassioned champion of the Endangered Species Act and the National Wildlife Refuge System.

She also played a major role in getting MICRA and state biologists involved in helping to develop new national floodplain management strategies in the aftermath of the 1993 midwest floods.

President Clinton praised her dedication to conservation. "America lost one of its great spirits with the untimely passing of Mollie Beattie," he said. "Mollie was a person who believed in the value of life and wildlife so deeply that she dedicated her many talents to preserving God's gracious earth."

Beattie had battled brain cancer for more than a year and had undergone two operations to remove malignant tumors. She returned to work in April after a four-month leave of absence, but her worsening condition prompted her resignation on June 5. Deputy Director John Rogers was appointed acting director.

House Resources Committee Chairman Don Young (R/AK), who often found himself at odds with Beattie on policy matters, offered her high praise. "While Mollie and I often differed on legislative issues, we were able to work closely together because she was a person of the utmost integrity and professionalism. I respected the fact that when she took a position she truly believed it was the right thing to do," he said. "She was a straight shooter who earned the respect of all of us in Congress."

The AK Congressional delegation introduced legislation in both houses to designate the 8-million-acre wilderness portion of the 19-million acre Arctic National Wildlife Refuge as the "Mollie Beattie Alaska Wilderness Area." President Clinton signed this legislation (S. 1899) into law on July 29th. A monument commemorating her contributions to fish, wildlife and waterfowl conservation and management

will be placed at the entrance of the wilderness area as designated by the Interior Secretary.

"I am deeply grateful to Congressman Don Young for his leadership in introducing legislation in the House of Representatives to name one of the most awe-inspiring wilderness areas in the United States after Mollie Beattie," Babbitt said. "This wilderness spans the heights of the majestic Brooks Range, towering over the seasonal pageant of migrating wildlife along the Arctic coastal plain in the Arctic National Wildlife Refuge. Alaska is a place that enchanted Mollie in her duties as director of the Fish & Wildlife Service, and it is a place where she longed to return."

In signing S. 1899, President Clinton said, "It is entirely appropriate that we honor Mollie in this way. She was a passionate defender of our 508 National Wildlife Refuges, the largest system of lands in the world dedicated to wildlife conservation. She saw them as places that must be appreciated and honored, as places where we could begin to fulfill our sacred trust as stewards of God's creation. Mollie worked tirelessly, even as her health was failing, to keep these places wild for the benefit of Americans today and for those who will follow us."

Beattie's vision, in the spirit of Aldo Leopold, was about revitalizing the FWS and fostering a new land ethic across the country. At her swearing in as director, she held a copy of Leopold's *A Sand County Almanac* under the Bible, so convinced was she of his wisdom and its application to our time.

In Beattie's words, "We can do all the regulating we want, but if we're not changing people's relationships with the land into an ethical one through other means, then we aren't going to get

anywhere. I think [Leopold] got it exactly right that government can only do so much in terms of buying land and regulating," she said. "And he's got this wonderful line about how if a thing is wrong and a thing is right In this business, if there's anything you've got to remember at all times it's right from wrong, and that is such a wonderful guideline."

Her indomitable spirit and passion for wild things and places will be sorely missed!

Source: Land Letter, Vol. 15, No. 19

Yellowstone Update

Houston-based Battle Mountain Gold on July 15 gained controlling interest in the New World Mine project planned for an area just outside Yellowstone National Park in Wyoming. Battle Mountain bought out Toronto-based Hemlo Gold Mines for \$1.5 billion, and as part of the deal acquired a 60% stake in Crown Butte Mines, Inc., which is trying to develop the controversial gold mine two miles upstream from Yellowstone.

The proposed mine has drawn strong opposition from environmental groups, including American Rivers, the Sierra Club and the Greater Yellowstone Coalition. Enviro's worry that waste rock from the mine containing high levels of sulfides could leak downstream into Yellowstone and foul the park. Battle Mountain Chair Karl Elers said the company is studying the project and will decide later whether to proceed with it. He said the company may look at alternative methods to mining at the site.

The decision on whether to let the proposed New World Mine operate outside Yellowstone National Park will be made by U.S. Department of Agriculture

(USDA) Secretary Dan Glickman, rather than by U.S. Forest Service (USFS) officials in Montana. USDA spokesman Jim Petterson said Glickman decided two or three weeks ago that he would make the final determination about the project. "Given the level of public interest, the complexity of issues and the location next to Yellowstone, it needs the attention of people higher up", Petterson said.

Gallatin National Forest Supervisor Dave Garber said that the move was a "surprise" for the USFS, but that he would send his recommendations to USDA. The USFS and the Montana Department of Environmental Quality plan to release a draft



environmental impact statement (EIS) for the mine later this summer. President Clinton imposed a two-year moratorium on new mining claims on federal land around Yellowstone in August 1995, preventing further expansion of Crown Butte's claims and said the EIS will require the mine to meet the "highest standards".

Senator Craig Thomas (R/WY) on July 23 announced his opposition to the controversial project. "There is only so long you can withhold your opinion when in fact you have a strong conviction that this might be the worst place to site a mine", Thomas said.

In a related matter, Representative Don Young (R/AK) has introduced a bill to prevent UN-affiliated

panels from designating federal lands as World Heritage sites or Biosphere Reserves without congressional approval. The bill would nullify all Biosphere Reserves unless they win congressional approval by December 31, 1999. Congress would also have to approve World Heritage sites and World Heritage "sites in danger." At the moment, the U.S. has 20 World Heritage sites, 18 of which are parks, and 47 Biosphere Reserves that encompass an area larger than Colorado, according to the Resources Committee, which Young chairs.

The World Heritage program entered the Yellowstone controversy in 1995 when its committee named Yellowstone National Park a "world heritage site in danger," saying it was threatened by the proposed New World mine. Such designations in theory commit the U.S. to protecting sites, but the Clinton administration has claimed they do not result in any binding actions.

But Young says the programs are part of a "one world-zoning enterprise" run by the administration and its UN allies. On the House floor Young said, "Men and women from Third World kleptocracies decide what goes on in American's backyards, and their elected officials have nothing to say about it." The bill's supporters say that even though the designations do not supersede U.S. law, they can "be a powerful club in the hands" of environmental interests.

Young's bill hasn't been scheduled for hearings, but enviro's "already are mounting a counteroffensive." They say the designations have no real impact on how the land is used.

In the meantime, National Park Service (NPS) officials are threatening to shut down Yellowstone National Park this fall

because of a lack of funds. The NPS is considering closing the park from Sept. 28 to Dec. 20 and from Mar. 1997 to May 1997. No other parks would be affected. Yellowstone faces a \$700,000 budget shortfall this year, according to Yellowstone spokesperson Marsha Karle.

The Interior Department is now in the process of choosing up to 50 facilities as sites for a fee experiment, which will allow parks to keep 80% of their entrance fees. Presently, parks are allowed to keep only 15% of their gate receipts, with the rest going to the U.S. Treasury.

The NPS is also reviewing the privately run lodging, restaurants and other services at Yellowstone. All contracts and permits for commercial use of Yellowstone expire between 1999 and 2002. By December 1998, park officials want to have a plan for future commercial use of the park.

Source: Greenwire Vol. 6, Nos. 53, 55, 56, and 59

Idaho Agreement Protects Streams

Idaho Governor Phil Batt (R) on June 6 signed a "historic" agreement with state and federal officials, ranchers, miners and enviros allowing Lemhi County commissioners to oversee efforts to keep rivers and streams in the county in "top ecological health."

The Lemhi County Riparian Habitat Conservation Agreement sets up a process for deciding what streams and rivers need the "most help" and makes it easier for ranchers and miners to comply with the federal Endangered Species Act (ESA). While most habitat conservation plans under the ESA have focused on individual species, this one is "unique" because it takes a regional approach and includes voluntary participation from

landowners.

Federal officials hope the plan will become a nationwide model for solving "bitter disputes" over endangered species. Mike Dombeck, acting director of the Bureau of Land Management said, "You can have all the directives you want on Mike Dombeck's desk in Washington, but it's local people working together that make it happen." The agreement "epitomizes" the local control that Senator Dirk Kempthorne (R/ID) is pushing in his rewrite of the ESA

Source: Greenwire Vol. 6, No. 28

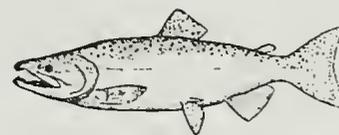
More Natural Salmon River Management

Saving northwest salmon will require "sometimes-costly" changes to hydropower dams to return the Columbia River in Washington to a more natural state, Richard Williams, chairman of the Independent Scientific Advisory Board, said on June 11.

The remarks came in a report to Congress from the 11-member independent scientific panel, which was formed by the Northwest Power Planning Council (NPPC) and the National Marine Fisheries Service (NMFS) to prepare a report on how to save Northwest salmon.

Williams told the Senate Environment and Public Works subcommittee that "if you want more fish, you are going to have to manage the river more like a river." "Restoration of Columbia River salmon will require changes

that move the regulated river system toward a more natural ... set of conditions," including reserves to protect intact habitats that contain "key" populations, he said.

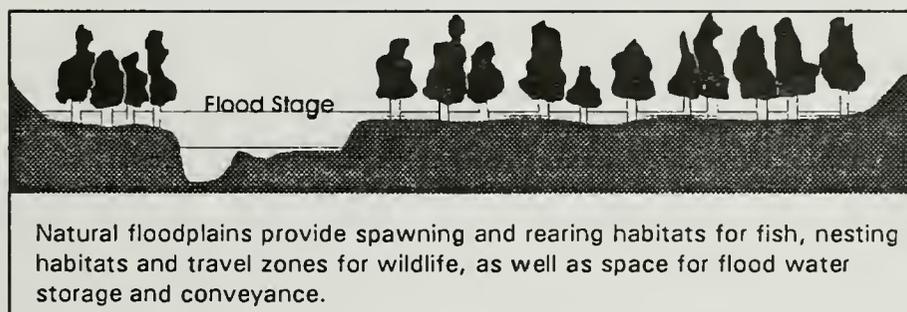


"chinook salmon"

Preliminary findings presented to the NPPC earlier this spring said some reservoir drawdowns and periodic scouring of the river bank with flood water are "crucial" to restoring the Columbia's dwindling salmon runs.

In an effort to force the feds to follow their own salmon restoration plan for both the Snake and Columbia rivers, a coalition of 10 enviro and fishing groups on June 12 filed a motion in a federal court for a preliminary injunction against the government.

The motion accuses the NMFS, the U.S. Army Corps of Engineers (COE) and the Bureau of Reclamation (BOR) of failing to implement guidelines outlined in a federal plan drafted in March 1994 to help salmon migrate to the Pacific Ocean. Specifically, the plaintiffs claim the government has failed to maintain an adequate water flow in the Snake and Columbia rivers. Dan Rohlf, an attorney for the groups, said the federal plan is deeply flawed but should be implemented as an initial step to



save the salmon. But William Stelle of the NMFS said the agency is doing all it can to restore salmon populations and called the lawsuit a distraction to the process.

U.S. District Judge Malcolm Marsh, who has deliberated on salmon cases in the past, "will probably" rule on the motion. Rohlf said he hopes for a decision by July 1996.

Faced with "tight" Pacific Ocean salmon seasons to protect dwindling salmon runs, fewer fishers are buying licenses, forcing the OR Dept. of Fish and Wildlife (ODFW) to cut hatcheries, biologists and fish and game officers. Going into 1997-99, the agency plans a 4% cut from its current \$175 million two-year budget. The cuts concern some enviros and fishing groups. Don Watson of Northwest Steelheaders says the ODFW is a "key player" in implementing OR Governor John Kitzhaber's (D) salmon recovery program.

In California in an effort to rescue winter chinook salmon runs from extinction in the Sacramento River, the U.S. Bureau of Reclamation (BOR) is constructing the "largest man-made mechanism ever dedicated to fish preservation" at the Shasta Dam.

The \$80 million Temperature Control Device will enable dam operators to provide a reliable flow of cold water to 55 miles of the Sacramento River during the summer, when the salmon -- listed as protected species under the CA and federal endangered species acts -- are at a "critical" growth stage. The system, built on the reservoir side of the dam, will use steel shutters to draw water from different levels of Shasta Lake, including deep cold water salmon need to survive. The system is "tall as the Statue of Liberty, wide as a football field" and weighs 8,500 tons.

For the past nine years, BOR has been forced to stop power generation during salmon spawning and rearing months to run cold water through outlet pipes. The new system will enable BOR to continue generating electric power while it helps young salmon.

Project construction, which began in January 1995, is expected to be completed by December 1996.

Source: Greenwire Vol. 6, Nos. 24, 31 and 33

Floodplain Report Released

A new report on public policies for floodplains, "On Borrowed Land," was recently released by the Lincoln Institute for Land Policy. The report, which is authored by Scott Faber of American Rivers, considers the ecological, economic and legal issues of land use in floodplains. It offers numerous case studies of local responses to the 1993 Midwest floods, as well as other river basin management programs around the country, while suggesting new ways to make floodplains safe for development.

For copies send \$14.00 to the Lincoln Institute, 113 Brattle Street, Cambridge, MA 02138-3400, (800) 526-3873.

South Platte River Water Decision

A federal judge in Denver on June 5 threw out a 1991 lawsuit filed by eight suburban water providers to revive the Two Forks water project on the South Platte River. The Denver Water Board and other water providers had planned to dam the South Platte and create a 33-year water supply for the Denver metropolitan area, but the USEPA vetoed the "multimillion-dollar" plan in 1990.

The lawsuit accused the EPA of

wrongly using federal clean-water laws to protect recreational and scenic uses of the South Platte. But U.S. District Judge Richard Matsch said the water providers lacked the legal standing to challenge the EPA veto. In the ruling, Matsch said the Two Forks controversy "centered on a very difficult policy choice between assured water resources for continued urban development and preservation of a native environment." Matsch said his ruling only indicates that the EPA's decision did not violate any rules.

Wally Welton, president of Consolidated Mutual Water Co., one of the water providers in the suit, said the verdict won't affect Denver's current water supply. Welton also predicted that the project won't "completely die," but it might take a "three-year drought to get people to recognize the need for it."

Dan Luecke of the Environmental Defense Fund, which has opposed the Two Forks plan for about 15 years, was pleased with the ruling.

Source: Greenwire Vol. 6, No. 29

NC-TN Water Quality Dispute

TN and NC enviros and TN officials have voiced opposition to a pending NC permit that would allow Champion International Corporation to discharge a "coffee-brown" effluent into the Pigeon River, which runs through both states. But enviros say Champion hasn't done enough to clean the river. Ginny Lindsey of the Clean Water Fund of NC said, "We look at water permits all across the state. The polluters wield tremendous influence. They basically write their own permits."

Champion has spent \$207 million on river cleanup over the past several years, and Champion's Tucker Hill says the

permit makes it cut back on organic material dumped in the river and "reduces the amount of color we can put in the river by 23%."

Enviros want the permit to include full treatment of organic waste from the plant, daily monitoring of the river's color and standards to deal with dioxin that has settled in the sediment of NC's nearby Waterville Lake.

Source: Vol. 6, No. 26

NC Ag Wastes

A cattle farm owned by Senator Lauch Faircloth (R/NC) on June 10 was blamed for a major fish kill along a 20-mile stretch of the Black River, "one of the state's most pristine waterways."

NC regulators said thousands of fish died after about 250,000 gallons of partially liquified sweet potato scraps leaked into a creek from a feed bin at a Faircloth Farms facility. "The decaying scraps depleted oxygen miles downstream in the Black River," which two years ago was designated by the state as an "Outstanding Resource Water."

Faircloth apologized for the accident and acknowledged his farm's guilt, saying a worker forgot to shut a valve. "But state officials noted that the farm's managers had been warned during an inspection last year about the potential for just such an accident." Faircloth could face a state fine of up to \$10,000.

Faircloth, "who a year ago was cool to the idea of increasing regulations for hog farmers," said on June 10th that he now believes NC is "moving in the right direction" in considering permits and mandatory inspections for large farms.

Source: Greenwire Vol. 6, No. 31

Ohio Waste Permits Violated

More than 40% of the major industrial and municipal wastewater treatment plants in OH violated their pollution discharge permits for waterways, according to the General Accounting Office (GAO).

But the Ohio EPA disputes the GAO finding, claiming the GAO used incomplete and erroneous data in its national study. The OH EPA says only about 10% of Ohio's 294 major industrial and municipal treatment plants exceed permitted pollution limits.

The GAO study has prompted OH-based Rivers Unlimited to lobby state regulators to drop support of a proposed "anti-degradation" law that would allow increased pollution discharges into most state waterways.

"A Franklin County Common Pleas judge is expected to rule soon on whether to allow the state to implement" the law, which is based on the assumption that rivers can absorb more pollution without endangering water quality. The law would allow pollution increases without new permits, public review or public comment.

Source: Greenwire Vol. 6, No. 60

AR Logging Injunction

The Arkansas Sierra Club on June 18 filed for a preliminary court injunction with the U.S. District Court in Little Rock, AR to halt logging now under way near the headwaters of the Buffalo National River in the Ozark National Forest.

The Arkansas Sierra Club and other enviros in October 1995 sued the U.S. Forest Service, claiming the agency missed a deadline for filing a management plan for the river. Tom McKinney, president of the Arkansas Sierra

Club, said the logging is eroding the river's watershed and is killing wildlife.

In April 1996, U.S. District Judge Bill Wilson ruled that logging is harming the forest's ecosystem, but refused to grant an injunction to stop the cutting "until the case can go to trial." The lawsuit is expected to go to trial late this year. Since Wilson's decision, environmentalists have been staging demonstrations against the logging.

Source: Greenwire Vol. 6, No. 38

Federal Judge Reverses Some Interior Grazing Rules

A federal judge on June 12 rejected some of the Interior Department's (DOI) 1995 rangeland reforms, asserting that they would "wreak havoc" on the ranching industry and go beyond the law. The rules were issued in August 1995 and were supposed to go into effect in March 1996 but were held in abeyance while five groups representing livestock interests sued to block them.



In his ruling, U.S. District Judge Clarence Brimmer barred a provision that would have weakened ranchers' rights to renew their federal grazing leases. Brimmer said the term "grazing preference" was included in the 1935 Taylor Act to give ranchers and their creditors some certainty about future operations. The DOI reforms would have emphasized "permitted" uses of lands.

Also rejected were regs that would have given the U.S. government title to future range

improvements, allowed conservation-use permits, and made it easier for nonranchers to obtain permits. But Brimmer upheld a proviso allowing DOI to determine whether permittees have met the stated terms and conditions. And he said the agency had followed proper procedure in issuing the regulations.

The groups challenging the regulations were the National Cattlemen's Association, Public Lands Council, American Farm Bureau Federation, American Sheep Industry Association and the Association of National Grasslands.

Representative Richard Pombo (R/CA) said GOPers are looking for other legislative vehicles to carry committee-passed grazing reforms in case an effort to attach them to omnibus parks legislation fails. The grazing bill would bar all of DOI's reforms. Adding it to the parks bill, currently in a House-Senate conference, "is seen as a way of getting around" an administration veto threat. But Interior Secretary Babbitt has told senators he would recommend a veto of the parks bill if it contains any measure unacceptable to the administration.

Source: Greenwire Vol. 6, No. 35

Electronic Collars for Cattle

Cowbells at a Cumberland, MD dairy farm have been replaced with "shock collars" to prevent its 100 bovine inhabitants from wandering near the eroding banks of a Potomac River and Chesapeake Bay tributary.

Each cow wears a loose-fitting leather choker with a pink plastic box that "jolts" the animal if it wanders near Pea Vine Run. The collars are part of a \$120,000 taxpayer-funded project to reduce watershed pollution in the area, where periodic flooding makes

conventional fences impractical.

The collars, which contain batteries that must be replaced every six to 12 months, beep as the cow approaches a wire buried along the banks. The beeps and florescent orange flags planted above the wire are supposed to help the cows "learn their limits." If a cow goes beyond the boundary, it gets a shock.

The collar manufacturer -- Invisible Fence Co. of Malvern, PA -- said the voltage is less than the 2,000 or more delivered by most electric fencing. Still, "they zap pretty good," said Allegheny Soil Conservation District Manager Craig Hartsock, who tried a collar on himself.

Source: Greenwire Vol. 6, No. 57

Techniques to Establish Streambank Vegetative Plantings

Several techniques can help establish vegetative plantings on streambanks and prevent erosion. Some examples follow:

- Live staking: Live, rootable vegetative cuttings are inserted and tamped into the ground perpendicular to the slope. Most willow species root rapidly.
- Live fascine: Long bundles of live branch cuttings are placed in shallow trenches dug on the contour of the slope. They are held by stout dead stakes driven through the fascines and stout live stakes inserted directly below the bundles. The fascines are then almost covered by moist earth and mulch is placed between rows.
- Brushlayering: Live branch cuttings are placed on small benches two to three feet wide, excavated at a slight tilt into the slope. Brushlayered branches serve as reinforcing units, retarding runoff and reducing

surface erosion, aiding seed germination and natural regeneration.

- Branchpacking: Alternating layers of live branch cuttings and compacted backfill repair small localized slumps, holes in slopes, and gullies.

- Live cribwall: A hollow, box-like interlocking arrangement of untreated log or timber members is filled with suitable backfill material and layers of live branch cuttings. The cuttings root inside the crib structure and extend into the slope, gradually taking over the structural functions of the wood members.

- Vegetated rock gabions: Rectangular containers of triple twisted, hexagonal steel mesh are placed in position, wired to adjoining gabions, filled with stones; then folded shut and wired at the ends and sides. Live branches placed on each layer between the rock-filled baskets will take root inside the gabion baskets and in the soil behind the structures, consolidating the structure and, in time, binding it to the slope.

- Vegetated rock wall: A combination of rock and live branch cuttings that differ from conventional retaining structures in that they are placed against relatively undisturbed earth and are not intended to resist large lateral earth pressures.

- Joint planting: Live cuttings are tamped into soil between open spaces in rocks that have been previously placed on a slope.

Source: USDA Natural Resources Conservation Service Engineering Field Handbook (210-EFH, 10/92), Chapter 18. "Soil Bioengineering for Upland Slope Protection and Erosion Reduction."

Watershed Tools Directory

EPA's new Watershed Tools Directory is a useful collection of 250 watershed tool summaries canvassed from EPA headquarters and regions, other federal agencies, states, and watershed organizations. The watershed tools described in the document include those for conducting modeling and assessments. Each summary includes a description of the tool, contact names and phone numbers, and information about intended uses.

The Directory can be accessed on-line at <http://www.epa.gov/OW/watershed/tools>. A form is provided for adding your own watershed management tool to the directory. Updates will be completed as new tools are received.

Contact: Chris Laabs, Watershed Branch (4503F), U.S. EPA, 401 M St., SW, Washington, DC 20460, (202) 260-7030. A copy of Watershed Tools Directory (841-B-95-005) can also be obtained from NCEPI, 11029 Kenwood Road, Building 5, Cincinnati, OH 45242, (513) 489-8695.

Urban Watersheds Planning Tools - New Handbook Series

The first three handbooks in a new Environmental Land Planning Series funded by an EPA Assessment and Watershed Protection Division grant to the Metropolitan Washington Council of Governments provide guidelines for different aspects of urban stream protection:

- **Site Planning for Urban Stream Protection:** Authored by Tom Schueler of the Center for Watershed Protection, this handbook presents a watershed approach to site planning. It examines nonstructural approaches to reducing pollutant loads and protecting aquatic

resources. Site Planning offers insight into the importance of imperviousness, watershed-based zoning, concentration of development, and other land planning topics (232 pages, \$35).

- **Clearing and Grading Strategies for Urban Watersheds:** Authored by Kathleen A. Corish of the



Metropolitan Washington Council of Governments, this handbook examines the water quality impacts of clearing and grading in urban watersheds. Its primary focus is on minimizing sediment loading to urban streams (107 pages, \$25).

- **Riparian Buffer Strategies for Urban Watersheds:** Authored by Lorraine M. Hersonlones, Maureen Heraty, and Brian Jordan of the Metropolitan Washington Council of Governments, this handbook provides guidelines for using riparian buffers to mitigate stream impacts in urban areas. It investigates pollutant removal potential and prevention techniques associated with chemical, biological, and physical processes in buffers and offers design recommendations (112 pages, \$20).

Two additional handbooks in the Environmental Land Planning Series are scheduled for release later this year: Cluster Development Strategies for Urban Watersheds, and Residential Street Strategies for Urban Watersheds.

Copies of the Environmental Land Planning Series handbooks are available from the Metropolitan Washington Council of Governments, 777 North Capitol Street, NE, Suite 300, Washington, DC 20002-4226, (202) 962-3200, Fax: (202) 962-3201. Site Planning for Urban Stream Protection, the first handbook in the series, is also available from the Center for Watershed Protection (\$35), S737 Colesville Road, Suite 300, Silver Spring, MD 20910, (301) 589-1890, Fax: (301) 589-8745.

"Partners for Wildlife" Recognized by SER

An innovative federal program that links private landowners who want to restore wildlife habitat on their lands with expertise and funding from the U.S. Fish and Wildlife Service (FWS) has received the Society for Ecological Restoration's (SER) Service Award for 1996.

Almost 14,000 non-Federal landowners have worked with the FWS *Partners for Wildlife* program to restore a broad range of wildlife habitats since it began in 1987. SER grants its Service Award to acknowledge individuals and organizations that have dedicated their time and skills to advance ecological restoration. The award was presented at SER's annual conference at Rutgers, The State University of New Jersey.

"*Partners for Wildlife* is a win-win approach to habitat conservation for the U.S. Fish and Wildlife Service and private landowners," John Rogers, the agency's acting director, said. "Participants in this voluntary program receive financial backing for restoration on their lands that they couldn't afford on their own. They also receive technical assistance that can include design consultations, advice on soil and water quality improvement, and grazing

management."

Partners for Wildlife restoration sites must be maintained for a minimum of 10 years. During that period, project participants can continue using their land and receiving the economic benefits from their habitat restoration efforts. "Not surprisingly, *Partners for Wildlife* is one of our most popular programs," Rogers said. "We have many more people interested in working with the Service than we have funds to provide."

According to Rogers, program priorities emphasize projects that will protect habitat for species that are or may be placed on the Federal endangered species list. They also target habitat for migratory birds and anadromous fish, including salmon.

"By protecting the habitat of plants and animals before it is too late, we hope to prevent the need to list many species as endangered or threatened," Rogers said. Last year, 85% of the partnership projects we set up in the western United States improved habitat for listed or candidate species."

Since its inception, *Partners for Wildlife* has provided funding to restore 310,000 acres of wetlands, including northeastern bogs, southeastern bottomland hardwoods, and southwestern cienegas; 40,000 acres of prairie grassland; 600 miles of streamside wildlife habitat; and 50 miles of instream wildlife habitat.

"Opportunities for creative partnerships are as diverse as the different habitats we've restored," said Steve Forsythe, chief of the Service's Division of Habitat Conservation. "Restoration techniques include everything from letting Mother Nature do all the work to complex stream restoration projects that involve the latest bioengineering techniques."

Partnership projects are often the result of cooperative efforts with other Federal, state, and local government agencies as well as private organizations, schools, and businesses. These groups often provide additional financial and technical resources toward restoration. "Frequently community groups, including conservation districts, Scout troops, students, and service organizations, help provide labor. This cooperative element helps teach people about the importance of restoring fish and wildlife habitat. What's more, participating is often just plain fun," Forsythe said.

For additional information about the *Partners for Wildlife* program, contact U.S. Fish and Wildlife Service, Division of Habitat Conservation, Branch of Habitat Restoration, 4401 N. Fairfax Drive, Room 2161, Arlington, VA 22203.

Ecological Sewage Treatment

Marine biologist John Todd has designed an ecological system that "helps nature solve manmade waste problems in an attractive environment." Todd's "Living Machines" employ "complementary communities" of trees, plants, snails, fish, bacteria, algae and microorganisms to feed on waste, "duplicating in an enhanced form the way natural marshes and ponds work."

The Living Machines, produced by Todd's Falmouth, MA-based Ocean Arks International, treat everything from raw sewage to high-strength organic waste streams like those produced by the food-processing industry. About 20 of the systems are operating now in several US states, the UK and Australia. The technology can treat waste to "advanced waste-water standards." However, all the current industrial applications involve recycling the treated

water for non-drinking uses at the facilities where the system is operating.

Frank Moir of the consulting firm Proctor & Redfern, which installed a Living Machine at the Ontario Science Center, said the technology could be useful in unsewered rural areas that have overloaded septic-tank systems or in communities with sewage-treatment systems that need to be expanded.

Source: Greenwire Vol. 6, No. 25

Green Economics

The W.S. JOURNAL reports "more economists are warming" to the ideas of University of Maryland's Herman Daly, a former World Bank economist who contends "the world economy -- and global consumption -- must eventually stop growing if nature is to survive."

According to conventional economics, resource scarcity "doesn't matter in the long run" because it spurs conservation or substitution of less-scarce materials. But Daly argues that "in practice, this doesn't always happen because some resources, such as air, aren't priced at all" and others, like oil, are priced in ways that understate the possibility of shortage.

To avert economic decline, Daly



"ecological economics"

says nonrenewable resources "should only be depleted at a rate equal to the creation of renewable substitutes." He also calls for shifting taxes away from income toward resource use.

Daly's theories "have inspired an academic movement" called ecological economics. But they "provoke skepticism from some eminent economists." Nobel laureate Robert Solow of MIT says he's "deeply suspicious" of Daly, "whom he considers an alarmist." The MIT Press rejected Daly's upcoming book even though it had commissioned it. An editor says an outside panel advised against publishing the book; Daly says that smacks of censorship. The book will be published in August by Beacon Press.

Source: Greenwire Vol. 6, No. 39

Corporate Philanthropy

The Nature Conservancy received \$1.82 million in corporate donations in 1993, the latest year for which data is available, making the group the second highest recipient of funding from Forbes 250 companies. Also in the top 10 among all groups getting donations from Forbes 250 firms was the World Wildlife Fund/Conservation Foundation, which received \$1.2 million.

A 1992 Conservation Fund survey found that an average of 4% of enviro groups' revenues came from business interests. And many environmental groups are actively seeking out more corporate donations, according to Terrence Scanlon of the Capital Research Center, a conservative group that tracks foundation giving.

These groups include: Conservation International, the Environmental Defense Fund, the Izaak Walton League of America, the National Audubon Society, National Wildlife Federation, Sierra

Club, Wilderness Society, World Resources Institute and the World Wildlife Fund.

Earth Share-Environmental Federation of America was formed in 1989 to raise money for environmental groups by collecting donations through companies' employee payroll deduction plans.

During its first five years, Earth Share collected nearly \$30 million, according to Jonathan Adler's recently released book "Environmentalism at the Crossroads." Participating companies include: Levi Strauss & Co., Mattel Inc., Mobil Corp., the New York Times Co. and Sears, Roebuck & Co.

Source: Greenwire Vol. 6, No. 31

WI/MI Property Rights Decisions

In a decision lauded by environmentalists, the Wisconsin State Supreme Court on June 3 ruled that Waukesha, WI has the right to rezone land for conservation purposes without compensating the landowner.

The court overturned a lower court ruling that favored Alfred Zealy, who contended that the city rezoned 8.2 acres of his 10.2 acre parcel for wetland protection in 1985 without just compensation. Zealy claimed the fair market value of the 8.2 acres was \$200,000 if developed but only \$4,000 as wetland; the city assessed the value of the total 10.2 acre parcel at \$81,000 before rezoning, \$57,000 after.

In backing Zealy, the state's 2nd District Court of Appeals said a government would have to "compensate the landowner for any resulting loss" if a compensable takings of land was found to exist. But the WI Supreme Court ruled the rezoning didn't deprive Zealy of all or

substantially all of the use of his land, so he wasn't entitled to payment.

The National Audubon Society, which joined other enviro groups in filing amicus briefs in support of Waukesha, said the case was important because the state Supreme Court based its decision on the value change of the whole 10.2 acre parcel, not just the value change in the 8.2-acre rezoned tract.

Audubon General Counsel John Echeverria said the court's decision undermined the view reflected in Sen. Bob Dole's (R/KS) property bill -- that takings claims should focus narrowly on the "affected portion" rather than the "parcel as a whole." According to Echeverria, "The court's decision makes it crystal clear that [Dole's bill] would be a radical departure from settled constitutional law".

In the meantime in Michigan a Court of Appeals recently ruled that the state Department of Natural Resources (DNR) must pay \$5.2 million to several landowners for denying them the right to build a nightclub and restaurant on land protected under the state's Wetlands Act.

The court agreed with a 1993 decision by the state Court of Claims and found that the DNR action represented "an unconstitutional taking." The court said MI must pay the property owners what the land would have been worth if the government hadn't taken it.

The decision was the first time the appeals court ruled under the Wetlands Act that the state government took property without just compensation, according to Michigan Assistant Attorney General Kevin Smith.

Source: Greenwire Vol. 6, No. 27 and 38

Local Property Rights Setback

In a "major setback" for sagebrush rebels claiming local authority over U.S. lands, a federal court in Nevada has ruled that only the federal government has a clear title to public lands.

The decision rejected a claim by officials in Nye County, NV, that the county had authority to control U.S. Forest Service lands within its borders. The ruling "knocks out the legal basis" for a number of similar ordinances that have been passed in nearly 35 counties across the West. Such measures "have been used to disregard federal law and in some cases, intimidate federal employees." The judge rebuked nearly every one of the issues brought by Nye County's lawyers.

Nye is one of dozens of counties that have challenged Federal control of local lands in recent years. Nye County Commissioner Dick Carver had authorized the bulldozing of a closed road in the Toiyabe National Forest and had threatened to prosecute federal officials for carrying out federal law as part of his campaign for county sovereignty.

Hailing the decision, Attorney General Janet Reno said public lands are "owned by all Americans, to be managed by the United States. That's the rule of law. The court made it clear that Nye and other counties are no exception to this rule".

Some Nevada ranchers have however vowed to resist federal control of public lands and have promised to appeal the ruling. Several county movement leaders said "they will now redouble their efforts" to get Congress to limit regulators' power. Nye County Commissioner Dick Carver said, "We got what we wanted. We had to take an aggressive stance in order to get our seat at the table ... and now, they are listening to us".

In the meantime, farmers have paid back less than \$1 billion out of \$7.1 billion they owe the feds for Western water projects, according to a General Accounting Office report released in late July. Overall, the GAO study shows the federal government has spent \$21.8 billion on water projects in 17 Western states. Farmers were supposed to reimburse the government less than half the total amount, but through September 1994, farmers have repaid only \$945 million, or about 13%, in subsidized water rates.

Representative George Miller (D/CA), the ranking minority member on the House Resources Committee and a "leader" in efforts to restructure water distribution in the West, will use the study to push a bill that would require farmers to repay the full cost of new irrigation projects. But Jason Peltier, manager of the Central Valley Project Water Association, said cutting federal subsidies "in many, many cases means the water would be unaffordable."

Source: Greenwire Vol. 5, No. 213, and 214, and Vol. 6, No. 62

Wise Use Dealt Blow By Local Opposition

"Just when the wise use movement seemed to be at full flood" thanks to strong congressional GOP support of its agenda, the crusade seems to have "hit a wall" across the West, where "little brush fires of opposition" have started to flare



"'wise use' vs common sense"

in recent months.

Wise use advocates tout local control "and handcuffing the regulators." But in some cases the locals don't seem to share the wise use agenda and "are not playing by the script."

One such example is a group of loggers and enviros who are meeting in an ID coffee house to find a way to reintroduce the grizzly. Dan Johnson, who represents loggers said, "We aren't trying to fit into someone's political scheme. Our goal is grizzly bear recovery, but included in that is a way to keep our jobs." Such talk has "infuriated" Representative Helen Chenoweth (R/ID), who has vowed to "quash" the efforts of the loggers, whom she has likened to prey lying down with a predator before a kill.

Other GOP members of Congress have found local adversaries. GOP supporters of wolf reintroduction in Yellowstone last year worked with Democrats to raise \$40,000 to keep the program on track after Senator Conrad Burns (R/MT) cut its funding. And neighbors of Representative Rick Pombo (R/CA), one of the main forces behind GOP moves to rewrite the Endangered Species Act, are opposing his efforts.

Merlin McColm of Elko, NV, a self-described "Gingrich Republican," who last year went to court to force ranchers who use U.S. Forest Service lands to meet certain enviro standards said, "[The] party wishes I would go away. But there are a lot of people out there just like me, and we aren't going away."

Some observers say GOPers misread the sentiments of rural Westerners. Phil Brick of WA-based Whitman College in 1994 conducted a poll of 1,250 voters in the "wise use stronghold" of Hell's Canyon, OR, and found that 66% said land development should be restricted

ven if it harms individual property owners. Such results suggest that Westerners "favor" a mainstream enviro agenda even if they "despise" the liberals "who spouse it."

As a result of these and similar polls, House Speaker Newt Gingrich (R/GA) has taken increasingly greener stances in recent days, angering wise use leaders in the process. But wise use "guru" Ron Arnold remains optimistic that his movement will eventually triumph, saying it may take three full election cycles to dismantle major enviro laws.

Source: Greenwire Vol. 6, No. 46

Young Americans Rank Environment Among Top Problems

Forty-seven percent of Americans aged 18 to 29 consider environmental problems to be among the "most important problems" facing the U.S., according to a Newsweek poll released on June 22. Another

44% say the environment is "important, but not a most important problem." Only 9% say the environment is "not too important."

Princeton Survey Research Associates interviewed 380 Americans aged 18 to 29 from May 1-5. Margin of error is +/-6%. A comparison between this poll and a January 1996 Knight-Ridder poll of registered voters of all ages indicates that the general public is less concerned about environmental problems than young adults. Only 36% of the general public rank the environment among the most important problems, and 16% consider it "not too important".

Source: Greenwire Vol. 6, No. 39

Religious Environmental Activism

Increased activism may help turn the tide against pollution and environmental destruction, world religious leaders said on July 1 as

they opened a week-long conference in Turkey.

Ecumenical Patriarch Bartholomew I, the leader of Orthodox Christians, urged his Anglican, Roman Catholic, Methodist, Jewish and Muslim colleagues to work together to preserve the environment. Bartholomew praised young people for leading the fight for the environment and compared cooperation on "ecological realities" to "the sanctity of prayer." Pope John Paul II said the conference could build "understanding of the wonders of God's creation and of our responsibility to care for [His] work."

President Clinton, in a message to the religious leaders, urged them to "move beyond mere awareness" of environmental problems and toward "active and extensive efforts" to address them. The conference was also cosponsored by Prince Philip of the United Kingdom.

Source: Greenwire Vol. 6, No. 47

Meetings of Interest

August 13-16: The DELTA: Connecting Points of View for Sustainable Natural Resources. Cook Convention Center, Memphis, TN. Contact: National Association of Conservation Districts, Delta Conference, 509 Capitol Court, NE, Washington, DC 20002, (202) 547-NACD.

August 15-19: International Conference on Wetland Systems for Water Pollution Control, Vienna, Austria. Contact: ICWS, Vienna 1996, Attn: Mrs. Eva Brauman, Nussdorfer Laende 11, A-1190, Vienna Austria.

August 25-29: 126th Annual Meeting of the American Fisheries

Society, Dearborn, MI. Contact: Deborah Feldpausch, MI Dept. of Natural Resources, Fisheries Division, P.O. Box 30446, Lansing, MI 48909, (517) 373-1280, FAX (517) 373-0381.

September 22-28: INTECOL V International Wetlands Conference, University of Western Australia, Perth. Contact: UWA Extension Conference and Seminar Management, University of Western Australia, Nedlands, Perth 6907; 619 380-2433; FAX 619 380-1066; e-mail: uwext ~ uniwa.uwa.edu.au

September 22-25: Yesterday's Investment, Tomorrow's

Protection: A Look at the Condition of Small Watershed Improvements in the U.S., Oklahoma City, OK. Contact: National Watershed Coalition, 9150 W. Jewell Avenue, Suite 102, Lakewood, CO 80232. (303) 988-1810.

September 22-26: 32nd Annual Conference and Symposium on GIS & Water Resources, Fort Lauderdale, FL. Sponsored by the American Water Resources Association and others. Contact: American Water Resources Association, 950 Herndon Parkway, Suite 300, Herndon, VA 20170-5531. (703) 904-1225. Fax: (703) 904-1228. E-Mail:

October 22-24: National NPS Pollution Information/Education Conference, Chicago, IL.

Sponsored by Illinois Environmental Protection Agency, in cooperation with USEPA and the Northeastern Illinois Planning Commission. The conference will focus on providing examples of successful outreach programs and materials dealing with nonpoint source pollution. Contact Christy Trutter, Illinois EPA, Bureau of Water, 2200 Churchill Road, P.O. Box 19276, Springfield, IL 62794-9276. (217) 782-3362. Fax: (217) 785-1225.

October 23-26: 23rd Annual Natural Areas Conference and 15th North American Prairie Conference, Pheasant Run Resort

and Conference Center, St. Charles, IL. Contact Karl Becker, (217) 785-8774.

November 15-17: Urban Streams Conference, Arcata, CA.

Sponsored by the city of Arcata, the conference will include sessions on treating streams in urban areas and working with the natural properties of streams. Contact Susan Schramm, Conference Coordinator, Environmental Services Department, City of Arcata, 736 F Street, Arcata, CA 95521. (707) 822-8184. E-Mail: creeksconf@aol.com.

January 14-16, 1997: 1st Annual Conference on Natural Resources of the Missouri River Basin. A multi-disciplinary conference is being established to provide a

forum for information exchange between researchers and resource managers on issues related to the stewardship, ecology, and management of the Missouri River mainstem, floodplain and tributaries. Contact: Mark Laustrup, USGS-BRD, Midwest Science Center, Route 2, 4200 New Haven Road Columbia, MO 65201, (573) 875-5399 X1703, E-mail: mlastrup@msc.nbs.gov

July 1997, III International Symposium on Sturgeon, ENEL Training Centre, Piacenza, Italy. Contact: Dr. P. Bronzi, ENEL spa - CRAM via Montfalcone, 15 - 20132 Milan (Italy) phone: + 39-2 - 72243412 or 3452, FAX: + 39 - 2 - 72243496, E-mail: bronzi@cram.enel.it.

Congressional Action Pertinent to the Mississippi River Basin

Agriculture

S. 1822 (Harkin, D/IA) to permit the Agriculture Secretary to waive the prohibition on the termination of conservation reserve contracts for certain lands.

H.R. 3544 (Bryant, R/TN) to allow for immediate haying and grazing on certain lands enrolled in the Conservation Reserve Program in Tennessee.

Forests

S. 1590 (Murray, D/WA) "Public Participation in Timber Salvage Act of 1996" to repeal the emergency timber salvage sale program and for other purposes.

S. 1595 (Bradley, D/NJ) "Restoration of Natural Resources Laws on the Public Lands Act of 1996" to repeal the emergency timber salvage sale program.

S. 1647 (Pressler, R/SD) amends the Forest Land Policy and

Management Act to provide that forest management activities shall be subject to initial judicial review only in the United States district court for the district in which the affected land is located.

H.R. 1089 (Cremeans, R/OH) ensures that acquisition of lands for inclusion in the National Forest System does not result in a loss of tax revenue to the affected county.

H.R. 1439 (Metcalfe, R/WA) amends the National Forest Management Act of 1976 to require that the Forest Service timber sale program be financed only by receipts from the sale of timber under the program.

Government Affairs

S. 1001 (Glenn, D/OH) reforms the regulatory process, providing for cost-benefit analysis risk assessment of major rules, and calls for a review of existing rules.

H.R. 2500, (Michael Oxley R/OH) amends the Comprehensive Environmental Response, Compensation, and Liability Act of 1980.

H.R. 2827 (Saxton R/NJ) consolidates and improves governmental environmental research by organizing a National Institute for the Environment.

H.R. 3048 (Edwings, R/IL), "Regulatory Flexibility Amendments Act of 1996."

H.R. 3093 (Franks, R/CT) amends the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 to establish a brownfield cleanup loan program.

H.R. 3105 (Wolf, R/VA) amends the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 to exempt certain state and local redevelopment boards or commissions, and fresh start

users of facilities purchased from those boards or commissions, from the liability under that act.

H.R. 3214 (Franks, R/CT), to amend the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 to establish a brownfield cleanup loan program.

Parks

Senate Energy Committee on June 19 approved **S. 1703** to provide the National Park Foundation a greater ability to raise funds from individuals, foundations and corporations to help repair and preserve national parks.

H.R. 1846 (Richardson, D/NM) establishes the Yellowstone Headwaters National Recreation Area within Montana's Gallatin and Custer National Forests

H.R. 3317 (Williams D/MT) to establish the Yellowstone River Valley Heritage Area in Montana, North Dakota, and Wyoming.

H.R. 3318 (Williams, D/MT) to establish the Southwest Montana Heritage and Recreation Area in the state of Montana.

Public Lands

S. 93 (Hatfield, R/OR) amends the Federal Land Policy and Management Act providing for ecosystem management on public lands. Referred January 4 to Committee on Energy and Natural Resources.

S. 518 (Thomas, R/WY) limits federal acquisitions in states where 25% or more of the land is owned by the United States.

S. 1844 (Murkowski, R/AK) to amend the Land and Water Conservation Fund Act to direct a study of the opportunities for enhanced water based recreation and for other purposes.

Senate Energy Committee on June 19 approved **S. H.R. 238** to provide for the protection of wild horses in the Ozark National Scenic Riverways, Missouri, and prevent the removal of such horses.

Senate Government Affairs Committee on June 27 held a hearing on proposals to improve the management and organization of federal natural resources and environmental functions

H.R. 2107 (Hansen, R/UT) amends the Land and Water Conservation Fund Act of 1965 to improve the quality of visitor services provided by federal land management agencies through an incentive based recreation fee program.

H.R. 3198 (Calvert, R/CA) to reauthorize and amend the National Geologic Mapping Act of 1992, and for other purposes.

H.R. 3619 (Campbell, R/CA) to provide off-budget treatment for the Land and Water Conservation Fund.

H.R. 3752 (Young, R/AK) a bill to preserve the sovereignty of the United States over public lands and acquired lands owned by the United States, and to preserve state sovereignty and private property rights in non-federal lands surrounding those public lands and acquired lands

Refuges

S. 1013 (Conrad, D/ND) authorizes the Interior Secretary to acquire land for the purpose of exchange for privately held land for use as wildlife and wetland protection areas.

H.R. 1675 (Young, R/AK) improves management and establishes purposes of the National Wildlife Refuge System. House on April 24 passed by a 287-138 vote.

H.R. 2679 (Barrett, R/NE) revises the boundaries of the North Platte National Wildlife Refuge

Executive Order 12996 issued by President Clinton on March 25 outlining the mission and purposes of the National Wildlife Refuge System (3/28 Federal Register, p. 13657).

Rivers

H.R. 1260 (Johnson, D/SD) ensures equity in and increased recreation and economic benefits from the Missouri River system.

H.R. 1331 (Furse, R/OR) creates a voluntary non-regulatory technical assistance and grants program within the Natural Resource Conservation Service's existing Small Watershed Program.

H.R. 2939 (Gunderson, R/WI) provides for a Congressionally authorized test of the Mississippi Interstate Cooperative Resource Agreement in the Mississippi River Basin. Resource Committee held a hearing on May 9.

Takings

S. 605 establishes a uniform system for protecting property rights and compensating landowners adversely affected by regulations. Approved for floor action on Dec. 21.

H.R. 971 (Wyden, D/OR) ensures that homeowners have access to information and opportunities to comment on actions that may decrease home values, and establishes a compensation program for development that produces pollution or otherwise impacts home values.

Water and Wetlands

S. 626 (Hatfield, R/OR) amends the Watershed Protection and Flood Prevention Act establishing a technical assistance and grant program for waterways restoration.

S. 639 (Warner, R/VA) authorizes civil works programs for the Army Corps of Engineers which preserves the navigation of channels and harbors and provides for flood control and storm damage reduction.

S. 1601 (Levin, D/MI) to amend the Federal Water Pollution Control Act to extend the deadline for and clarify the contents of the Great Lakes health research report, and for other purposes.

S. 1620 (Lautenberg, D/NJ) amends the Water Resources Development Act of 1986 to provide for the construction, operation, and maintenance of dredged materials.

S. 1660 (Glenn, D/OH) to provide for ballast water management to prevent the introduction and spread of nonindigenous species into the waters of the United States, and for other purposes.

H.R. 961 (Shuster, R/PA) reforms and reauthorizes the Clean Water Act. Passed the House May 16, 1995.

H.R. 1132 (Oberstar, D/MN) amends the Clean Water Act providing for improved non-point source pollution control.

H.R. 1262 (Pallone, D/NJ) amends the Clean Water Act improving enforcement and compliance programs.

H.R. 1268 (English, R/PA) establishes a comprehensive program for conserving and managing wetlands.

H.R. 1438 (Lowey, D/NY) amends the Clean Water Act to provide funding to the states for estuary conservation.

H.R. 2940 (Hayes R/LA) entitled "Deepwater Port Modernization Act."

H.R. 3112 (Pallone, D/NJ) to amend the Water Resources Development Act of 1992 relating to sediments decontamination technology.

H.R. 3113 (Pallone, D/NJ) to amend the Water Resources Development Act of 1986 relating

to cost sharing for creation of dredged material disposal areas, and for other purposes.

H.R. 3152 (Baker, R/CA) "Wetland Creation and Improvement Act."

H.R. 3217 (LaTourette, R/OH) to provide for ballast water management to prevent the introduction and spread of nonindigenous species into the waters of the United States, and for other purposes.

H.R. 3563 and 3692 (Shuster, R/PA) provides for the conservation and development of water and related resources to authorize the Secretary of the Army to construct various projects for improvements to rivers and harbors of the United States.

Source: Land Letter, Vol. 14, Nos. 17, 20, 24, 33 and Vol. 15, No. 2, 6, 11, 14 and 18; and NOAA Legislative Informer, September 1995, Issue #15



River Crossings

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

**BULK RATE
U.S. POSTAGE
PAID
BETTENDORF, IA
PERMIT NO. 83**