River Crossings

Volume 13 **March/April 2004** **Number 2**

Report Criticizes Corps of Engineers' Pork Barrel

A two-year investigation funded by the *National Wildlife Federation* (NWF) and the *Taxpayers for Common Sense* (TCS), concluded that the Corps of Engineers (Corps) is moving ahead with more than $12 billion worth of projects that will harm the environment and waste taxpayer dollars. The report entitled, *Crossroads: Congress, the Corps of Engineers and the Future of America's Water Resources*, reveals "a recipe of politics and pork that has led Congress to turn a blind eye to legislative fixes that could stop many of these projects in their tracks".

In preparing the report, investigators read through thousands of pages of Corps' documents and conducted dozens of interviews to rank the most environmentally and fiscally wasteful water projects in the nation. The report provides an action agenda for Congress and the Bush Administration to redirect the Corps toward more responsible, cost effective projects that protect the environment and use tax dollars wisely.

Throughout its history, the agency's civil works program has deepened more than 140 ports and harbors, constructed 11,000 miles of inland waterway navigation channels, built 8,500 miles of levees and floodwalls, and erected more than 500 dams. Today, the Corps operates and maintains more than 1,500 of these projects, while many other projects built by the Corps are operated locally. Some of this work has contributed significantly to the nation's infrastructure, but much of it has wasted billions of dollars, while damaging – or threaten to damage – floodplains, rivers and coastlines, the report said.

A contrast in river management – an unchannelized, diverse recreational channel on the left vs a Corps of Engineers' channelized, "drainage ditch" on the right.

This is not the first time the need for reform and change within the Corps has been recognized. As early as 1836, a House Ways and Means Committee report complained about 25 over-budget projects and expressed a desire for "actual reform, in the further prosecution of public works. . . ." In 1902, an Ohio Congressman, frustrated by Congress' endless pursuit of pork-barrel water projects, led Congress to create a review board to determine whether Corps projects were truly needed. Ironically, Congress abolished this board a decade ago, and continues to pursue scores of wasteful and questionable projects.

"We've documented a host of horror stories of Corps' projects that waste tax dollars and harm wildlife and the environment," says David Conrad, NWF's Senior Water Resources Specialist. "It's a hit parade of the worst of the worst – with the nation's treasury and natural resources taking the hit." "Despite exploding deficits, Congress continues to spend like drunken sailors on gold-plated

Inside This Issue

pork-barrel water projects," says Steve Ellis, Vice President of Programs at TCS. "The problem is that the Corps of Engineers is aiding and abetting this spending spree because they have never met a boondoggle they didn't like."

Crossroads "reveals a Corps project machine that consistently "cooks the books" with bad economics, lowballs the environmental damage its projects will cause, relies on outdated approaches, lacks direction in its work, and perpetuates wasteful federal subsidies". No federal agency has greater influence over the nation's waterways, wetlands, floodplains, and coasts than the Corps of Engineers. While Congress has recognized that the Corps is flawed and the Corps admits that it has to change, the agency's self-serving claims of reform ring hollow. *Crossroads* "exposes systemic failures within the agency that cause it to push bad projects that continue to harm the environment at enormous taxpayer expense". For example, the Corps continues to promote large-scale flood control in sparsely populated areas and navigation improvements for phantom barge traffic.

Mounting numbers of people and organizations from across the country are calling for reform. More than 100 organizations, including NWF and TCS, are now involved in a group called the *Corps Reform Network* (CRN) which is demanding that Corps projects and programs become fiscally and environmentally responsible. The CRN is working with members of Congress to stop business as usual and compel Congress to address the serious problems so clearly evident with the Corps' current program. In 2002, legislation to launch more than $4 billion in new Corps projects was stopped in its tracks because the bill did not contain measures to reform the Corps.

Additionally a bipartisan group of members of the House of Representatives have formed the congressional *Corps Reform Caucus* to educate each other, their fellow representatives, and the general public about the issues. The Bush administration has also highlighted the need for reform. Even the Corps itself recognizes the need for change and that it cannot do it alone. In June 2002, Lt. General Robert B. Flowers, the Chief of Engineers, told Congress: "[T]he Corps must change . . . Transformation of the Corps won't be easy, but we stand ready to work with you . . . for the well being of the American people and the environment in which we live."

However, in recent years, Congress has blocked even the suggestion of considering investigating whether the Corps ought to continue some of its current civil works functions and whether any or all of those functions should even reside within the U.S. Army. *Crossroads* says, "Given the looming water challenges and the critical importance of water resources to the nation's future, this debate must occur soon. Remaining on the current path of waste and destruction at the Corps is not an option". The Bush administration's Fiscal Year 2004 Budget proposed five broad "Principles for Improving Program Performance" to change the way the Corps and Congress conduct business. In many respects, these principles are in line with the five principles identified in *Crossroads*:

1. The federal government's primary role in water resource management should be to provide leadership in facilitating projects and policies that reflect a comprehensive and coordinated national vision.

2. The federal government's involvement in water resources projects should be limited to circumstances in which the government would produce more economically efficient and nationally beneficial outcomes than state or local entities or the private sector. Subsidies should be limited and the government should strive for full-cost recovery through cost-sharing and user fees for projects that have discernible economic benefits.

3. The federal government should recognize that it has special stewardship responsibilities for common or boundary resources, and work collaboratively with states to ensure that costs of water resource projects in these areas are shared equitably.

4. The federal government's water resource efforts should work with natural systems and watershed based planning and management that balances flow, quantity, and quality issues and protects and enhances wildlife habitat. Sustainable economic

River Crossings

Published by

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

MICRA email: ijrivers@aol.com
MICRA Web Site: http://wwwaux.cerc.cr.usgs.gov/MICRA/

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

development and environmental protection ought to be the co-equal goals of water resources management. The nation's water resource policy should encourage people and structures to back away from the edge of the coast and out of high-risk floodplains, deter unnecessary environmental destruction, as well as promote and encourage greater water efficiency and waste reduction, and support innovative technologies that can increase and protect water supplies.

5. The federal government must create a more responsible and comprehensive water resources planning and development framework to help ensure limited federal resources are allocated in a targeted, forward thinking way. To improve interagency, intergovernmental and private sector coordination, there should be a substantial consolidation of agency functions and a cabinet-level coordinating body should be formed. To assist this process, Congress and the Administration should establish a national water commission to study and recommend how to restructure overall water resources functions

For each of the past three years, the Bush administration has recommended positive steps to reduce waste in the Corps' program by proposing budget cuts to many of the most wasteful Corps projects that are highlighted in *Crossroads*. Unfortunately, the administration has failed to follow through and defend those budget cuts. "The budget battle lines between the Congress and the administration have been drawn," continues Ellis. "The Corps budget will act as a spending litmus test to see if the administration will hunker down and defend its budget or if they will let themselves be overrun by pork barrel politicians," he said.

In the near future, the U.S. Senate is expected to consider the 2004 Water Resources Development Act (WRDA), legislation that could authorize as much as $8 billion worth of new Corps projects. The upcoming WRDA presents a landmark opportunity for enacting new policies to change the way the agency does business. "Congress needs to change the rules of the game for the Corps by cutting bad water projects and permanently redirecting the agency to use tax dollars wisely to restore America's waterways," continues Conrad.

If the Corps makes necessary changes in its policies and procedures, *Crossroads* states that the agency could become a powerful force for restoring and enhancing the country's environment. According to *Crossroads* a reform agenda must include:

- Holding the Corps accountable to the public;
- Modernizing the Corps' approach to water management so that projects are environmentally sound and less expensive;
- Prioritizing the Corps' workload to meet the nation's most pressing needs; and
- Ensuring that project beneficiaries share equitably in the costs of projects.

Crossroads identified 10 Corps projects as the most threatening and wasteful in the nation. Six of these occur in the Mississippi River Basin. The ten are listed below:

1. The Eastern Arkansas Irrigation Projects (Arkansas) — The $319 million Grand Prairie Demonstration Project sets the stage for a barrage of additional irrigation projects that would cost taxpayers

more than $1 billion in total and cause extraordinary damage to two national wildlife refuges and habitat for the largest concentration of wintering mallard ducks in North America.

2. Big Sunflower River Dredging and Yazoo Backwater Pump (Mississippi) — The Corps plans to construct the world's largest hydraulic pump, the Yazoo Pump, and dredge the Big Sunflower River, primarily to prevent seasonal flooding on marginal farmland. The projects will not protect homes and businesses from flooding, but they will pack a double punch for the Mississippi Delta by destroying valuable bottomland hardwood and tens of thousands of acres of wetlands at a combined cost of $243 million.

3. Lower Snake River Navigation (Idaho, Oregon and Washington) — Between 1997 and 2001 alone, federal agencies poured $1.5 billion dollars into failed efforts to save endangered salmon, including barging and trucking the fish around the dams. Removing the four lower Snake River dams is the most economical and effective solution to stop the hemorrhage of taxpayer money and save the salmon.

4. Upper Mississippi River Navigation Expansion (Illinois, Iowa, Minnesota, Missouri, Wisconsin) — The Corps continues to exaggerate future barge traffic on the Upper Mississippi in order to justify this $2.3 billion project, which will undermine efforts to restore the Mississippi ecosystem. Twice, the *National Academy of Sciences* has criticized the Corps for ignoring less expensive ways to manage traffic efficiently.

5. Industrial Canal Lock Replacement (Louisiana) — Instead of the 50% growth in traffic the Corps used to justify this $748 million project, traffic has actually decreased 50% since 1988. The project would contaminate nearby water sources and wetlands with toxic chemicals and force historic and low-income, minority neighborhoods to endure a decade-long construction nightmare to replace a single lock on a little-used canal.

6. Delaware River Deepening (Pennsylvania, New Jersey and Delaware) — The General Accounting Office discredited the Corps' justification for its $286 million plan to deepen the Delaware River's main shipping channel. The Corps lacks a realistic plan for disposing the millions of cubic yards of dredge spoils that would result from the project and has failed to consider the project's full impact on human health and the environment.

7. Missouri River Navigation (Iowa, Kansas, Missouri, Nebraska) — To accommodate a trickle of barge traffic, the river's natural pattern of high spring flows and low summer flows has been replaced with stable flows, threatening fish and wildlife.

8. St. Johns Bayou Basin/New Madrid Floodway (Missouri) — The Corps' $108 million project to close an intentional gap in a Mississippi River levee will flood upstream communities and destroy tens of thousands of acres of wetlands and 75,000 acres of increasingly rare backwater habitat.

9. Dallas Floodway Extension (Texas) — Despite opposition from the Bush administration and a court injunction, the Corps is ignoring cheaper alternatives in order to proceed with a $154 million plan to extend existing Dallas levees and cut a 600-foot wide swath through the Trinity Forest.

10. Columbia River Deepening (Oregon and Washington) — The Corps is pursuing a project that will deepen the Columbia River estuary and pose a new threat to salmon and steelhead survival while overestimating its economic benefits to taxpayers.

Other wasteful projects listed by *Crossroads* include:

Most Urgent Threats:
1. Apalachicola River Dredging
2. Devils Lake Emergency Outlet
3. Wichita River Basin Chloride Control
4. Environmental Infrastructure (nationwide)

Emerging Threats:
1. Dare County Beach Replenishment
2. Great Lakes Navigation Expansion
3. Arkansas River Channel Deepening
4. Ohio River Navigation System Expansion

Serious Concerns:
1. White River Navigation
2. Auburn Dam
3. Savannah Harbor Expansion
4. Locks and Dam at Minneapolis
5. Lock and Dam #3
6. New Jersey Beach Replenishment
7. Long Island Beach Replenishment
8. Clear Creek Flood Control

Watch List:
1. Oregon Inlet Jetties
2. Chesapeake and Delaware Canal Deepening
3. Jackson Navigation Spur and Port Facility

The entire *Crossroads* report is available on line at: http://www.taxpayer.net/corpswatch/crossroads/. For more information contact: Linda Shotwell, NWF, (703) 438-6083 and Keith Ashdown, TCS, (202) 546-8500

Source: *National Wildlife Federation and Taxpayers for Common Sense News Release,* 3/18/04

New Missouri River Water Control Manual

After struggling for 14 years, the Army Corps of Engineers (Corps) has adopted a disputed new Missouri River management plan that shifts water upstream in severe drought and delays environmentally friendly flow changes downstream. "You'll find that there are no winners in the basin, that there are some compromises that have to be made. What we try to do is find that delicate balance," said Brig. Gen. William Grisoli, commander of the Corps' Northwestern Division.

"They're proposing just to make it an industrial ditch, and to hell with everything else," said Chad Smith, spokesman for *American Rivers*, a conservation group that is suing the Corps. "We have warned that the Army Corps would exploit loose language in the Biological Opinion to make no changes at all, and that's exactly what they have announced today," said David Hayes with *Latham & Watkins*, lead attorney representing most of the conservation organizations in the case. "The Corps' piecemeal approach to river management won't work," said Tom France, Counsel for the *National Wildlife Federation*. "The Corps must look at the entire Missouri River system and restore natural flows throughout its length."

"The Corps has been told what needs to be done to restore this natural resource," said Larry Hesse, a river ecologist who served on a 2002 *National Academy of Sciences* panel

that reviewed the Missouri's ecosystem. "Clearly, they've decided to manage the river their own way, in opposition to a consensus in the scientific community."

An *American Rivers* news release said, "The Missouri River EIS pays lip service to the myriad needs along the Missouri River, but in practice prioritizes commercial navigation ahead of all other uses. Barge traffic on the Missouri River was in sharp decline long before any river species were protected under the Endangered Species Act, and in January, two of the last barge companies operating on the river announced they would take no orders to ship grain or fertilizer along the river in 2004." "The only thing sillier than squandering millions of dollars of economic potential and damaging the environment to float a few barges is doing those things to float no barges at all," said Tim Searchinger, an attorney for *Environmental Defense*.

Sen. Max Baucus (D/MT) said the agency "draped a fancy new plan around the status quo" and threw "a watered-down bone to upstream states while giving continued preference to the barge industry." Sen. Tom Daschle, (D/SD) said, "By nearly every single measure, the Corps has clearly chosen downstream states like Missouri over upstream states like South Dakota... the Corps blatantly ignores sound science and fails to include proposed changes that have the potential to remedy decades of mismanagement of the Missouri River."

Sen. Tim Johnson (D/SD) said, "This Master Manual is fourteen years late and doesn't pass the smell test. It fails to incorporate or even acknowledge the best, peer-reviewed scientific evidence for future management of the River." "We should manage the Missouri River according to the best science possible. That includes recognizing that the recreation industry's economic benefits are ten times greater than those of the barge traffic downstream. Unfortunately, the Master Manual has White House electoral politics written all over it," he said.

Sen. Byron Dorgan (D/ND) said, "This fight is not over. Whether it's through legislative means, the courts, or direct communications with the Corps, their practices must change, and North Dakotans will not rest until the Corps learns to manage the Missouri River in a way that meets the vital needs of all its users, not just the narrow interests of a few downstream users."

On the other side of the issue, Sen. Kit Bond, (R/MO), an advocate for downriver farmers and shippers, complained that the decision "fails to protect the priorities of Missouri and other downstream states." Bond also took aim at the plan's "adaptive management" features allowing federal agencies to make changes over time. "With adaptive management", he said, "there is no reliability on which people can count, and the master manual is an empty document which effectively turns ultimate management authority over to the Fish and Wildlife Service."

Sen. Jim Talent (R/MO) said, "The Missouri River has many authorized uses, however, the new master manual places the needs of Missourians, and economic growth in

general, a very distant second behind the Endangered Species Act."

Missouri Gov. Bob Holden said that he also was distressed by the Corps' refusal to rule out a "spring rise" – pulses of water during times of plenty intended to re-create the creature-friendly backwaters and other natural conditions that existed before the Missouri was dammed and channelized for flood control and barges. Holden further accused President George W. Bush of breaking a campaign promise made in 2000 to resist flow changes.

Randy Asbury, executive director of the *Coalition to Protect the Missouri River*, an industry support group, said, "It's ridiculous that common sense can't seem to prevail in this issue. Stakeholders continue to be bludgeoned by an Endangered Species Act (ESA) that has done little to improve the condition of ESA-listed species, yet continues to wreak havoc on private interests caught in its grasp…Moreover, it is frustrating to see such a wholesale transfer of water to the Upper Basin at the expense of every downstream interest. Nothing in these documents hints of balance."

But Captain Jeffrey McFadden resident of rural Richmond, MO, takes a different view. McFadden is president of *Big River Tours, Inc*. and skipper of the *Morning Star*, the only licensed passenger tour vessel currently working the Missouri River between the city of St. Charles and the Iowa line. In testimony before Congress McFadden said, "The Missouri River, running 553 miles along and through the state and passing within fifty miles of all of

the state's major population centers except Springfield, could be and should be a recreational gold mine to the people of Missouri. Instead, it is managed in an indisputably ecologically destructive way, allegedly for the benefit of agriculture, the largest industry in the state. There are grounds to question the reality of this benefit."

"The simple fact", McFadden says, "is that Missouri River barge navigation, never very successful, has failed in the marketplace. Many advocates of the current system publicly acknowledge that barge navigation is not an economically viable industry but urge that the government keep this moribund industry alive in order to keep rail rates down. The idea that the United States Government should prop up a failed industry to limit the profitablility of a successful one boggles the mind. I cannot believe that such nonsense is seriously considered in public in this, allegedly the freest market nation on earth."

Regarding the claim by some that the ESA is somehow responsible, or at least partly responsible, for the fact that farmers are now fewer than 2% of our nation's population, McFadden says, "Nothing could be further from the truth." "For all of my 56 years", he said, "there have been fewer farmers on every census than the census before, to the point that as of the census of 2000 the census bureau no longer is keeping count. There have, in all likelihood, been fewer farmers in this country every year of my life than the year before. Perhaps every day."

"Throughout most of this half century of carnage" he said, "we have been assured by our government and our educated leaders that the near-total destruction of the American family farm was somehow beneficial to society and even, hard though it is to imagine, to farmers themselves. We have been assured that the loss of people from the farm is proof that American farms are the most successful, most efficient on earth…Yes, it's a heartbreak, but it's not the Endangered Species Act's fault. It's been going on since World War II and before".

"The real heartbreak", he said, "is that the survivors of this half a century of destruction have been conned into believing that if we just eliminate the ESA and cash in the pallid sturgeon they will somehow be saved. It's not likely. We might as well keep the fish". "The destruction of the entire Missouri River ecosystem will not", he concluded, "in the long run, keep one farmer in business – but it will keep a lot of the rest of us out".

Corps spokesman Paul Johnston said, "We think we've got a plan that balances the benefits to folks along the river". But referring to expected criticism, he added, "The hardest part is that we don't have a way to enlarge the pie. All we can do is alter the size of the slices."

"The Army Corps has a legal obligation to prevent endangered species from going extinct and a moral responsibility to manage the Missouri River for the benefit of the public at large," said Chad Smith, director of *American Rivers*' Nebraska Field Office. "Today, the Corps dashed our last lingering hopes that they will show leadership without an explicit court order."

The court is expected to decide by summer whether the new document complies both with the Flood Control Act of 1944 and the ESA. The Corps plans to put off at least until 2006 a "spring rise" designed to re-create backwaters sacrificed when the river was dammed and channelized. In December, the U.S. Fish and Wildlife Service (FWS) ruled that the Corps must cut summer river flow this year and craft a plan by 2006 for a double surge in the spring. That flow pattern resembles the pre-dam river, which also was slower, muddier and more flood-prone. Biologists say mimicking that flow would create shallow water for pallid sturgeon to feed and grow in summer and a cue for them to spawn in spring. Missouri farmers and local officials have worried that the added water could trigger flooding.

The FWS told the Corps it could forgo low summer flows this year if it created 1,200 acres of habitat that would be accessible to sturgeon at high river flows. The Corps proposes to create that habitat artificially using part of this year's $23 million restoration budget. But *American Rivers'* Smith said creating habitat alone is woefully inadequate. "On the one side, there is a mountain of science that says you need to restore more natural flows," he said. "On the other, there is a group of engineers saying we're going to use bulldozers."

The Corps said it intends to create the 1,200 acres of new shallow-water habitat by July 1. But Smith said, "I don't know how the Corps expects everyone to believe they can do several million dollars' worth of work in a couple of months." Gen. Grisoli could not pinpoint where the new wetlands would be, but he did say that the focus is on about 200 miles of river between Sioux City and the Osage River in mid-Missouri. In all, the river flows 2,341 miles from Montana to St. Louis. Eventually, the Corps says it plans to build 20,000 acres of new habitat costing more than $1 billion over 30 years.

The plan also calls for a water release of 28,000 cubic feet per second from Gavins Point Dam near Yankton, SD – enough to support minimal barge traffic. This would drain about a foot of water from Lake Oahe, said Corps spokesman Paul Johnston, but add perhaps a foot to the river between Yankton and Sioux City. However, the manual also provides for drought conservation measures that cut flow from the reservoirs earlier than the previous manual did. Certain "triggers" are identified that would shorten the navigation season and reduce the flow of water downstream when the combined volume of water at three upstream reservoirs – Lake Oahe, Lake Sakakawea and Fort Peck Reservoir – drops precipitously. That could mean about a foot more water in Lake Oahe this summer than there would have been, Gen. Grisoli said.

Missouri officials were pleased at the prospect of avoiding immediate flow changes, which they have consistently opposed. But they were deeply troubled by a drought plan that automatically holds water in upstream reservoirs when dry times persist. Those flow triggers could be reached this summer if drought in the upper basin persists. According to the manual, if the volume of water in the three reservoirs falls beneath 31 million acre-feet on March 15 of any year, navigation would be suspended for that year by the secretary of the Army and flows downstream would be restricted. The volume in the reservoirs stood at 39.2 million acre-feet in mid March this year.

Because of the drought measures, Missouri Gov. Bob Holden (D) has threatened to sue to block the plan. In a letter to Gen. Grisoli Holden wrote that the state of Missouri was extremely disappointed at a Corps plan "that would reduce the commitment to downstream drinking water supplies, power plant cooling and river commerce." "Instead of supporting these vitally important uses, the Corps chose to favor higher water levels on upstream reservoirs primarily to benefit reservoir recreation," Holden added.

On the other hand, South Dakota Gov. Rounds said that he considered the manual's drought plan valuable to his state. Lake Oahe was 27.5 feet below normal earlier, and Rounds said his state desperately needed water this Spring for spawning to support a valuable walleye fishery. According to persons attending Rounds' meeting with Corps officials, the mild-mannered Rounds pounded his desk in anger when he was told that the only large boats on the river this Spring might be Corps vessels building habitat. "I guess you can say that I was more than mildly agitated," Rounds said. "It struck me as extremely inappropriate to be releasing stored water just so the Corps could float their own boats." Rounds said that his state, too, might sue if its plea for water falls on deaf ears.

Chris Brescia, president of *MARC 2000*, a river commerce trade association in St. Louis, referred to the new Master Manual as the beginning of a new round of courtroom warfare. Brescia asserted that nothing in the plan gives the barge industry the certainty it needs to survive and grow. "Essentially, the Fish and Wildlife Service will be running the river and making the determination every year whether or not there will be a navigation season," he said.

Meanwhile, in early March Montana Attorney General Mike McGrath filed a "friend of the court" brief, asking the U.S. Supreme Court to hear an appeal of a

Gavins Point Dam

lawsuit brought by North Dakota and South Dakota. The lawsuit states that the U.S. Army Corps of Engineers' management of the river illegally favors downstream states. "The Corps of Engineers has played favorites with the downstream interests at our expense," he said. "The Flood Control Act … gives them authority to manage the river. But it does not give them the authority to play favorites. It's really that simple." A federal district court ruling favored the Dakotas, but the 8th U.S. Circuit Court of Appeals in St. Louis overturned that decision last summer.

Then on March 26 South Dakota Gov. Rounds and Sens. Johnson and Daschle sent a letter to President Bush asking his assistance in resolving the conflict. "We request your assistance in this matter, and ask that you direct the Corps of Engineers to implement flow changes on the Missouri River to provide equal treatment to upstream uses of water to support fish and wildlife, recreation, municipal water supply, and irrigation needs," they said. "Upstream states deserve fair and equitable treatment when it comes to management of the river, and in this regard the Master Manual and Annual Operating Plan are severely lacking," the letter states.

But the Corps' assistant secretary of civil works, John Woodley said, "There are three things we cannot do in the master manual. No. 1, we cannot make it rain or stop it from raining; No. 2, we cannot ignore congressional mandates [which include providing for strong navigation]; and No. 3, we cannot make everybody happy."

But *American Rivers*, the *National Wildlife Federation* and other groups plan to take the Corps back to a U.S. district court in Minnesota in hopes of enforcing the 2000 FWS biological opinion that called for greater flow variations for species protection. An order from that court prompted the Corps to cut flows to 21,000 cfs for three days last August. With regard to the FWS and Corps proposals, *American Rivers'* Chad Smith said, "Both agencies appear to be making things up as they go along. We took both agencies to court, and both agencies lost resoundingly, and we are prepared to do that again. "I simply don't expect their science to hold up in court," he said.

But Woodley and Grisoli said they are ready for a renewal of that fight. "I think that we are confident that we've fully complied with the Endangered Species Act in the master manual and that the Fish and Wildlife Service agrees," Grisoli said. But *Environmental Defense's* attorney Tim Searchinger contends that the new Master Manual falls short considering that several species face extinction. "It's like spending 14 years to create a new way to play music, and then deciding in the end to use eight-track tapes," he said.

Richard Opper, executive director of the eight-state *Missouri River Basin Association*, lamented the failure of basin states in the late 1990s to agree among themselves on river management. "I think there will be a lot more acrimony," he said. "My biggest disappointment is the basin's inability to determine its own future. We all have to be asking ourselves if it would have been better if we could have all come together on these issues."

Sources: Bill Lambrecht, *St. Louis Post-Dispatch*, 2/27 and 3/18/04; Libby Quaid,

AP, 2/27/04; Bill Graham, *Kansas City Star*, 2/28/04; Henry Cordes, *Omaha World-Herald*, 2/28/04; Ben Shouse, *Sioux Falls Argus Leader*, 2/28/04; *American Rivers News Release*, 2/27/04; Mark Henckel, *Billlings Gazette, 3/1/04*; Judith Graham, *Chicago Tribune Knight Ridder/Tribune Business News*, 2/28/04; *Billings Gazett*e, 3/12/04; *AP/Kansas City Star*, 3/26/04; Libby Quaid, *AP/Bismarck Tribune*, 3/11/04; and *Greenwire, 2/27,* 3/19, 3/22, and 3/29/04

White House Accused of Distorting, Suppressing Facts

More than 60 scientists, including 20 Nobel laureates, in mid February issued a report entitled, *Scientific Integrity in Policy-making: An Investigation into the Bush Administration's Misuse of Science*, charging the administration with "distorting scientific data and suppressing scientific analysis in numerous policy areas including environmental protection". The report, drafted by the *Union of Concerned Scientists* (UCS), accuses the White House of "repeatedly censoring and suppressing reports by its own scientists, stacking advisory committees with unqualified political appointees, disbanding government panels that provide unwanted advice and refusing to seek any independent scientific expertise in some cases".

In addition to the 20 Nobel Prize winners noted above, signers include 19 recipients of the *National Medal of Science*, awarded by the president for outstanding contributions in the field. Nobel winners include former *National Institutes of Health* chief Harold Varmus and pioneering chemist Richard Smalley. Medal winners include H-bomb designer Richard Garwin and Harvard physicist Norman Ramsey, both advisers to Republican administrations. "These are very distinguished scientists with years of public service," says science policy expert Al Teich of the *American Association for the Advancement of Science*.

The signers also include current heads of several institutions, including David Baltimore, president of the California Institute of Technology, and Gerald Fischbach, dean of the Faculty of Medicine at Columbia University. Kurt Gottfried, retired Cornell physics professor and chairman of the UCS board called such participation unusual among leaders whose institutions depend heavily on federal grants. "They're taking a real risk doing this," he said "This is absolutely unprecedented. There's something irrational about what this administration is doing," Gottfried said, "The concerns we raise here are not academic abstractions. The cavalier attitude toward science that has provoked us to speak out can produce tangible damage to the health, well-being and security of all of us, for generations to come", he said.

The report, "*Scientific Integrity in Policymaking: An Investigation into the Bush Administration's Misuse of Science*," did not uncover new episodes of alleged tampering, but it did add previously unknown details – some from government scientists who had not spoken out before. "Its major purpose was to show how comprehensive and widespread these practices are. It's the overall picture that is most distressing," said one of the signers, Rice University physicist Neal Lane.

Lane a former director of the *National Science Foundation*, as well as a presidential science adviser during the Clinton administration said, "One of the most egregious cases mentioned in the report was the issue of the panel on appropriate levels of mercury and lead in paint, and in the environment in general." "To appoint people who have clear

conflicts of interest, because of their association with the paint industry, to panels that have to make difficult judgments on the scientific basis for limiting the amount of lead that is available in the environment, you could in fact do harm to hundreds of thousands of young people", he said.

Dr. Lane said that scientists understand that politicians must make their decisions based on any number of factors, not just the science, but he warned that efforts to fudge the data have gone so far that "leading policy-makers simply don't know what they don't know."

"I've become increasingly concerned, even alarmed, by the Bush administration's actions to manipulate the government's scientific advisory system. Even, I think, to prevent the administration or the upper-level policy-makers of the administration from hearing any advice that might run counter to its political agenda," Lane said on a conference call with Dr. Russell Train, former U.S. EPA administrator and Dr. Gottfried. "What you must not have is people on these panels who are unqualified, who have clear conflicts of interest, who have strong ideological views that have been publicly expressed on issues that run counter to the science. That simply confuses the information that then is provided to the policy-makers."

Train, another Republican report signer who served as U.S. EPA administrator under both Presidents Nixon and Ford said that he never felt any political pressure from either of those presidents but that "times have changed"

White House officials defended the administration's record on science and stressed that the examples cited were not representative. "The sweeping conclusions of the [UCS'] statement go far beyond reasonable interpretations of the issues it recites," said John H. Marburger, director of the White House Office of Science and Technology Policy. "This is a collection of disconnected cases that have rubbed somebody the wrong way." Marburger declined to address the scientists' specific complaints, but one example he cited in the administration's defense was the research strategy it has crafted to study climate change and its impact. A report published by the *National Research Council* of the *National Academy of Sciences* applauded the strategy, and panelists said they had not perceived political influence affecting the administration's blueprint for studying the issue. "This administration has strongly incorporated science in its policy-making processes and encourages sound, independent science," he said.

But the UCS said that although politicians have long ignored science when making decisions, the Bush administration has repeatedly tried to adjust the science to fit its political objectives or to block the release of science that would contradict its policies. "What we are seeing here, and we have not seen it before, is an administration that distorts the process by which it gets advice and censors the advice it gets from its own scientists," Gottfried said.

The report shines a light on previously low-profile examples of alleged distortions. For instance, James Zahn, a research biologist at the Agriculture Department, said that, on at least 11 occasions, he was

prohibited by his superiors from publicizing his research on the potential hazards to human health from airborne bacteria from farm wastes. Zahn left the department convinced that his work was being suppressed to protect agribusiness, the report stated.

Another stifled study was done by the EPA, documenting the percentage of children who were at risk of developmental problems because of the mercury-laden fish consumed by their mothers when they were in utero. That report, which said that 8% of women of childbearing age had mercury blood levels higher than what the government considered safe for a fetus, sat in a White House review for nine months. It made it to print when an EPA official leaked it to a reporter.

"In case after case, scientific input to policymaking is being censored and distorted," Lane said. On the issue of climate change, the White House made so many alterations to the chapter on that topic in an EPA report last year that then-EPA Administrator Christie Whitman decided to publish the report in June without that section. The episode sparked criticism from Train, "[N]ever once, to my best recollection, did either the Nixon or Ford White House ever try to tell me how to make a decision," he said in a letter to the *New York Times*.

In defense of the administration, Marburger said the UCS report misrepresented the evidence. "It makes sweeping generalizations about policy that are based on random selection of incidents. I don't think these incidents add up to a case," he said. He called the signers "distinguished scientists and educators" but said they had misinterpreted the evidence. Each of the incidents in the report had an innocent explanation, he said: "In all of these cases there is a supportable reason for taking these actions."

Marburger, who said he had no plans to discuss the report with the president, defended Bush's views on research. "The president is quite supportive of science. He understands that science is the basis of innovation," he said. Marburger said he would work with agencies to clarify the real story behind the alleged incidents, even though he saw no need for a comprehensive investigation.

But the report's backers questioned his claim. "It's quite apparent that scientific decisions are being made by political appointees," said one of the signers, Lynn Goldman, a professor at the Johns Hopkins Bloomberg School of Public Health. Goldman, who oversaw regulation of pesticides and toxic chemicals for the EPA during the Clinton administration, said many of her former EPA colleagues were demoralized by rampant political interference.

Researchers have been especially angry about administration moves to "peer review" federal regulations, excluding academic scientists while encouraging participation by scientists representing the regulated industry.

The report specifically lists the following as objectionable practices, echoing past complaints from former government researchers:

- The removal of highly qualified scientists from lead-poisoning, environment, health and drug-abuse panels and their replacement with industry representatives.
- Forbidding EPA, Health and Human Services, Agriculture, and Interior Department scientists from speaking publicly.
- Revisions to the ESA that limit scientists from commenting on the protection of habitats.
- The disbanding of advisory panels on nuclear weapons and arms control.
- The dismissal of assessments by national lab experts on the likelihood that Iraq had weapons of mass destruction.

The following were among the allegations included in the report:

- The administration demanded that the EPA remove from a major report data supporting the notion of global warming.
- The EPA withheld an analysis showing that the administration's plan to reduce air pollution was less effective than a competing proposal.
- The Department of Agriculture stifled a researcher who was examining resistance to antibiotics in the swine industry.
- Tommy G. Thompson, secretary of Health and Human Services, rejected qualified appointees to a committee on childhood lead poisoning, in favor of researchers friendly to the lead industry, including two with financial connections to it. The report details several instances in which the administration allegedly appointed biased researchers to such committees.
- The Office of Management and Budget (OMB) delayed a report that found high mercury levels in almost 1 in 10 women of childbearing age.

Gottfried and others emphasized that such alleged tampering has concrete consequences. "These are not just abstractions," he said. "Mercury is a potent neurotoxin that's dangerous for children."

The UCS report called on Congress to hold hearings on the allegations and asked the president to authorize Marburger to come up with new regulations prohibiting censorship and distortion of government scientific research. Some participants hoped the report would have more immediate consequences, forcing the administration to limit future interference. Goldman, for example, cited an OMB proposal to add another level of review to government-funded research. Critics call it a cynical attempt to trap controversial studies in a labyrinth of biased evaluations.

"This is signaling that the scientific community is now watching what's going on," said David Michaels, a professor of occupational and environmental health at George Washington University who signed the report. This is not *Greenpeace*. Presidential science advisers and Nobel Prize winners aren't normally an activist group," he said. "It includes a lot of people who aren't concerned all that often," joked one signer, atmospheric scientist F. Sherwood Rowland, who won the Nobel Prize in 1995 for his work on global warming. Michaels has been a frequent critic of the administration's science policy, but noted that some signers had served under Republican administrations, including Richard Garwin, who was a science adviser to President Richard M. Nixon.

Some critics say they're worried that the Bush administration's policies could drive demoralized scientists away from respected government agencies. Gottfried said the censorship issue is particularly distasteful: "This is extremely offensive to scientists, much more than people realize. That's the scientific method – that we're allowed to say what we've discovered."

The entire UCS report can be downloaded online at: http://www.ucsusa.org/global_environment/rsi/report.html. UCS is an independent watchdog group that often criticizes government science, particularly environmental and security policy. But this report's signers include many who don't normally speak out on politically charged issues.

Sources: James Glanz, *New York Times*, 2/19/04; David Kohn, *Baltimore Sun*, 2/19/04; Dan Vergano, *USA Today*, 2/19/04; Oliver

Moore, *Toronto Globe and Mail*, 2/19/04; Elizabeth Shogren, *Los Angeles Times*, 2/19/04; *Greenwire*, 2/19/04

Adaptive Management and Bureaucracy on the Colorado River

Adaptive management is a "trial and error" technique used to manage natural resources when a specific best management practice is not known. The technique is being used to some extent all over the country and is presently being proposed for use on the Missouri River. It is often promoted by agencies to avoid the shutdown of one resource use until another is adequately mitigated.

The process has been used on the Colorado River for almost a decade now to enhance ecological conditions in the Grand Canyon's river corridor while allowing continued power production from Glen Canyon Dam. But according to two stakeholder groups who help manage the program, the adaptive management process is failing to meet its mandate.

"We've created a new bureaucracy, but Grand Canyon's beaches and native fish have continued to decline," said Pam Hyde, Colorado River Coordinator for the *Grand Canyon Wildlands Council* and a member of the *Glen Canyon Dam Adaptive Management Work Group*, an organization of 26 stakeholders that oversees management of the park's river corridor.

The Grand Canyon Adaptive Management Program (GCAMP) was set up eight years ago by the Interior Department to comply with the Grand Canyon Protection Act, which directed the agency to protect and mitigate adverse impacts to, and improve the values for which Grand Canyon National Park and Glen Canyon National Recreation Area were established.

For the first few years, Hyde said, the program ran smoothly. But in recent years, politics, bureaucratic inertia, and "mission drift" have undercut the program, she and other critics say. Hyde and Nicolai Ramsey of the *Grand Canyon Trust*, another environmental stakeholder who serves on the work group, recently sent a letter outlining their concerns about the program to Michael Gabaldon, the Bureau of Reclamation's (BOR) director of western operations and Interior's liaison for the GCAMP.

Among other things, the environmentalists said that while scientific studies, interagency memos and policy directives stack up, little progress has been made in addressing two of the park's biggest challenges, restoring eroded beaches and recovering native fish – particularly the endangered humpback chub – in the Colorado River watershed.

In an interview in early March, Gabaldon acknowledged that the program could be improved, but he stressed that the trial-and-error approach of the work group has wrought considerable benefits to the canyon and allowed managers to better understand the resource. "I would say there's been quite a bit of success," he said. For example, experimental flows on the river, while unsuccessful in replenishing beaches over the long-term, nevertheless produced valuable data that can be used to improve the next round of experimental flows, Gabaldon said.

As for the humpback chub, its population may be stabilizing, he said, noting that the outcomes of a new effort to restore the chub by removing non-native fish from the river will not be known for another year or two.

Humpback chub

Also last year, the group urged Interior Secretary Gale Norton to approve a "temperature control device" for the dam that would warm up the river to help the chub. The group's recommendation was spurred by studies suggesting the fish's decline is due in part to its difficulty tolerating the cool, clear waters created by the dam.

By definition, adaptive management requires patience, but the program has sometimes failed to finish what it started, Hyde said. Moreover, environmentalists contend that operators of the 710-foot-tall Glen Canyon Dam, whose turbines produced an average 4.6 billion kilowatt hours of power over the last decade, have too much sway over the management group's decisions. For instance, over the winter the work group decided to ramp up flows from behind Glen Canyon Dam, just upstream from the park, to 20,000 cubic feet per second (cfs) during the day and then pull back to 5,000 cfs at night to control trout, which compete with native fish for resources. But about two years into the experiment, the power interests said the flow spikes were too short; without longer bursts of water, they would have to buy replacement power to meet demand.

As a result, BOR changed the operation of the dam, negating two years of scientific study, Hyde said. "The basic message is, 'We'll protect the resource as long as it doesn't hurt hydropower too much,'" Hyde said. "But if you look at the Grand Canyon Protection Act, it basically says hydropower doesn't rule the day anymore". "Let's find out how much power we can produce without compromising the resource," she added.

An undue focus on the effects of management on power production can be traced to stakeholder politics, said Steve Glazer of the *Sierra Club's Colorado River Task Force*. "As far as who has a dominant voice, it's out of balance," he said. "[The Western Area Power Administration] and the states have a disproportionate influence over the Fish and Wildlife Service and the National Park Service."

There is also a disconnect between federal scientists studying the river corridor and the work group, the environmental stakeholders contend in the letter. While the scientists are charged with answering questions raised by the work group and informing it of new developments, they often fail to do so, the stakeholders say. At its latest meeting the work group decided to reconvene for a special session to address concerns about the efficiency and efficacy of the program, he said. That meeting will likely be held in June, Gabaldon said.

Hyde commended the group for agreeing to discuss the program's shortcomings. But if its problems are not resolved, more drastic action may be necessary. "I think there's an increasing sense that if this isn't seen as a program that can work by all stakeholders, somebody's going to be walking around with litigation in their back pocket," she said.

Source: April Reese, *Greenwire*, 3/8/04

Water Rights Ruling Impacts ESA

An effort to save two rare fish in California's Central Valley more than a decade ago now could jeopardize the federal government's ability to protect

threatened or endangered species. In December, a federal judge in Washington, D.C., awarded $26 million to a group of California farmers for an early 1990s water diversion, ruling that the farmers were entitled to compensation for the water they lost.

If the judgment survives expected legal challenges, the government could find itself forced to pay millions every time it diverts water for the protection of endangered species. That would have implications across the West, where the federal government often clashes with property owners in attempts to save species on the brink of extinction. Environmentalists also said the massive pumps installed in the Sacramento-San Joaquin Delta to send water to farms and cities killed massive numbers of salmon and smelt and bore some of the blame for the poor health of the species.

"There may be implications for how the Endangered Species Act (ESA) is implemented," said Alf W. Brandt, the Interior Department lawyer who argued the government's case. "There may be implications for how water diversions are made." "The purpose of these suits is simply a backdoor attack on environmental laws," said Barry Nelson of the *Natural Resources Defense Council*. "And frankly, it's to bust the federal budget as the price tag for complying with environmental-protection laws" "It makes the decision [to enforce the ESA] harder because there's direct financial consequences up front," said Lester Snow, a former regional director of the Bureau of Reclamation. "It's a sea change in the way they manage the Endangered Species Act".

But Roger Marzulla, an attorney for the plaintiffs in the case, said the issue is property rights under the takings clause of the Constitution, not environmental protection. "There's no free water, just as there's no free lunch. The costs are going to be borne somewhere along the line," he said. "The plaintiffs have a recognized property right under state law. The federal government took it, and the federal government has to pay for it" Brent Graham, general manager for *Tulare Lake Basin Water Storage District*, one of the plaintiffs, also insisted that the claim was not an attack on the ESA. "You have to pay us for the water you're taking," Graham said.

The case was heard by Judge John Paul Wiese in the Court of Federal Claims in Washington, D.C., which hears claims against the federal government. That court has been on the front lines of a quiet battle between environmentalists and property rights activists. Wiese's December 31 ruling (which didnt' hit the media until early February), is seen as a clear victory for champions of property rights, who have sought to rein in what they see as regulatory excesses committed in the name of the environment. Critics, however, called it a radical legal decision that seeks to undermine environmental laws by making them too costly to enforce.

Judge Wiese first ruled in May 2001 that the farmers were to be compensated for diverted water. His December 31 decision set the compensation at $13.9 million. Farming interests said the total ruling is valued at $26 million, including interest. That's far short of the $65.7 million the farmers were seeking. But Graham said future cases could be even costlier to the federal government. He said the judge declared that the farmers should receive about $66 an acre-foot, an amount tied to a state-run water market that was in operation in the early 1990s. But under the fledgling free market for water in California, water could be worth two or three times as much, he said. An acre-foot is 326,000 gallons of water, a year's supply for one to two California households.

Wiese's ruling would have a significant impact in California, where courts have halted diversions of water to protect the environment, said John D. Echeverria, executive director of the *Environmental Law and Policy Institute* at the Georgetown University Law Center. It also could start a rush of claims against the state. "Although this is a case against the United States, it might well lead to billions of dollars in claims against the state of California," Echeverria said. The question now is whether the Justice Department will choose to appeal. If the ruling is appealed and upheld, efforts to protect fish throughout the West could become even more costly.

The U.S. Forest Service is being sued over a plan to close irrigation ditches in the Methow Valley in Washington state to provide additional water for endangered fish runs. In New Mexico, the Bureau of Reclamation is seeking court approval to take water from farmers and cities to help the endangered Rio Grande silvery minnow.

Marzulla scoffed at the notion that the judgment will break the government's bank. He noted the U.S. Fish and Wildlife Service budget includes about $4 million to protect elderberry bushes along the Sacramento River that may host an endangered beetle. "This judgment is nothing," Marzulla said. "It's not going to do anything other than... give some small quantity of justice to a few of the farmers who were injured in what was really a pretty rash act."

Marzulla also is involved in a Court of Federal Claims case over $100 million worth of water the U.S. Bureau of Reclamation took from farms in the Klamath Basin in 2001 to protect endangered suckers and threatened coho salmon. He said he was exploring similar claims on behalf of others, whom he declined to name. Marzulla has been at the front lines of the property rights movement and has frequently invoked the Fifth Amendment takings clause. As an assistant attorney general under President Reagan, he helped draft a 1988 executive order intended to minimize government takings on private property rights.

Tom Graff, a water lawyer with the advocacy group *Environmental Defense*, questioned whether the Bush administration, known for its strong advocacy of private property rights, fought the case very hard. "One isn't sure the federal government is making all that aggressive an effort to achieve the environmental objectives," Graff said. He also noted that Marzulla, has strong ties to Interior Secretary Gale Norton. They worked together at the Colorado-based *Mountain States Legal Foundation*.

But Fred Disheroon, a Justice Department lawyer who worked on the case, said, "We fought it very hard and we believe we made a very compelling case." He said it was unknown if the government will appeal the ruling. A spokesman for Norton referred questions to the U.S. Fish and Wildlife Service, who had no comment.

As for Marzulla, he and his wife founded the Washington, D.C.-based *Defenders of Property Rights* in 1991. Interior Secretary Gale Norton was on the group's advisory board until she was nominated by President Bush to the Cabinet. The ESA needs to be reined in, Marzulla said. He said protecting species, the original goal of the act, has been lost in the past 30 years as the law has been steadily broadened by "bureaucratic fiat" into a habitat-protection statute.

"We're trying to use a hammer to drive a screw into the wall," he said. "It's not working very well. It's very clumsy, and it caused a lot of damage in the process."

Sources: Dale Kasler, *Sacramento Bee*, 1/14/04; Seth Hettena, *AP/San Francisco Chronicle*, 2/8/04; Bettina Boxall, *Los Angeles Times*, 1/26/04 and *Greenwire*, 2/9/04

Governors Call for More State ESA Authority

The National Governors Association (NGA) in late February passed a resolution calling for states to have a greater role in Endangered Species Act (ESA) regulation, a position that is consistent with the Bush administration's efforts to apply a more collaborative framework for ESA decisions. The NGA's Natural Resources Committee, chaired by Colorado Gov. Bill Owens (R), adopted the resolution following a panel discussion.

It was the latest in a long line of NGA resolutions dating back to 1994 calling for more state involvement in ESA interpretation and enforcement. The resolution calls for the reauthorization of the ESA based on increasing the role of states, streamlining the law, and providing concrete information and technical support for landowners and water users so they can more fully participate in species protection.

The final resolution advocates allowing states to develop their own conservation and recovery plans after agreeing to adhere to certain federal standards. "The act can be effectively implemented only through a full partnership between the states and the federal government," the resolution states. The resolution also calls for allowing states to delist species when they have reached their recovery goals.

The NGA also advocates allowing judicial review of species listings, rather than only for denials of listing petitions as is the case today. The resolution says further that states should be exempted from the requirements of the Federal Advisory Committee Act (FACA), which requires that federal panels consisting of private-sector individuals be open to public scrutiny. "FACA is an obstacle that prevents the free flow of information between states and federal agencies with wildlife management responsibilities," the resolution states.

The resolution directs Congress to clarify the differences between endangered and threatened species. "When a species is classified as threatened, regulatory restrictions appropriate to endangered species must give way to greater deference to states, greater program flexibility, and a broader range of permissible actions in developing a creative conservation program." The NGA also cites lack of funding as an impediment to recovering species and recommends a national task force be formed to devise new funding strategies.

Andrew Freedman, *Greenwire*, 2/24/04

Endangered Silvery Minnow May be Moved

Interior Secretary Gale Norton will "give serious consideration" to a proposal by Sen. Pete Domenici (R/NM) and Sandia Pueblo Tribal Gov. Stuwart Paisano to relocate the endangered silvery minnow further upstream in the Rio Grande River to avoid confrontations with downstream water users. The minnow's primary habitat is in the southern part of the river south of Albuquerque, which often runs dry and requires water diversions from nearby farmers and towns. Domenici and Paisano also proposed sanctuaries for the fish on tribal lands north of Albuquerque.

Meanwhile, a January 5 decision by the 10th Circuit Court of Appeals threw out an earlier ruling that water imported from the Colorado River Basin for New Mexico's growing cities may not be used to provide habitat for the minnow. That decision vacated a June 12 opinion by the court's three-judge panel that required the San Acacia stretch of the Rio Grande, 50 miles south of Albuquerque, to maintain a flow of 50 cubic-feet per second for the endangered fish. In order to maintain the minimum flow, water needed to be released from Heron Reservoir.

The injunction, which expired in 2003, essentially meant the Endangered Species Act took precedence over water contracts that the city of Albuquerque and the *Middle Rio Grande Conservancy District* own. But Domenici said we "should bring the minnow to the water instead of the water to the minnow". "I know the technical people don't like innovation", he said, "and I know they aren't going to like this". Domenici said he brought the issue directly to Norton to make sure she hears it "before they tell us they can't do it.".

AP and *Santa Fe New Mexican*, 2/13/04 and *Greenwire*, 2/17/04

Corps Receives Engineering Award for UMR Project

The U.S. Army Corps of Engineers (Corps), St. Paul District, recently received a 2004 Chief of Engineers environmental Award of Excellence for its Pool 8 Islands habitat project near La Crosse, WI. We applaud the St. Paul District for this important award.

Corps headquarters established this biannual awards program in 1965 to recognize and promote excellence in design and environmental achievement by its engineers and professional contractors. This year, the mostly non-Corps judges received 17 entries in the environmental category, eight of which were selected for awards. Only the St. Paul District received the highest award presented – the award of excellence.

The Pool 8 habitat project is part of the Upper Mississippi River Environmental Management Program (UMRS-EMP) and was planned and designed in cooperation with the U.S. Fish and Wildlife Service, the Wisconsin and Minnesota Departments of Natural Resources and local interests. The project took almost 10 years and $4.5 million to complete. It consisted of rebuilding more than four miles of islands in Pool 8 that eroded between 1939-1989, following lock and dam construction on the Upper Mississippi River. This erosion was caused by wave action, floods, river currents and ice action and resulted in a decline of more than 1,000 acres of aquatic habitat for waterfowl and fish.

"By restoring the islands, we were trying to do what would happen naturally without the locks and dams," said Jon Hendrickson, Corps hydraulics engineer. "River currents and sediment transport were returned to more natural conditions, wind-driven wave action was reduced and diversity of habitat was restored."

About the project, the panel of judges said, "This comprehensive project documents the success of restoration over time. A combination of hydraulics, geotechnical and biotechnical improvements was used to set an example for successful floodplain restoration along the Mississippi. [It is] an outstanding example of an engineering solution that has stood the test of time and successfully integrated itself with nature.

"Although not a large public works project, the design challenges and innovative solutions were outstanding and the success of the design concept has been clearly documented," they continued. "By using earth fill and rock to create islands and restore natural vegetation and the floodplain, the habitat conditions for migratory birds, fish and other species were optimized. The project required complex hydraulic, geotechnical, ecological, and biotechnical analysis, and deserves the highest award."

Numerous individuals from the district office and other agencies supported the completion of the Pool 8 Islands habitat project. About receiving this award, Corps' project manager Don Powell, said, "The award recognizes the expertise of the multi-agency team that planned and designed the habitat restoration project along with local public input. The success of the project in achieving the return of aquatic vegetation to the area is a result of many people working together toward a common goal."

The Pool 8 Island Project was initially conceived by a group of biologists with the Upper Mississippi River Conservation Committee (UMRCC) in the early 1980's, so it took nearly 25 years to come to fruition. It and many other UMRS-EMP projects are clearly examples of environmental progress made on the Upper Mississippi River through the long-term persistence of groups like the UMRCC.

The UMRCC was formed by the conservation and natural resource departments of the five Upper Mississippi River states (MN, WI, IA, IL and MO) in 1945, with the assistance of the U.S. Fish and Wildlife Service and the Army Corps of Engineers. The UMRCC is one of MICRA's cooperating sub-basin groups and serves on MICRA's Executive Board. In fact, the UMRCC organization served as a model used in the formation of the MICRA organization in 1991.

Source: *USACE, St. Paul District News Release #PA-2004-015*, 3/4/04

Grass Carp Clarification

The January/February issue of *River Crossings* contained an article entitled, "*Genetically Modified Organisms – Potential Invasive Species*". In that article we stated that: "Grass carp were imported from Asia, sterilized using triploidy techniques, and then stocked as a GMO to control aquatic vegetation in lakes and ponds beginning in the early 1970's. Critics were told that the species was sterile, and that reproduction in the wild was impossible because of the induced triploidy. But, 100% sterility had not been achieved, so after escaping confinement, the grass carp produced breeding populations in the wild, and continues to expand its range in the U.S. as a major nuisance species."

While grass carp are being used in that way and for that purpose in portions of the U.S. today, Mike Armstrong, Arkansas Game and Fish Commission (AGFC), one of our members, wanted to clarify the history of how the grass carp were imported into the U.S. in the first place; how triploidy came to be used; and how wild, spawning populations of grass carp came to exist in the U.S. Mr. Armstrong said that inaccuracies in our article lead the reader to the conclusion that "…triploid grass carp stockings contaminated with fertile, diploid fish resulted in the eventual establishment of wild, spawning grass carp populations in the Mississippi River Basin (MRB)". "It is much more likely", he said, "that wild, spawning grass carp are the result of widespread use of diploid grass carp throughout a number of basin states prior to the development of triploidy."

Large grass carp collected by biologists from the Missouri River.

He summarized grass carp establishment in the U.S. as follows: "Grass carp were imported into the U.S. by the U.S. Fish and Wildlife Service (FWS) in 1963 as a means to control aquatic vegetation in aquaculture ponds. The fish were first held at the FWS Fish Farming Experimental Station in Stuttgart, AR. Broodstock were later transferred to Auburn University in Alabama and the Joe Hogan State Fish Hatchery in Lonoke, AR. The use of fertile grass carp in aquaculture ponds began in the mid-1960s and the first public water stocking occurred in 1968 when the AGFC stocked Lake Greenlee, a 300-acre four-levee reservoir in eastern Arkansas. The fish proved successful and by the late 1970's fertile, diploid grass carp were actively being stocked in nine MRB states (AR, MS, AL, TN, OK, MO, IA, KS, and eastern CO). The first evidence of wild spawning of grass carp occurred with the collection of larvae from the Mississippi River in 1979.

'Interest in large scale production of sterile grass carp grew through the early 1980's over concerns regarding the presence of wild, spawning fish in the Mississippi River. Successful production of functionally sterile, triploid grass carp was completed by private aquaculturists in 1983 and the first triploid grass carp were marketed in 1984. Techniques for the production of triploidy were considered proprietary, intellectual property early on. The Triploid Grass Carp Act of 1995 established a certification process under FWS authority and required the testing of each fish by the producer prior to shipment. Under the certification process FWS officials sample an allotment of 120 fish for Quality Assurance and Quality Control (QA/QC).

'Twenty-five states, principally along the east and west coasts, currently allow the importation of triploid grass carp under restrictive permit. To date, there is no evidence of wild, spawning grass carp in any of these states. The nine states mentioned above still allow the stocking of diploid grass carp. However one feels about the use of grass carp as a biological control, or the use of functionally sterile triploid grass carp as a preventative measure, it is highly unlikely that the presence of wild, spawning grass carp within the basin is the result of contaminated triploid stockings. It is much more likely that these fish originated with the escapement of fertile diploids extending back to the early stockings of the 1970s."

It should be pointed out that the former FWS Fish Farming Experimental Station, mentioned above, is now operated by the U.S. Department of Agriculture as the Harry K. Dupree Stuttgart National Aquaculture Research Center. The Center's mission is to conduct aquaculture research to address the highest priority needs of the U.S. aquaculture industry, including a Freshwater Systems Production Research Unit which develops feeds and improves culture strategies for warmwater fish species, other than catfish, such as hybrid striped bass, baitfish, ornamental fish and carp.

For further information contact: Michael Armstrong, Assistant Chief/Management Fisheries Division, marmstrong@agfc.state.ar.us, (501) 223-6372

Herpes Virus Threatens Carp

Aquaculturists and fish disease experts are becoming increasingly concerned about how to contain a viral disease that is spreading rapidly around the world and razing carp populations. The disease threatens two important fish species: the ornamental koi carp industry, which is worth tens of millions of dollars in Japan, and the common carp, the world's fourth most-farmed fish.

Meanwhile, those of us faced with the spread of Asian carp, are hopeful that the virus will affect them and not our other desirable native fish populations. Fish populations are periodically struck with viral diseases, but koi herpes virus, or KHV, is killing four out of every five fish that it infects. "In the past 30 years it's the worst and most rapidly spreading virus I've dealt with," says Ron Hedrick, who studies infectious diseases in fish at the University of California, Davis.

The herpes virus was first isolated in Israel in 1998, and has since been detected in ornamental koi carp in Europe, Asia and the United States. Last year it started killing large numbers of common carp in Japan. Authorities there were alerted to the problem in October, when fish began dying in *Ibaraki Prefecture's* Lake Kasumigaura, where more than half of Japan's farmed carp are produced.

By the end of 2003, the disease had been reported in common or koi carp in 23 of Japan's 47 prefectures, according to Motohiko Sano of the *National Research Institute of Aquaculture* in Tamaki. Experts fear that the virus could cause further economic damage if it spreads to farmed carp stocks in other countries – particularly in China, which produces three-quarters of the world's farmed carp. "We could have a situation where it reaches the wild population and potentially decimates it," says Hedrick.

One point of concern among fish disease experts is the lack of an effective test for the virus, particularly one that can reliably detect it during its sometimes lengthy asymptomatic phase. "The industry is almost screaming for a detection method that will tell you where this virus is," says Keith Davenport, chief executive of Britain's *Ornamental Aquatic Trade Association*, based in Trowbridge.

Researchers also want to know where the new virus first emerged – whether it jumped into carp from another species, for example. This might help them anticipate and prevent other new fish infections. "Finding out where these things are originating might change the way they are handled in the future," says Hedrick.

Another issue is whether international trade in ornamental fish, which is thought to have fuelled the spread of the virus, should be more tightly controlled. Although fish imported for aquaculture are subject to rigorous health inspections, regulations on the transport of ornamental fish are more hit and miss.

Some researchers say that the virus should be included in a list of certifiable diseases compiled by the *World Organization for Animal Health*. Nations would then be obliged to notify the agency within 24 hours of the disease being detected. But Davenport argues that good practice within the industry can limit the disease without the need for further formal regulations. "Industry has no wish to trade in fish with this virus present," he said.

Source: Helen Pearson, *Nature*, 2/12/04

Meat and Poultry Products Industry Effluent Limitations Set

The USEPA on February 26th established new wastewater discharge limits for the Meat and Poultry Products (MPP) industry reducing discharges of conventional pollutants, ammonia, and nitrogen to rivers, lakes, and streams. The new regulation affects about 170 facilities that discharge wastewater from slaughtering, rendering, and other processes such as cleaning, cutting, and smoking. And, for the first time, establishes effluent limits for poultry processors.

EPA Administrator Mike Leavitt signed the rule just in time to meet a deadline imposed by a court settlement with the *Natural Resources Defense Council* (NRDC). Since 1974, EPA has promulgated effluent guidelines for more than 50 industry sectors. Other sectors to face new rules from the NRDC settlement include the construction, coal mining and aquaculture industries

Nutrients, including nitrogen, are the fifth leading type of pollutants contributing to the impairment of rivers and streams. Nutrients are the leading contributor of pollutants to impaired lakes. Nitrogen pollution from meat processors comes in several forms, including ammonia discharges and releases of nitrates into waterways. Excess nitrogen can lead to fish kills, reduce aquatic biodiversity and feed the growth of toxic algae such as "red tide" and *Pfiesteria piscicida*, a bacteria that kills fish.

Scientists believe that excess nitrogen from farm fertilizers and other runoff is responsible for massive "dead zones" in the Chesapeake Bay and the Gulf of Mexico near the Mississippi River. Such dead zones are characterized by oxygen levels too low to support fish and other aquatic life. At its peak in 2003, the Chesapeake Bay dead zone was estimated to be about 250 square miles.

The final rule applies to direct discharges of wastewater from existing and new:
- Meat first processors (slaughterhouses) that slaughter more than 50 million pounds per year;
- Meat further processors that generate more than 50 million pounds per year of finished products (examples: bacon or sausage);
- Independent renderers of meat and poultry products that use greater than 10 million pounds per year of raw material;
- Poultry first processors (slaughterhouses) that slaughter more than 100 million pounds per year; and
- Poultry further processors that generate more than 7 million pounds per year of finished products (examples: ready-to-cook chicken cutlets or ground turkey).

The rule also applies to direct discharges of wastewater from new poultry processors at lower production thresholds, specifically, to new
- Poultry first processors (slaughterhouses) that slaughter less than or equal to 100 million pounds per year; and
- Poultry further processors that generate less than or equal to 7 million pounds per year of finished products.

The rule will apply to major firms like *Tyson Foods Inc*., the world's largest producer and marketer of beef, pork and chicken products, "as well as to some smaller companies," said an official with the *American Farm Bureau Federation*. The meat processing industry is generally satisfied with the rule because the facilities it targets "are what we view as typical point sources," the official added.

The regulation revises the existing effluent guidelines for the meat industry by adding ammonia and total nitrogen limits for meat slaughterhouses, and total nitrogen limits for meat further processors and independent renderers. For poultry slaughterhouses and further processors, the rule establishes limits for conventional pollutants, ammonia, and total nitrogen.

EPA estimates reductions in the discharge of total nitrogen of about 27 million pounds per year and reductions of conventional pollutants (e.g., BOD, total suspended solids, oil and grease) of about 4 million pounds per year. EPA further estimates water quality benefits of about $2.6 million, primarily from increased recreational opportunities, such as swimming and fishing. There are likely to be other ecological benefits, although these are harder to quantify. EPA estimates compliance costs of $58 million per year.

Sources: Marty Coyne, *Greenwire*, 3/1/04; and *USEPA Fact Sheet 821-F-04-004*

EPA Penalties Raised for Violations

The USEPA on February 13th issued a new rule that will provide a double digit increase in the monetary penalties that the agency can levy against companies that break environmental laws. The rule increases the maximum penalties by 17.23% above current levels. For example, the maximum penalty under the primary laws enforced by EPA – the Clean Water Act, Clean Air Act, the Safe Drinking Water Act, the Resource Conservation and Recovery Act and Superfund – are now $32,500 per day per violation.

The rule, required under the 1996 Debt Collection Improvement Act, is aimed at ensuring that maximum penalties are adjusted for inflation every four years. Although the EPA last updated the penalties in 1996, the rule notes that its efforts to do so again in 2002 ran into a snag because of differences among EPA and other agencies on how the penalties are rounded. Some agencies rounded the increase based on the amount of the current penalty before adjustment, while other agencies have rounded the increase resulting from the Consumer Price Index calculation.

EPA issued a final rule in 2002 with roughly the same increase as today's rule, which meant that it would have become final 30 days after appearing in the *Federal Register*. But the General Accounting Office protested EPA's rounding method and consequently EPA is now using the Consumer Price Index approach. Despite EPA taking twice as long to adjust penalties as is allowed by the debt collection law, the amount of the increase reflects the total increase in inflation since 1996, said an agency official familiar with the rule.

Publication of the rule came a few days after the U*.S. Public Interest Research Group* (PIRG) released its own analysis concluding that EPA's delay in updating the civil penalty amounts means the agency collected $39 million less than it would have otherwise. Because the penalties adjustment is not retroactive, EPA "compromises its mission of enforcing environmental statutes and deterring illegal pollution by removing the economic incentives for violation," PIRG said.

But the EPA official familiar with the new rule disagreed, noting that the civil penalties adjustment is only one factor affecting how much money the agency collects from violations of the law. "The driving factor is the economic benefit calculation in penalties and EPA automatically updates it every year," this source said. Furthermore, PIRG's contention that industry reaped a windfall of $39 million because of the delay in increased penalties is flawed because the agency only seeks maximum penalties for the most egregious violations of environmental laws, according to the EPA official. "We base penalties on how serious a violation is and whether the company is recalcitrant" in addressing the pollution problem.

EPA under the Bush administration has repeatedly come under fire for its enforcement activities. Last year, a *Knight-Ridder* analysis of the agency's enforcement records showed that administrative penalties that the agency collected during President Bush's tenure dropped 28% and the agency has referred 5% fewer enforcement cases to the Justice Department.

Source: Marty Coyne, *Greenwire*, 2/13/04

Lawsuit Blocks Double-Crested Cormorant Control Plan

Four environmental groups filed suit in federal court in early February to stop a Fish and Wildlife Service (FWS) rule allowing state, federal and tribal officials in 24 states to kill double-crested cormorants to protect commercial fish populations. *The Fund for Animals*, the *Humane Society of the United States*, *Defenders of Wildlife* and the *Animal Rights Foundation of Florida* filed the suit in U.S. District Court in New York City alleging FWS failed to justify the new rule.

The FWS declined comment on the suit, citing policy against speaking about litigation. The suit argues that the FWS failed to justify the new rules. "The scientific evidence clearly indicates that double-crested cormorants are, by and large, not responsible for declining sport fish populations," said Bette Stallman, a wildlife scientist with the *Humane Society*.

Last year, FWS authorized states to reduce populations of the double-crested cormorant, a migratory bird whose fish-gorging habits are a nuisance to aquaculture operations and traditional fisheries. Under the rule, state officials, mostly in the South and Midwest, can use a variety of means to reduce the bird's population, including trapping, killing and confiscation of unhatched eggs. In the past, such takings would have required special permission from the FWS. The birds are protected under the Migratory Bird Treaty Act, and the federal government must authorize killing them. Sickened by DDT contamination, the birds were scarce during the 1960s and 70s, but have rebounded to a current population estimate of about 2 million, according to FWS officials.

Those who support hunting said the birds are numerous enough to threaten commercial fishing and fish farming. "They should talk to people in Lake of the Woods who have had islands destroyed," said Collin Peterson (MN/D), referring to a resort area on the Minnesota-Canada border. "What these birds do is eat two to three times their weight of fish in a day. They are very deadly predators." "They're a big nuisance, and there are no natural predators to control them," he added. "They've been spreading too."

"Cormorants, like many other birds, eat fish to survive, and should not be punished for doing what comes naturally," said Michael Markarian, president of *The Fund for Animals*. "Writing a blank check to kill tens of thousands of protected birds at any time and any place is an extreme knee-jerk reaction to placate the sport fishing and commercial fish farming industries,"

Sources: Frederic J. Frommer, *AP/St. Paul Pioneer Press*, 2/6/04; and *Greenwire*, 2/6/04

Stream Restoration Boosts Economy

Freeman House, a frustrated commercial salmon fisherman, in 1978 began planting willows on the banks of the Mattole River to improve conditions for wild salmon. According to a recent study, the restoration work he pioneered accounted for 300 jobs and brought $14.5 million into Humboldt County, CA in 2002. The report released by *Forest Community Research*, a nonprofit social science organization, found that natural resources restoration work generated more than $65 million between 1995 and 2002 in the North Coast county – mostly from contracts and grants from state and federal agencies.

It has spawned a complex, well-coordinated network of groups dedicated to reinvesting in ecosystem health, said Mark Baker, author of the 60-page report. Among them are federal, state, and local government agencies, tribes, private land managers, nonprofit watershed groups and private contractors. Together they have put Humboldt County at the leading edge of restoration in the United States, Baker said.

The model is especially important with the current national focus on natural resources and forest restoration brought by recent legislation, including the Healthy Forest Restoration Act and the National Fire Plan, said Chris Larson, executive director of the *Mattole Restoration Council* in Petrolia. The restoration economy emerging in Humboldt County parallels new trends throughout the western United States. Local residents planting trees, stabilizing stream banks and restoring watersheds are creating an economy "based on healing the Earth and providing living-wage jobs for their communities," Larson said.

House, author of *"Totem Salmon"* and former director of the *Mattole Restoration Council*, said his fascination with salmon drew him to the coastal creeks where the fish spawn. He and others soon realized the health of the streams was tied to the health of the surrounding habitat, which stretched to the ridgelines of every watershed. "Restoration is a much bigger undertaking than anyone anticipated back then," said Sungnome Madrone, co-director of the Redwood *Community Action Agency* in Eureka. Today it includes road repair and removal, stream restoration and wild-salmon rearing. Many unemployed loggers are working at restoration jobs using the skills they honed felling trees.

Baker's study estimates the value of Humboldt County's restoration economy at about twice the value of commercial fishing in 2002. He estimated that $150 million in restoration funding is needed to address water-quality and salmon-habitat issues related to county roads in a five-county north state region.

Source: Jane Braxton Little, *Sacramento Bee*, 3/17/04

Buckyballs Damage Fish Brains

Buckyballs, a spherical form of carbon discovered in 1985 and an important material in the new field of nanotechnology, can cause extensive brain damage in fish. This was the conclusion of research presented in late March at a national meeting of the *American Chemical Society* in Anaheim, CA by Eva Oberdörster, an environmental toxicologist at Southern Methodist University in Dallas. She said the buckyballs also altered the behavior of genes in liver cells of the juvenile largemouth bass she studied.

Buckyballs are part of a group of materials called fullerenes for their structural resemblance to geodesic domes. Synthetically produced buckyballs, along with more recently created fullerenes like carbon nanotubes, have played a major role in igniting interest in nanotechnology, the field in which researchers manipulate materials with dimensions measured in nanometers – particles that measure a billionth of a meter in size – tens of thousands of times thinner than a human hair.

The new carbon molecules have been studied for numerous potential uses in advanced computer processors, lubricants, fuel cells and drug delivery systems. Some experts have said that scientists could use nanoparticles to make lightweight and fuel-efficient cars. Others have said they could use nanotechnology to build panels on the moon to store energy and beam it back to Earth. While others have said that engineered nanospheres, which resemble tiny cages, could be used to capture toxic metals. In fact, the U.S. government has promised $4 billion over the next four years for scientific study; it estimates that the annual market for nanotechnology-based goods could be $1 trillion.

But beneath the hype there has been an undercurrent of environmental concern, more so in Europe than in the United States. Critics are concerned about the use of titanium dioxide in nanotechnology. The chemical is nonreactive when used in common products such as skin lotions and paint, but in the form of nano-size particles it has been shown to be highly reactive and can "burn up" bacteria. Some scientists worry that such a chemical could significantly damage soil chemistry, which could "both create serious environmental pollution and also impoverish the soil for many decades".

Oberdörster's report is the latest of several studies that have raised questions about the potential health and environmental effects of synthetic nanoscale materials. Her research tested nine juvenile largemouth bass. None died after being exposed, but there was a breakdown of some fatty tissues in their brains after 48 hours. This brain damage in the exposed fish was 17 times higher than in nine unexposed bass. There were no outward behavioral changes in the damaged fish, although such illness is often not readily visible in wildlife, the researchers say. Other researchers, including Dr. Oberdörster's father, Günter Oberdörster, a professor of environmental medicine at the University of Rochester, have shown that such particles can enter the brain, but the recent fish studies were the first to indicate destruction of lipid cells, the most common form of brain tissue.

Oberdörster also studied the effect of buckyballs on water fleas. That work suggested that buckyballs, based upon a scale established by the Environmental Protection Agency, were "moderately toxic," or slightly less harmful than copper, but greater than some industrial solvents. It is notable, supporters of nanotechnology say, that there have been no studies to show that buckyballs have accumulated in the environment so far, let alone at the 0.5 parts per million level tested by Oberdörster. "I want to emphasize that the benefits of nanotech are great, and we definitely should not put the brakes on positive nanotechnology research," Oberdörster said. "But at the same time, we need to be doing toxicology studies. Just alongside the traditional research, we should also look at some of these side effects. This is the first indication there might be some problem in environmental species."

"It's very important that this kind of work be done," said Kristen Kulinowski, executive director of Rice University's *Center for Biological and Environmental Nanotechnology* (CBEN). "But any results from a single study have to be viewed after the peer review process, and this work was not peer reviewed." Dr. Oberdörster said that her results underscored the need to learn more about how buckyballs and other nanoscale materials are absorbed, how they might damage organisms and what levels of exposure represent hazards. But she rejected arguments made by some nanotechnology critics that the limited toxicological research to date justified a moratorium on the development and sale of the new materials. "This is a yellow light, not a red one," Dr. Oberdörster said in a telephone interview.

Vicki L. Colvin, whose laboratory at Rice University's CBEN supplied the buckyballs used by Dr. Oberdörster, was even more cautious about the results. Dr. Colvin said that the surface characteristics of the lab's buckyballs, which are not a form that is commercially available, needed further study. She said that they had not been coated, a process that is commonly used to limit the toxicity of such materials in applications like drug delivery. David B. Warheit, a *DuPont* researcher, said that how nanoparticles are coated and how quickly they clump together may be more important factors in toxicity than their size

For example, *C Sixty Inc.,* a start-up company in Houston working on drugs and drug delivery systems based on buckyballs, said that unreported data on its coated buckyballs in zebra fish embryos and adult rodents showed toxicity levels comparable to or lower than many existing medicines. The rodent tests indicated that *C Sixty's* buckyballs collect in the kidneys and liver and are excreted like other wastes after completing their function of delivering medicines, said Russell M. Lebovitz, the company's vice president for research and business development.

Japan's *Mitsubishi Corp.* is already making hundreds of tons of the material for industrial purposes, and a dozen or more companies around the world are also ramping up production efforts, according to *CMP Cientifica*, a European nanotechnology research and consulting firm.

Sources: Barnaby J. Feder, *The New York Times*, 3/29/04; Eric Berger, *Houston Chronicle*, 3/29/04; and *Greenwire*, 3/29/04

Tiffany & Co. Pushes for Tighter Mining Regulations

Tiffany & Co., one of the world's foremost jewelry retailers, took an unprecedented stand against U.S. mining regulations in late March, in a letter to Forest Service Chief Dale Bosworth. The letter appearing as an advertisement in the *Washington Post* took issue with the Rock Creek mine in Montana's Cabinet Mountain Wilderness area, as well as with the 1872 General Mining Act that has allowed for project approval.

The move marks the first time a major jewelry company has taken such a visible stance on a specific U.S. mine and called for reforms to the main law regulating mining in this country. *Tiffany*, which is based in New York, had net sales last year of $2 billion. Environmental analysts said the push by *Tiffany* could be an early sign of fears of consumer backlash from the harmful environmental effects that precious metals mining can have.

Tiffany Chief Executive Officer Michael Kowalski wrote in the letter that a proposed copper and silver mine in Montana's Cabinet Mountains Wilderness would cause pollution and environmental degradation to the area. The *Sterling Mining Co.* proposed the mine, which would be within the Kootenai National Forest, and won the approval of the Forest Service's Northern Regional Office last fall. Analysis of the Rock Creek mine predicts it would discharge about 300 million gallons of treated wastewater per day into the Clark Fork River, a major trout stream that feeds Lake Pend Oreille. "Vast quantities of mine tailings – a polite term for toxic sludge – would be stored in a holding facility of questionable durability," Kowalski wrote. "Wildlife already struggling to survive would face new perils."

The mining operation would be the first major mine ever built beneath a wilderness area. Although the 1964 Wilderness Act prohibits commercial development in wilderness areas, it includes a special provision allowing mining companies to patent claims for 20 years after the law's adoption. During that window, the *American Smelting and Refining Co*. staked claims in the Cabinet wilderness – one of the first wilderness areas designated under the law – and proposed a copper and silver mine at Rock Creek. *Sterling* purchased the mineral rights for Rock Creek and the nearby Troy Mine from *ASARCO* in 1999.

Kowalski also wrote in opposition to the nation's overarching mining law, which he said is obsolete and causes perverse incentives to encourage mining. "Other disputes of this nature, involving public lands administered by the Forest Service or the Bureau of Land Management, are too often settled in favor of developers because statues and departmental regulations tilt their way," he wrote. "The 1872 Mining Act is a particularly egregious example." "We at *Tiffany & Co*. understand that mining must remain an important industry. But like some other businesses benefitting from the trade in precious metals, we also believe that reforms are urgently needed," Kowalski wrote.

But Agriculture Department Undersecretary Mark Rey, a Bush administration official, criticized *Tiffany's* letter saying they wasted company money. "I'm guessing this ad cost upwards of $50,000," he said. "For $49,999.63 less, they could have sent us this letter and given their customers a discount on their products." Rey went on to say that if fewer mines were built in the United States, more precious metals and stones would have to come from poorer countries lacking environmental and safety standards.

But *Tiffany* officials defended the ad in a follow-up press release: "It is by no means the first time that we have communicated with appropriate government officials about our desire to see precious metals and gemstones extracted in environmentally and socially responsible ways."

Carol Raulston of the *National Mining Association* (NMA) said she was "surprised and confused" by the advertisement. Raulston said NMA, which represents a variety of U.S. mining companies but not *Sterling*, has been in the process of a dialogue with *Tiffany* representatives to educate them about new sustainability practices that their member organizations adopted last year. Further, she said the letter did not take into account the 16 years of technical analysis by federal and state organizations that have found the mining proposal would be safe. And she said the mine proposal's water treatment process would meet standards for drinking water and aquatic life and a new tailings facility design would provide stability and water quality protection.

The Fish and Wildlife Service (FWS) released a biological opinion last year finding that grizzly bears and bull trout

would not suffer significantly from the mine. But environmentalists have vehemently opposed the mine every step of the way, finding support for their fight among business interests including a ski resort and real estate agents, who fear the area's appeal to tourists and second-home buyers will be soured by the mine. Three legal challenges against the mine are pending – one opposing the FWS biological opinion, one in state court opposing the mine's clean water claims, and a pending claim that environmentalists expect to file in May or June against the Forest Service, according to Lexi Shultz of *Earthworks*.

Stephen Esposito, president of *Earthwork*s, an environmental group that focuses on mining, said he hoped the move by *Tiffany* will be the first among other pushes from the business community for more sustainable mining practices. "The business community is poised to take a leadership position and recognizes that mining does not have to be done at the expense of communities and the environment and that there are some special places that should never be mined," Esposito said.

Sources: Nicholas K. Geranios, *AP/San Francisco Chronicle online*, 3/25/04; and Allison A. Freeman, *Greenwire*, 3/24/04

Proposed Mountaintop Removal Rules Attacked

Environmentalists and Appalachia residents rallied at recent Interior Department hearings against the Bush administration's proposal to change stream protections in mountaintop coal mining rules. The Interior Department proposed changes in January that would streamline mountaintop mining regulations on stream buffer zones, which environmentalists said would encourage the practice of burying waterways under waste rock and other mining refuse.

Current federal rules mandate that coal operations leave a buffer zone around streams, stating that "no land within 100 feet of an intermittent or perennial stream shall be disturbed by surface mining operations, including roads, unless specifically authorized." The rule states that regulators can make exceptions only if water quality and other environmental resources will not be adversely affected. The proposed new rules would alter the wording to allow such activities if they prevent additional damage to streams and minimize disturbances "to the extent possible, using the best available technology."

Officials with the federal Office of Surface Mining (OSM) defend the proposal as a clarification that would bring regulations in line with long-standing agency interpretation and practice. Agency officials said the change was necessary to align the buffer zone provision with other federal regulations, including the Clean Water Act and OSM's excess spoil rules.

But a coalition of environmental groups said at a press conference that the alteration eliminates the last standing clear prohibition on clogging streams with mining waste. "Let's be clear – there is no definitive or scientific way to monitor a 'to the extent possible' provision," said Carol Pope, *Sierra Club* president. "The best available technology is what they will claim they are using now – big machines making a big mess of our mountains," said Joe Lovett, executive director of the *Appalachian Center for the Economy and the Environment*, which has filed suit against the government over valley fills. "And we've seen that the minimization is none."

So-called mountaintop mining – a practice used to expose coal seams in West Virginia, Kentucky and other Appalachian states – involves shearing off the top of a mountain ridge and depositing the waste rock in adjacent valleys, many of which are coursed by small streams. The practice is preferred by mining companies because it allows access to low-sulfur coal that is near the surface, but environmentalists say valley fills are highly destructive to biological systems, including the waterways themselves.

In fact, the U.S. Fish and Wildlife Service in January sent a report to the West Virginia Department of Environmental Protection (DEP) urging state regulators to examine the amount of selenium that enters waterways as a result of mountaintop removal coal mining. At the behest of coal industry lobbyists, the state Legislature's joint Legislative Rulemaking-Review Committee approved a change to the state's clean water regulations eliminating the current selenium limits and instead creating a rule limiting the amount of selenium in fish tissue to 7.9 parts per million. The FWS report noted that studies have found concentrations over 4 ppm have caused death and reproductive problems in fish.

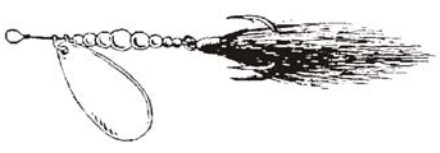
While environmentalists point out the ability of the new federal rule to encourage mountaintop mining, criticizing its potential to destroy landscapes and streams, they acknowledged that rule alteration would not actually lift any currently enforced environmental regulations. "This rule has never been enforced," Lovett said. The practical effect is that without the rule in place, the groups would not be able to fight in court against the commonly practiced mining techniques.

Representatives of the mining industry have said the rule change would not really result in any changes on the ground, but would provide regulatory certainty for current practices. A series of amendments to the Surface Mining Control and Reclamation Act (SMCRA) have established how valley fills can be constructed, but the buffer zone rules have never been changed to reflect that. Bradford Frisby, a lawyer for the *National Mining Association* (NMA) said the new rule would clarify existing permitting practices. "Our preference is that the rule be deleted entirely," he said, "There are other regulations that protect streams."

Dozens of other citizens, environmentalists, religious leaders and public health advocates testified against the proposal at the Interior Department hearings. The agency held four other hearings on the issue in KY, PA, TN and WV. "We know coal is important to the economy. But there is a right way and a wrong way to do things," said Melodye Flowers of Barboursville, WV.

Congressmen Frank Pallone (D/NJ) and Christopher Shays (R/CT) support the groups in criticizing the change. The House members introduced legislation two years ago that would add regulation of "fill material" to the Clean Water Act. "We will continue to fight not only with that legislation, but in general against mountaintop mining," Pallone said. "We will try to deal in a larger way with legislation."

Sources: Ken Ward Jr., *Charleston Gazette*, 1/20/04; G*reenwire*, 1/21/04; and Allison A. Freeman, *Greenwire*, 3/31/04



Meetings of Interest

May 2-6: AFS, 4th World Fisheries Congress - Reconciling Fisheries with Conservation: The Challenge of Managing Aquatic Ecosystems. Vancouver, BC. See www.worldfisheries2004org. Contact: fish2004@advance-group.com, (800) 555-1099

May 3-7: River Voices, River Choices. River Management Society's 7th biennial symposium, Lake Tahoe, CA. Contact: rms@river-management.org. See: www.river-management.org

May 5-7: First Annual Southeastern Ecology and Evolution Conference. Atlanta, GA. See: www.biology.gatech.edu/SEEC/SEEC. html. Contact: Alan Wilson, alan.wilson @biology.gatech.edu, (404) 894-8293

May 22-26: Missouri River Natural Resources Conference, Columbia, MO. See: www.infolink.cr.usgs.gov

Jun. 28-30: Riparian Ecosystems and Buffers: Multi-scale Structure, Function, and Management, Olympic Valley, CA. See: www.awra.org

Jul. 21-23: Climate Change and Aquatic Systems: Past, Present and Future. Plymouth, U.K. See: www.biology.plymouth.ac.uk/climate/climate.htm. Contact: Martin Attrill, matrill@plymouth.ac.uk

Aug 21-26: 134th Annual Meeting of the American Fisheries Society**.** Madison, WI. The Gathering: Leopold's Legacy for Fisheries. Contact: Betsy Fritz, bfritz@fisheries.org, (301) 897-8616

Aug. 23-Dec. 18: Fish Genetics Online, Kentucky State University. Fish Genetics (AQU 407/507), undergraduate and graduate internet courses. Contact: Dr. Boris Gomelsky, KSU Assistant Professor, bgomelsky@gwmail.kysu.edu

Sept. 12-17: 5th International Symposium, ECOHYDRAULICS, Madrid, Spain. The main focus will be restoration of aquatic habitats. Contact: Dr. Diego García de Jalón, ecohydraulics@montes. upm.es or Secretariat: ecohydraulics @tilesa.es. See: www.montes.upm.es/congresos/ecohydraulics, www.tilesa.es/ecohydraulics

Sep. 19-24: 13th International Conference on Aquatic Invasive Species, Ennis, County Clare, Ireland. See: http://www.aquatic-invasive-species-conference.org/

Congressional Action Pertinent to the Mississippi River Basin

Endangered Species Act (ESA) of 1973

S. 369. Thomas (R/CA). Amends the ESA to improve the processes for listing, recovery planning, and delisting, and for other purposes.

S. 1178. Enzi (R/WY). Amends the ESA to require the Federal Government to assume all costs relating to implementation of and compliance with that Act.

S. 2009. Smith (R/OR) and **H. R. 1662.** Walden (R/OR) and 18 Co sponsors. Amends the ESA to require the Secretary of the Interior to give greater weight to scientific or commercial data that is empirical or has been field-tested or peer-reviewed, and for other purposes.

H. R. 1194. Herger (R/CA). Amends the ESA to enable Federal agencies to rescue and relocate any endangered or threatened species that would be taken in the course of certain reconstruction, maintenance, or repair of man-made flood control levees.

H. R. 1235. Gallegley (R/CA) and Gibbons (R/NV). Provides for management of critical habitat of endangered and threatened species on military installations in a manner compatible with the demands of military readiness, and for other purposes.

H. R. 1835. Gallegley (R/CA) and 3 Co sponsors. Amends the ESA to limit designation as critical habitat areas owned or controlled by the Department of Defense, and for other purposes.

H. R. 1965. Gibbons (R/NV). Limits the application of the ESA with respect to actions on military land or private land and to provide incentives for voluntary habitat maintenance, and for other purposes.

H. R. 2602. Otter (R/ID). Amends the ESA to make the authority of the Secretary to designate critical habitat discretionary instead of mandatory, and for other purposes.

H. R. 2933. Cardoza (D/CA) and 17 Co sponsors. Amends the ESA to reform the process for designating critical habitat under that Act.

Federal Water Pollution Control Act (FWPCA) Amendments:

S. 170. Clean Water Infrastructure Financing Act of 2003. Voinovich (R/OH) and **H.R. 20.** Kelly (R/NY) and Tauscher (D/CA). Amends the FWPCA to authorize appropriations for State water pollution control revolving funds, and for other purposes.

S. 473. Feingold (D/WI) and 3 Co sponsors and **H.R. 962.** Oberstar (D/MN) and 21 Co sponsors. Amends the FWPCA to clarify the jurisdiction over waters of the U.S.

H. R. 738. Pallone (D/NJ) and 16 Co sponsors. Amends the FWPCA to clarify that fill material cannot be comprised of waste.

H. R. 784. Camp (R/MI) and 17 Co sponsors. Amends the FWPCA to authorize appropriations for sewer overflow control grants

H. R. 1560. Duncan (R/TN) Amends the FWPCA to authorize appropriations for State water pollution control revolving funds, and for other purposes.

H. R. 1624. Pallone (NJ/D). Amends the FWPCA to improve enforcement and compliance programs.

Energy

H. R. 1013. Radanovich (R/CA), Hastings (R/WA), and Walden (R/OR). Amends the Federal Power Act to provide for alternative conditions and alternative fishways in hydroelectric dam licenses, and for other purposes.

Floodplain Management

H. R. 67. Flake (R/AZ) and Hayworth (R/AZ). Provides temporary legal exemptions for certain management activities of the Federal land management agencies undertaken in federally declared disaster areas.

H.R. 253. Two Floods and You Are Out of the Taxpayers' Pocket Act of 2003. Bereuter (R/NE) and Blumenauer (D/OR). Amends the National Flood Insurance Act of 1968 to reduce losses to properties for which repetitive flood insurance claim payments have been made.

Forestry

S. 32. Kyl (R/AZ) and 4 Co sponsors and **H.R. 460.** Hayworth (R/AZ) and 7 Co sponsors. Establishes Institutes for research on the prevention of, and restoration from, wildfires in forest and woodland ecosystems of the interior West.

S. 1208. Collins (R/ME) and Reed (D/RI). Amends the Cooperative Forestry Assistance Act of 1978 to provide assistance to States and nonprofit organizations to preserve suburban forest land and open space and contain suburban sprawl, and for other purposes.

S. 1453. Leahy (D/VT) and Boxer (D/CA) Expedites procedures for hazardous fuels reduction activities and restoration in wildland fire prone national forests and for other purposes.

H. R. 1042. Udall (D/CO) and Udall (D/NM). Authorizes collaborative forest restoration and wildland fire hazard mitigation projects on National Forest System lands and on other lands, to improve the implementation of the National Fire Plan, and for other purposes.

Global Warming

S. 17. Daschle (D/SD) and 15 Co sponsors. Initiates responsible federal actions that will reduce global warming and climate change risks to the economy, the environment, and the quality of life and for other purposes.

S. 139. Lieberman (D/CT) and McCain (R/AZ). Provides for scientific research to accelerate reduction of U.S. greenhouse gas (GHG) emissions by establishing a market-driven system of GHG tradeable allowances; limit U.S. GHG emissions; and reduce dependence on foreign oil, and ensure benefits to consumers from the trading in such allowances.

H. R. 1578. Udall (D/CO). Promotes and coordinates global change research, and for other purposes.

Invasive Species

S. 144. Craig (R/ID) and 9 Co sponsors and **H.R. 119.** Hefley (R/CO). Requires the Interior Secretary to establish a program to provide assistance through the States to eligible weed management entities to control or eradicate harmful, nonnative weeds on public and private land.

S. 525. Levin (D/MI) and 15 Co sponsors and **H. R. 1080.** Gilchrest (R/MD) and 67 Co sponsors. Amends the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 to reauthorize and improve it.

S. 536. DeWine (R/OH) and 5 Co sponsors and **H.R. 266.** Ehlers (R/MI) and Gilchrest (R/MD). Establishes the National Invasive Species Council, and for other purposes.

H.R. 273. Gilchrest (R/MD) and Tauzin (R/LA). Provides for the eradication and control of nutria in Maryland and Louisiana.

H. R. 989. Hoekstra (R/MI). Requires the issuance of regulations to assure, to the maximum extent practicable, that vessels entering the Great Lakes do not discharge ballast water that introduces or spreads nonindigenous aquatic species and treat such ballast water and its sediments through the most effective and efficient techniques available, and for other purposes.

H. R. 1081. Ehlers (R/MI) and 67 Co sponsors. Establishes marine and freshwater research, development, and demonstration programs to support efforts to prevent, control, and eradicate invasive species, as well as to educate citizens and stakeholders and restore ecosystems.

H. R. 2310. Rahall (D/WV) and 17 Co sponsors. Protects, conserves, and restores native fish, wildlife, and their natural habitats through cooperative, incentive-based grants to control, mitigate, and eradicate harmful nonnative species.

Mining

H. R. 504. Udall (D/CO). Provides for the reclamation of abandoned hardrock mines, and for other purposes.

Public Service

S. 89. Hollings (D/SC) and **H.R. 163**. Rangel (D/NY) and 5 Co sponsors. Provides for the common defense by requiring that all young persons in the U.S., including women, perform a period of military service or civilian service in furtherance of the national defense and homeland security, and for other purposes.

S. 2188. Feingold (D/WI), McCain (R/AZ) and Daschle (SD/D) and **H.R. 2566.** Kind (D/WI) and 3 Co sponsors. Provides for reform of the Corps of Engineers, and for other purposes.

Public Lands

S. 124. Roberts (R/KS). Amends the Food Security Act of 1985 to suspend the requirement that rental payments under the conservation reserve program be reduced by users, through the establishment of a National Forest Ecosystem Protection Program.

S. 1449. Crapo (R/ID) and Lincoln (D/AR) and **H. 1904.** Cochran (R/MS). Improves the capacity of the Agriculture and Interior secretaries to plan and conduct hazardous fuels reduction projects on National Forest System and Bureau of Land Management lands and for other purposes.

S. 1938. Corzine (D/NJ) and 3 Co sponsors. Amends the Forest and Rangeland Renewable Resources Planning Act of 1974 and related laws to strengthen the protection of native biodiversity and ban clearcutting on Federal land and for other purposes.

H. R. 380. Radanovich (R/CA). Provides full funding for the payment in lieu of taxes program for the next five fiscal years, to protect local jurisdictions against the loss of property tax revenues when private lands are acquired by a Federal land management agency, and for other purposes.

H. R. 652. Andrews (D/NJ). Assures that the American people have large areas of land in healthy natural condition throughout the country to maximize wildland recreational opportunities for people, maximize habitat protection for native wildlife and natural plant communities, and to contribute to the preservation of water for use by downstream metropolitan communities and other users, through the establishment of a National Forest Ecosystem Protection Program.

H. R. 749. Udall (D/CO). Directs the Secretary of the Interior to establish the Cooperative Landscape Conservation Program.

H. R. 2169. Leach (R/IA) and 89 Co sponsors. Saves taxpayers money, reduces the deficit, cuts corporate welfare, protects communities from wildfires, encourages Federal land management agency reform and accountability, and protects and restores America's natural heritage by eliminating the fiscally wasteful and ecologically destructive commercial logging program on Federal public lands, restoring native biodiversity in our Federal public forests, and facilitating the economic recovery and diversification of communities affected by the Federal logging program.

H. R. 3324. Shays (R/CT) and 7 Cosponsors. Provides compensation to livestock operators who voluntarily relinquish a grazing permit or lease on Federal lands, and for other purposes.

Water Resources

S. 323. Landrieu (D/LA) and Breaux (D/LA). Establishes the Atchafalaya National Heritage Area, Louisiana.

S. 531. Dorgan (D/ND) and Johnson (D/SD). Directs the Interior Secretary to establish the Missouri River Monitoring and Research Program, to authorize the establishment of the Missouri River Basin Stakeholder Committee, and for other purposes.

S. 561. Crapo (R/ID) and 5 Co sponsors. Preserves the authority of States over water within their boundaries, and delegates to States the authority of Congress to regulate water, and for other purposes.

S. 993. Smith (R/OR). Amends the Small Reclamation Projects Act of 1956, and for other purposes.

S. 2244. Hutchison (R/TX) and Breaux (D/LA) and **H. R. 2890.** Saxton (R/NJ). Protects the public's ability to fish for sport, and for other purposes.

H.R. 30. Bereuter (R/NE). Amends the Water Resources Development Act of 1992 to authorize the Secretary of the Army to pay the non-Federal share for managing recreation facilities and natural resources on water resource development projects if the non-Federal interest has agreed to reimburse the Secretary, and for other purposes.

H. R. 135. Linder (R/GA) and 3 Co sponsors. Establishes the "Twenty-First Century Water Commission" to study and develop recommendations for a comprehensive water strategy to address future water needs.

H. R. 961. Kind (D/WI) and 5 Co sponsors. Promotes a Department of the Interior effort to provide a scientific basis for the management of sediment and nutrient loss in the Upper Mississippi River Basin, and for other purposes.

H. R. 1517. Graves (R/MO) and 6 Co sponsors. Amends the Land and Water Conservation Fund (LWCF) to limit the use of funds available from the LWCF Act of 1965 for maintenance.

H. R. 2557. Young (R/AK) and 4 Co sponsors. Authorizes the Secretary of the Army to construct various projects for improvements to rivers and harbors of the U.S., and for other purposes.

Wild and Scenic Rivers

H. R. 987. Herger (R/CA) and Doolittle (R/CA). Amends the Wild and Scenic Rivers Act to ensure congressional involvement in the process by which a river that is designated as a wild, scenic, or recreational river by an act of the legislature of the State or States through which the river flows may be included in the National Wild and Scenic Rivers System, and for other purposes.

Source: *U.S.. Congress On Line; http://www.access.gpo.gov/congress/cong009.html*

River Crossings

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

ADDRESS SERVICE REQUESTED

PRST - STD
U.S. POSTAGE
PAID
PERMIT NUMBER 83
BETTENDORF, IA