

# River Crossings

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## Asian Carp Fishing

Asian carp are becoming more and more common in the rivers of the Midwest and the Mississippi River Basin. Past issues of *River Crossings* have reported on the dilemma that these invaders have created for commercial fishermen (i.e. clogging their nets with unwanted fish) and recreationists (i.e. physical impact with large jumping fish).

Fisheries managers are now facing another dilemma — while more and more sport fishermen are catching the carp (which managers want to see), possession and transport of the fish are illegal in many states. The latter measure has been taken to prevent spread of the invaders to uninfested waters. Some states allow possession of “dead” Asian carp to encourage removal by fishing, but state fishing guides aren’t always clear on this issue. They simply say that it is “illegal to possess or transport Asian carp within the state”, with no distinction being made between “dead or alive”.

So while fishermen are encouraged to capture and kill as many Asian carp as possible, they are cautioned that while some states allow the possession and transport of “dead” Asian carp, others do not. Until this issue is clarified by the states, fishermen are urged to consult local fishing guides and local departments of conservation and natural resources offices before attempting to capture, possess or transport any Asian carp, dead or alive.



*Fifty pound bighead carp taken in Barkley Reservoir, TN.*

Anyone wishing to specifically fish for bighead or silver carp are faced with yet another dilemma. Because these two species are plankton feeders, they do not readily take a lure or traditional bait. Instead, their capture is usually accomplished accidentally by snagging. While anglers can find Asian carp snagging methods on the Internet, they should first consult their local fishing guides and departments of conservation and natural resources offices regarding laws which regulate this activity. These regulations often vary by state and locality.

In the meantime, efforts continue to encourage the U.S. Fish and Wildlife Service to list the black, bighead and silver carp as injurious species under the federal Lacey Act. This action would prohibit the transport of “live” Asian carp (excluding grass carp) across state lines nationwide, and would go a long way toward keeping Asian carp from invading the nation’s other watersheds including the Columbia, Colorado and Red River of the North.

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## Recent Black Carp Catch No Surprise to River Fisherman

The recent capture of a black carp, reported from the Red River (LA), came as no surprise to Rusty Kimble, a third generation commercial fishermen. Kimble said he didn't see what the fuss was all about because he'd been catching black carp on the river near the Atchafalaya Basin and selling them to fish markets for 10-12 years.

The saga began earlier this year when Kimble, 35, was approached by a Louisiana Department of Wildlife and Fisheries biologist who told him about a new fish in Missouri that could make its way to Louisiana. "When he described it to me, I said, 'I've got news for you, buddy, they've been here. I've been catching about two-three a year for about 12 years,'" Kimble said. "The guy told me that the next time I caught one, to keep it for him. The next day I caught one by accident and four or five days later, I caught another one."

Currently netting him about 20 cents/lb., Kimble describes black carp as a "long, cylindrical fish with a blueish-gray scale." "They have a head very similar to a goo-sucker, but the biologist told me they aren't sucker fish ... they eat shell fish, like mussels," Kimble said. And therein lies the threat of the black carp. Growing up to three feet in length and weighing as much as 150 pounds, the fish is considered a severe threat to native freshwater mussel and snail populations. Many native mussel and snail species are on state and federal threatened and endangered species lists.

The black carp is a non-indigenous, or exotic species that was introduced into the U.S. from Asia to assist catfish farmers with biocontrol of the yellow grub. Yellow grubs penetrate channel catfish tissue after the fish consume infected snails in aquaculture ponds. The black carp are supposed to feed on snails in the ponds and thus break the yellow grub's life cycle. Biologists across the Mississippi River Basin have been concerned that black carp could escape from catfish ponds in the same way that silver and bighead carp did a number of years ago.

While the capture of a black carp in the Red River was alarming to Louisiana inland fisheries biologists, the news sent a shock wave to researchers throughout the Mississippi River Basin. Just like the other Asian carp species, there is no reason to believe

that this one won't also migrate to suitable habitats throughout the basin. Other individual black carp have already been captured in a backwater lake (Horseshoe Lake) near the Mississippi and Ohio River confluence (March 2003) and just downstream from Lock and Dam 24 of the Upper Mississippi River (June 2004). The recently captured Upper Mississippi River fish weighed 10.8 lbs. and measured 29.7 inches in length.



*Horseshoe Lake black carp.*

Kimble said he told Louisiana biologists that whenever they're looking for an invasive species, like the carp, they should post a flyer at the fish markets for commercial fishermen to see. "We're out there and

we know what's in the water," he said.

Kimble, who has owned and operated his boat for 21 years, said the inedible bighead carp is the biggest threat to commercial fishermen. "I don't know what kind of impact carp are having on the sport fishing, but they're having a big economic impact on the commercial fishing industry," he said. "They are so thick in some areas that we can't put our nets out. They're powerful fish and will go through anything we have."

Kimble said the worst thing about bighead carp is that they have no value to fishermen. "We pile them on the back (of the boat) and let the buzzards eat 'em, because nobody wants 'em," Kimble said. "The game wardens don't want them, we don't want them here ... but they're taking over the river."

Source: Jimmy Watson, *tuscaloosaneews.com*, 6/7/04

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## New EPA Fish Farm Rules Exempt Catfish Farms and Invasives

A new U.S. EPA rule requires large fish farms to reduce waste discharges from pens and cages where salmon, trout and other species are raised primarily for human consumption and sport fishing. The rule, known as an effluent guideline, requires farms that produce 100,000 pounds of fish annually and discharge at least 30 days per year to limit the amount of sewage — mostly fish excrement — they release to streams, rivers and estuaries. These discharges contribute to a host of water quality problems, including low dissolved oxygen and the presence of harmful bacteria that make areas unsafe for swimming.

The waste also can contain large quantities of antibiotics, which are fed to the fish to prevent diseases. At high concentrations, such antibiotics can disrupt the ecological system and harm other wildlife. The regulation — which also targets farms that raise tilapia and hybrid striped bass — contains no numeric discharge limits for large fish farms, but requires owners to prepare best management plans for handling pollution.

Among the key changes EPA made to the rule since it was first proposed in 2002 was to exempt catfish operators, which produce 70% of the nation's farm-raised fish, from discharge requirements. Catfish farms also represent more than two-thirds of fish farming revenues, according to Hugh Warren, executive vice president of *Catfish Farmers of America*. Warren said his organization worked hard to impress upon EPA that catfish farms do not discharge in the same way that other aquaculture facilities do. Most farmed catfish are raised in enclosed ponds rather than in underwater pens, and they discharge water usually only once a year to make embankment improvements and recharge the ponds with fresh water. "We're very pleased that EPA recognized, based on reams of evidence, that our farms really don't add to the pollution" by aquaculture, he said.

EPA anticipates the rule will cut roughly 500,000 pounds of sewage waste from fish farms annually, while nutrients and chemicals that lower dissolved oxygen will be cut by 300,000 pounds per year. The rule also requires large non-catfish fish farms to take steps to minimize the discharge of excess feed, which is nutrient-rich, and control pesticides used to combat aquatic weeds.

Facilities subject to the rule must also keep records on the number and weight of farmed fish, the amounts of feed distributed and the frequency of pen cleanings, inspections, maintenance and repairs. In addition, the rule requires operators to report the use of experimental drugs for fish and any violations of federal regulations.

Finally, the rule requires facilities to limit the discharge of pollutants resulting from the harvest or transport of fish from farm to market. *National Aquaculture Association* President Randy MacMillan said the industry is generally pleased with the rule because it recognizes the difficulty operators would face in meeting numeric discharge standards. Without the numeric standards, EPA estimates the rule will cost the industry approximately \$1.4 million a year.

EPA spokeswoman Catherine Milbourn said given the limited discharges from catfish farms, the agency "didn't believe it was warranted to regulate them via a federal rule." State permitting programs can address catfish farms that discharge more frequently, Milbourn said. Warren and MacMillan also noted that the catfish industry — concentrated in the Mississippi Delta region and a few other Southeastern states — faces stiff competition from fish farms in Southeast Asia and South America that are not subject to the same environmental standards as U.S. farms.

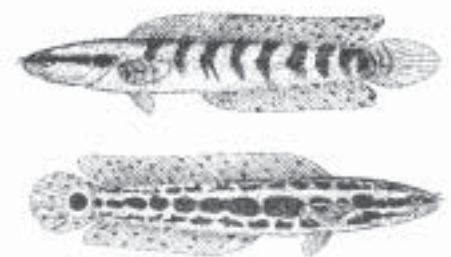
Environmental groups, meanwhile, criticized the rule for relying on best management practices instead of more stringent regulatory approaches. "EPA is taking a lowest common denominator approach," said *Environmental Defense* senior scientist Rebecca Goldberg. "This is another example of EPA giving a bye to the animal industry," she said.

Another of the rule's shortcomings, according to environmentalists, is its failure to address non-native farmed fish and the use of exotic species for biocontrol such as Asian carp that can escape from underwater pens and ponds into local waters and breed, thus diluting gene pools and competing with native fish for space and food. But MacMillan said EPA is "ill-equipped" to address the problem, in part because escaped fish are not traditionally viewed as pollutants. Rather, she said, responsibility for invasive species falls more to the Interior Department, the National Marine Fisheries Service and the Army Corps of Engineers.

Source: Marty Coyne, *Greenwire*, 7/8/04

## Snakeheads in Maryland, Virginia and Pennsylvania

Biologists said the discovery of two adult female Northern snakeheads carrying thousands of eggs indicates the nonnative and potentially destructive species now may be a permanent resident of the Potomac River ecosystem in Maryland, Virginia and the District of Columbia. Wildlife officials report that the number of Northern snakeheads caught in the Potomac River now totals 14, including the two adult females that measured 15 and 17 inches. The largest fish caught so far was 3 to 5 years old, measuring 24 inches in length, and weighing 5 lbs. All 14 fish, found within a 14-mile stretch of the Potomac River and its tributaries since May, have been sent to the Smithsonian Institution for genetic testing.



*Asian and African Snakehead Species*

Native to Asia, the Northern snakehead can grow up to 3 feet in length, live out of water for up to three days and move across land by using its pectoral fins. Even though eggs and babies — definitive proof of a breeding population — have not been found, scientists say the number of catches and the swath of the river involved suggest that the fish is established in open water that can neither be poisoned nor drained. "It's the first act of the nightmare, if you will," said Mike Slattery, assistant secretary of the Maryland Department of Natural Resources (MDNR).

"It's time to say we have a naturally reproducing population in the system, and they've probably been there for two or three years," said John Odenkirk of the Virginia Department of Game and Inland Fisheries. "We've had reproduction for some time in the system," Odenkirk said, "but it's nowhere close to what we'll see pretty soon." "The bottom line is, this is big," he said, "but even if the snakehead becomes established in the area, it could take years to see its effect on the ecosystem".

Odenkirk said the aggressive, Asian-bred



fish probably will not overrun the ecosystem, but instead will compete with fish at the lower levels of the food chain, which will result in long-term population changes. "It will be subtle at first," he said, "But in 10 years, looking back, it might jump out at you." MDNR biologist Bob Lunsford said snakeheads have the ability to produce and protect large numbers of young. Walter Courtenay Jr. with the U.S. Geological Survey said that within 20 years it is possible the snakehead may crowd out local species, including the smallmouth bass, a popular game fish.

MDNR is now seeking to ban the possession of 29 different kinds of snakeheads in the state. Maryland's new regulations would take effect Sept. 13 and current snakehead pet owners would be able to turn in their fish after that date without being penalized. "It is a safeguard that needs to be put in place," said Slattery. But some snakehead owners were alarmed by the legislation. Ruth Hanessian of the *Maryland Association of Pet Industries* said, "It is not fair to criminalize existing good owners." Unlike the tropical species, which include bright colors and spots, the northern snakehead is rather drab, making it unpopular in tropical fish markets and far more common in the live-food trade. For that reason, pet store owners said, the tropical trade shouldn't be punished.

Even though the tropical breeds of snakehead typically can't survive Maryland's cold winters the northern snakehead can. And Steve Early, an assistant director with the MDNR's fisheries service, said his department thought it best not to take chances, so they listed all species. "Snakeheads, as juveniles at least, all look very similar. It's a matter of keeping it simple," he said. "They're all considered highly aggressive and highly predatory." Early said the northern snakehead got to the Potomac the same way it got to a Crofton pond in 2002: Someone put it there. In the Crofton case a man dumped two northern snakeheads - a male and a female - into the pond. The prolific fish spawned, and when state biologists poisoned and drained the pond, they found hundreds of dead juvenile snakeheads.

Meanwhile, officials with the Pennsylvania Fish and Boat Commission (PFBC) have now confirmed the presence of northern snakeheads in a 17-acre Pennsylvania lake (Meadow Lake) that is part of a maze of interconnected embayments and tidal sloughs adjoining the lower Schuylkill and

Delaware Rivers. The first report came to the PFBC in late July when an angler caught two snakeheads and preserved them for PFBC inspection. A total of six have now been taken from the lake, including three captured by PFBC biologists.

Commission officials believe additional snakeheads are likely present elsewhere in the system, and they have concluded, given the nature of the system, that there is no practical method for eradicating them from Meadow Lake and adjoining waters. Instead, they have decided to monitor the pond and surrounding waters. Anglers are encouraged to properly dispose of any snakeheads they catch since it is against PFBC regulations to possess any live variety of the species. It is too early to say what impact the snakeheads will have on species already present in Meadow Lake such as panfish, catfish, carp, gizzard shad, blueback herring, eels, and largemouth bass said Dr. Douglas Austen, PFBC Executive Director.

In California, Korean market owner Sung Chul "Daniel" Rhee pleaded not guilty on June 28 to charges of importing snakeheads from Asia. Rhee, 46, was arrested this spring at his market, *Assi Super*, where he is accused of selling live snakehead fish for \$14.99 a pound. He was charged with three federal counts of importing an injurious species, and is scheduled to be tried August 24.

The fish were hidden in larger shipments of fresh food from South Korea's *Hae Won Seafood* via *Korean Air*, and the snakeheads were labeled "sea bass" or "bass, fresh water fish," prosecutors said. Extrapolating the amount of "sea bass" imported by *Assi Super*, the U.S. Fish and Wildlife Service estimated that Rhee generated nearly \$23,000 in snakehead sales in 2002 and the first half of 2003, the U.S. attorney's office has said.

Snakehead are believed by consumers to have beneficial qualities for pregnant women and are considered a delicacy. For pet owners, the snakehead is the pit bull of fish — a species known to gobble goldfish whole, jump out of its tank and even shatter an aquarium with its thrashing. In many ways, what frightens naturalists about the fish is what delights some pet owners. "They eat other fish — that's the attraction," said Birgit Sexton, 55, who has worked for the past 14 years at *Glen Burnie's House of Tropicals* in Maryland.

Unfortunately, the culinary and recreational habits of a few are creating major impacts on the Nation's ecosystems.

Sources: Rona Kobell, *Baltimore Sun*, 7/8/04; Darragh Johnson, *Washington Post*, 7/8/04; David A. Fahrenthold and Joshua Partlow, *Washington Post*, 6/30/04; Stephen Manning, *Washington Post*, 6/30/04; AP/*San Francisco Chronicle online*, 6/28/04; Isacc Wolf, *Washington Times*, 6/19 and 6/26/04; AP/*Hampton Roads [Va.] Daily Press*, 7/9/04; *Pennsylvania Fish and Boat Commission Press Release*, 7/23/04; and *Greenwire*, 6/29, 7/1, 7/8 and 7/12/04

## Concerns About Genetically Modified Fish

In a limited-food situation, genetically modified (GM) coho salmon will out-compete normal salmon and sometimes eat other members of their own species, according to a new study published in an early June issue of the *Proceedings of the National Academy of Sciences*. GM fish are bred to grow faster than normal salmon, and sometimes only one or two GM salmon survived out of 50 mixed fish in a tank. "When food supplies are low, transgenic fish have a very significant effect on the population," said lead study author Robert Devlin of Fisheries and Oceans Canada. Not only did the aggressive, gene-modified salmon gobble up most of the feed when raised in tanks with ordinary salmon, but they also gobbled up their weaker competitors — including their own type.



Scientists who oppose development of GM organisms said this research shows the dangers of transgenic animals, should they enter the wild. "We should not be taking a risk like this at a time when native salmon stocks are already in trouble," said Doug Gurian-Sherman of the *Center for Food Safety*, a consumer group. The worst-case scenario involving transgenic fish is the "Trojan gene" hypothesis proposed by Purdue University geneticist William Muir: Genetically engineered salmon outcompete normal fish for food and mates, leading to less-hardy hybrids and the eventual extinction of the entire wild population.

Joseph McGonigle, vice president for *Aqua Bounty Farms*, one of the companies raising the fish, says their net pens would hold only sterile females, eliminating the possibility that escapees could breed in the wild. Also, several other studies, including some in Devlin's lab, have shown that the GM fish aren't likely to survive well outside of captivity because they're more susceptible to disease and oblivious to predators. "We realize we have no chance getting approval unless we can clearly demonstrate these fish are completely sterile, and they represent no genetic threat and no behavioral threat, in terms of competition for resources," McGonigle said.

Meanwhile, in early July more than 2,580 Atlantic salmon escaped from a fish farm near Vancouver Island, British Columbia. Three holes in a net at *Stolt Sea Farm* allowed the fish a way out, alarming environmentalists and local tribes who are concerned the invasive Atlantic salmon will compete with native fish stocks and spread disease.

Waltham, Mass.-based biotechnology firm *A/F Protein Inc.*, which is connected to *Aqua Bounty*, has created a transgenic Atlantic salmon by taking genes from winter flounder or ocean pout and injecting them into an Atlantic salmon. The flounder or pout genes trigger the salmon's pituitary gland to produce growth hormones year-round instead of just in the summer, creating a salmon that grows four to six times faster than normal.

*A/F Protein* maintains that the technology will make salmon farming more efficient and provide more high-quality, low-cost protein to consumers around the world. The Food and Drug Administration is currently considering whether to allow transgenic fish to be sold for human consumption in closed proceedings designed to protect *A/F Protein's* trade secrets. Because of this secrecy, critics are calling for a new system that is open and gives more authority to environmental and wildlife agencies.

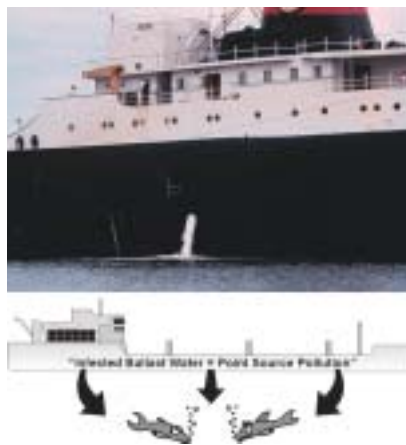
Sources: Sandi Doughton, *Seattle Times*, 6/8/04; *AP/San Francisco Chronicle*, 7/16/04; and *Greenwire*, 6/8/04 and 7/19/04

## Great Lakes States Call for Tighter Ballast Water Regs

State attorneys from seven Great Lakes states called on the federal government in mid July to stop invasive mussels, fish and

other species from entering U.S. waters via ballast water discharges from large ships. Using a two-pronged strategy to prod federal action, attorneys from New York, Illinois, Michigan, Minnesota, Ohio, Pennsylvania and Wisconsin filed a rulemaking petition with the U.S. Coast Guard, while at the same time submitting a "friend of the court" brief in a lawsuit against the U.S. EPA seeking tighter regulation of ballast water.

"Ballast water ought to be considered a significant pollutant," New York Attorney General Eliot Spitzer (D) said in a statement. "The exotic species of fish, mussels and plants contained in these discharges multiply at fantastic rates and overwhelm our ecosystem. The federal government can and must be more aggressive in combating the problem, which each year costs Great Lakes communities billions of dollars in damages."



While critics say the government has been slow to address the problem in the U.S., the issue has gained the attention of international government bodies. Earlier this year, a U.N. panel passed a treaty to develop international standards for ballast water discharges. Meanwhile, the only current federal regulation pertaining to ballast water discharges involves a voluntary Coast Guard program that recommends ships discharge ballast water from origin ports at mid-ocean and take on new ballast water before entering ports of call.

The state attorneys petitioned the Coast Guard to adopt more stringent regulations. "As states, we don't have the authority to develop regulations on vessels involved in international trade," noted March Violette, a spokesman in Spitzer's office. "For that we are calling on the federal government to give us the help we need." Coast Guard spokeswoman Jolie Shifflet said the agency had not formulated a response to the

petition, but Shifflet said ballast water is a top environmental priority for the agency.

New Coast Guard rules due for release this summer will require that ships take additional effort to release or treat their ballast water, Shifflet said. But the regulations will not establish quantifiable standards for allowable invasive species in ballast water. "We want to know the standard we set will have the result we intend," Shifflet said. "We want it to be based in science, we don't just want to guess."

In addition to calling on the Coast Guard to develop tighter regulations, the attorneys said EPA should re-examine its position on ballast water. Last fall, EPA declined to regulate ballast water under the Clean Water Act, claiming that the releases are part of shipping operations and therefore subject to Coast Guard review. Shortly thereafter, three environmental groups sued EPA in an effort to goad it to force ships to obtain National Pollutant Discharge Elimination System permits for ballast water and other incidental wastewater from ships. The attorneys general filed an amicus brief in that suit in mid July in the court of the Northern District of California.

Scientists say that ballast water, used to stabilize vessels on transoceanic voyages, is the most significant pathway for the introduction of nonnative species into coastal waters. Oceangoing ships are known to carry invasive species from foreign ports in their ballast water that is often dumped at ports of call. EPA has estimated that 31,000 vessels carrying commercial cargo enter U.S. ports up to 78,000 times each year, where they dump an estimated 21 billion gallons of ballast water annually. Such discharges are believed to have introduced numerous invasive species, including zebra mussels in the Great Lakes, fire ants along the Gulf and southern Atlantic coasts, and Asian green and mitten crabs on the Pacific coast.

Allison A. Freeman, *Greenwire*, 7/16/04

## Boat Inspection Prevents Zebra Mussel Invasion

The National Park Service is stepping up its checks of boats heading to Lake Mead after a ranger discovered an out-of-state houseboat with invasive zebra mussels on its hull. The ranger prevented the 54-foot Kentucky-registered houseboat from launching over Memorial Day weekend, avoiding a potential disaster at the lake, officials said.

The finger-size mollusks have caused millions of dollars in damage in the Midwest by clogging intake pipes for water supplies and ruining boat engines. "We are trying to actively prevent any zebra mussel problem in the lake by educating the rangers and others at entrance stations about preventing out-of-state boats from bringing them in," said Roxanne Dey, spokeswoman for Lake Mead National Recreation Area. The cooling system for the boat's two engines was flushed with a chlorine solution to kill the clamlike creatures. Then the houseboat must spend 30 days in dry dock for decontamination, said Nevada Department of Wildlife spokesman Geoff Schneider. The boat will then be inspected again by the National Park Service and wildlife officials from Nevada and Arizona.



***Zebra Mussels Attached to a Boat Motor.***

Since the early 1990s, wildlife officials in the West have feared zebra mussels could be devastating to hydropower and water-supply facilities. Southern Nevada water officials have expressed concerns about the threat to Lake Mead, but experts say the possibility of colonies forming is low because of new technology, a lack of sufficient nutrients in the lake and the deep level of the water system's intakes. If by chance a colony could thrive under those conditions, a chemical feed system would be used to inject potassium permanganate to destroy the colony, said Ron Zegers, director of the Southern Nevada Water System. "We can control their growth and not interfere with the intake from Lake Mead," he said. The lake's two intakes are currently about 80 feet and 130 feet below the surface.

A single female zebra mussel can lay more than 1 million eggs during a spawning season. Their larvae are microscopic and can move from one body of water to another in boat live wells, jet drives, cooling systems and bait buckets. The exotic mussels can disrupt ecosystems by smothering native mollusks and consuming other organisms in the food chain.

Sources: *Las Vegas Review Journal*, 6/12/04; *AP/Arizona Republic*, 7/14/04; and *Greenwire*, 7/14/04

### **Judge Invalidates Mountaintop Removal Permits**

The Army Corps of Engineers (Corps) can no longer automatically grant permits to mountaintop removal mining operations that meet certain guidelines, a federal judge ruled in early July. The ruling only affects southern West Virginia. Mountaintop removal 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 of mountaintop removal is preferred by mining companies because it allows access to low-sulfur coal that is near the surface. But environmentalists say the valley fills are highly destructive to biological systems, including the waterways themselves.

In issuing his ruling, Judge Joseph Goodwin of the U.S. District Court for the Southern District of West Virginia ordered the Corps to revoke 11 valley fill and surface impoundment permits where mining had not yet started. Currently, the Corps controls what happens in all U.S. waterways through their permitting system. When someone wants to undertake an activity that would affect a body of water, they have to apply for a Corps permit. Congress authorizes the Corps to issue two different kinds of permits.

The first type of permit is a general (or Nationwide) permit for activities that would affect a body of water or wetland but cause "minimal adverse environmental effects." With this type of permit, Congress' intent was to reduce bureaucratic red tape and the Corps' workload. Once an activity is approved under this type of permit, anyone wanting to engage in such an activity can do it without getting permission from the government or undergoing an individual review.

The second type of permit is for specific activities where people or businesses want to discharge dredged or fill materials into U.S. waters. Under this second type of permit, the Corps must hold public hearings, give the public notice and allow enough time for interested parties to express their views. It also requires site-specific

documentation and analysis of the project's environmental impact.

The permit in question, called Nationwide Permit 21 (NWP 21), was developed under the first permit type, and the Corps has used this "general permit" to authorize valley fills stemming from mountaintop removal. In 2000 alone, according to agency records, they authorized 264 such mining projects. Those projects buried more than 87 miles of streams, the records show — hardly a "minimal adverse effect".

As noted earlier, the law requires the Corps to guarantee that an activity will have minimal impact before it issues a nationwide permit. In the case of NWP 21, Goodwin said the Corps didn't do that, instead it set up a process coal companies have to follow in order to make sure there is minimal impact, he wrote. The Corps also doesn't determine whether the environmental impact is minimal until after the activity has taken place, he added. Nationwide permits are created for circumstances where there would never be a case where there was concern over possible serious environmental impact, the judge said.

NWP 21 also illegally requires an individual review of projects. This defeats the purpose of nationwide permits, which is to reduce the bureaucratic workload on the government and individuals, Goodwin wrote. "The Corps' procedural approach ... is unlawful," Goodwin wrote. "[T]he Corps has defined neither a category of activities that will cause only minimal adverse effects nor a set of requirements and standards. "If the Corps cannot define a category of activities that will have minimal effects, absent individual review of each activity, the activities are inappropriate for general permitting," he wrote. "That's important because the Army Corps and the Bush administration generally have been using these permits that have been destroying southern West Virginia with absolutely no scrutiny," said Joe Lovett, an attorney for the *Ohio Valley Environmental Coalition*, which filed the suit against the Corps. "The judge's ruling forces them to comply with the law, which is something the Bush administration has refused to do. Secondly, it forces them to confront the science ... that shows the impact of this devastating mining on southern West Virginia," Lovett said.

Mine operators contend that valley fills are an essential part of surface mine operations, which must contend with large quantities of waste. Corps lawyers say mitigation plans,



like diverting streams or rebuilding them in man-made drainage ditches, make up for any damage and lower the impact to the minimal level. But in the nationwide permit program, Goodwin said, "the methods that project proponents can propose to 'mitigate' the effects of their discharge are seemingly infinite."

Previous lawsuits have targeted different aspects of mountaintop removal, which environmentalists say has resulted in the destruction of more than 1,000 miles of stream beds in West Virginia alone. The government has already spent millions of dollars on studies that show the damage of mountaintop removal mining, but has ignored the science, Lovett said. The immediate result of the ruling is that coal companies will now have to seek individual permits from the Corps for mountaintop removal because the Corps can no longer issue permits under NWP 21.

The Bush administration has not decided whether to appeal the ruling. "All of that is under review," said Corps spokesman David Hewitt. Still, the ruling may not slow down the permitting process for mountaintop mining, said Mark Taylor, a Corps project manager. "If they have all their ducks in a row, and give us all of the information we need up front, we can probably do an 'IP' [individual permit] faster than we've done some nationwide permits," Taylor said.

In their criticism of Appalachian mountaintop mining, environmentalists have pointed to a 5,000-page draft environmental impact statement (EIS) that the Bush administration issued last year. The practice has buried more than 700 miles of streams in the Appalachian Mountains, the EIS stated. But environmentalists had worried that the EIS would lead to speedy mining permits. "West Virginians know that the coal industry is using our resources for short-term gains at the expense of our future," Lovett said.

According to a new poll released in mid July, West Virginians oppose mountaintop removal mining and Bush administration efforts to weaken restrictions on the practice. The survey, by Democratic pollster Celinda Lake, found that 56% of West Virginians oppose mountaintop removal. The *Appalachian Center for the Economy and the Environment*, a regional policy and law center based in Lewisburg, paid Lake's firm, *Lake, Snell, Perry & Associates*, to conduct the poll. The poll has a margin of error of 4.4%.

Sources: John Raby, *AP/Lexington Herald-Leader*, 7/9/04; Chris Wetterich, *Charleston [W.Va.] Gazette*, 7/9/04; Ken Ward Jr., *Charleston [W.Va.] Gazette*, 7/14 and 7/18/04; and *Greenwire*, 7/9 and 7/20/04

## **Pesticide Ban Near Streams Upheld**

A federal appeals court has refused to lift a temporary ban on the spraying of pesticides near salmon-bearing streams in California, Oregon and Washington despite claims by agricultural interests and the pesticide industry that the ban is having serious economic consequences. The 9th U.S. Circuit Court of Appeals said the injunction against pesticide use, imposed last January by Seattle District Court Judge John Coughenour, will stand while agricultural groups and the pesticide industry appeal a two-year-old decision by Coughenour that the U.S. EPA consult with the National Marine Fisheries Service to establish permanent standards for the use of 54 different pesticides near salmon-bearing streams.

The ban prohibits the use of 38 of those pesticides within 100 yards of streams that support salmon when the chemicals are aerially applied, and 20 yards of streams when the pesticides are applied by other methods. The district court set out a 2.5 year timeline for EPA and NMFS to develop the standards. *CropLife America* and other intervenors appealed Coughenour's decision, as well as the injunction, to the 9th Circuit. The court unequivocally denied lifting the injunction but agreed to consider the merits of the district court ruling on an expedited basis.

*CropLife* issued a statement saying, "Intervenors are disappointed with the denial of the stay...(but) expect to prevail on the merits subsequently." Environmentalists, meanwhile, applauded the appellate decision. "This injunction was clearly warranted to get pesticides out of streams while EPA complies with the Endangered Species Act and develops permanent protections for salmon," said *Earthjustice* attorney Patti Goldman, who represents the *Washington Toxics Coalition*, the *Northwest Coalition for Alternatives to Pesticides* and the *Pacific Coast Federation of Fishermen's Associations*.

*CropLife* has said the injunction will cost growers millions of dollars in lost crops. "Farmers are going to lose their farms if they don't use these products," said Seema

Mahini, an attorney for the group, in a recent interview. "Because of the lack of alternatives, their crops are just going to die and be subject to [insect] infestation."

Source: Natalie M. Henry, *Greenwire*, 6/24/04

## **Fire Fighting May be Killing Threatened Stream Fish**

The Forest Service violated the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA) when it failed to hold a public review of a chemical fire retardant that may have contributed to fish kills, according to documents made public in June from a lawsuit filed last October by Forest Service Employees for Environmental Ethics (FSEEE). On 10/14/03 FSEEE asked the U.S. District Court for the District of Montana to require the Forest Service to prepare a study to examine the human cost of firefighting in the nation's forests. According to the documents, the Forest Service ignored warnings that sodium ferrocyanide, dropped from tankers to fight wildfires, breaks down in the environment to form hydrogen cyanide, a substance poisonous to fish.

More than 11,000 loads of fire retardant are dropped annually on 6,500 acres in the course of fighting wildfires. The government has acknowledged in the previous two years, that retardants went into streams eight times, resulting in three fish kills. Andy Stahl, director of FSEEE, said a motion for discovery in the case produced hundreds of documents, including a 6/23/03, briefing paper prepared by Rick Sayers, U.S. Fish and Wildlife Service (FWS) branch chief for Endangered Species Act consultation. The briefing paper said that while the ESA compels consultation with NOAA fisheries and the FWS if the retardant could harm endangered fish, "legal vulnerability is high" should the other agencies make an unfavorable recommendation.

"The public needs to know that if the judge orders retardant use to be stopped, it's because the government chose to break the law, and it knew better," Stahl said. "We could avoid that outcome. The way to do that is for the government to agree it has to write an environmental impact statement and involve the public in deciding how we manage fire on public lands, something the government has never done in 100 years."

Spokesmen for the Forest Service and for Mark Rey, agriculture undersecretary for natural resources and the environment, said they could not comment on pending litigation.

Sources: Jeff Barnard, *AP/San Francisco Chronicle*, 6/18/04; and *Greenwire*, 6/18/04

## **Sewage Impacts on Sex Change in Fish**

Traces of female contraceptive pills in sewage discharges are changing the gender of male fish in English rivers. A recent United Kingdom Environment Agency (UKEA) survey issued in early July revealed a serious threat to fish stocks because the gender changes are more widespread than previously thought. More than a third of 1,500 male fish sampled in 42 English rivers showed female characteristics, according to the 20-year survey. Nick Cartwright, the chemicals policy adviser for UKEA, said the effects have now been observed in coarse fish, and young fish are particularly susceptible, making them less fertile, which has serious implications for future fish populations. The feminizing effects are directly related to exposure to treated sewage effluent.

At issue is ethinyloestradiol, which is found in contraceptive pills and acts as an endocrine disrupter in male fish, particularly young fish. The synthetic hormone is about 1,000 times stronger than natural estrogen and lasts up to 90 days in water, or 20 times longer than natural estrogen. The number of fish affected and the severity of the effects are also related to the proportion of sewage effluent in the river. The most



significant substances from domestic sewage effluents are the natural steroid hormones oestradiol and oestrone, and the synthetic hormone ethinyloestradiol, all excreted from women naturally or as a result of taking the contraceptive pill.

Histological analysis of the carp-like roach revealed that 218 male roach (a third of all "males") were intersex, and intersex roach were present at 44 (86%) of the 51 sites within all 5 Regions sampled. One hundred seventeen of the intersex fish had abnormal reproductive ducts, and most of these had only a single sperm duct together with an oviduct in one or both of the gonads. In no fish was the male sperm duct blocked or absent, but in 23 fish one or both gonads contained an additional sperm duct, as well as an oviduct. There were 140 fish in which oocytes were found in the testes (ovotestis) and 39 fish in which both abnormal reproductive ducts and ovotestis occurred.

Prevalence of intersex varied between sites (from 100% to 0%). There was also a large variation in the severity of the condition at these sites. Both the proportion of "male" fish with ovotestis and the severity of the condition increased with age. Male fish with more than moderate changes in their sexual organs are less able to reproduce, with potentially serious implications for fish populations

This phenomenon is being noted worldwide, but scientists from the UKEA, Exeter and Brunel universities and elsewhere in the United Kingdom are leading the way in the research. The results of this work were discussed at an international workshop at Exeter University in early July. Attending were renowned scientists representing over 60 European research laboratories as part of a series of initiatives. As a result of the study, the UKEA is asking sewage treatment plants in England to study ways to remove traces of estrogen hormones from contraceptive pills before releasing treated wastewater, and is proposing two pilot plants to study removal techniques.

The appearance of "intersex" fish first came to the attention of researchers more than 10 years ago after a study of roach in the river Lea in Hertfordshire, a tributary of the Thames. A study of fish in eight rivers near large sewage-treatment works linked the intersex phenomenon with pollution, which was confirmed by laboratory studies. "This latest survey reinforces the need to look at cost-effective ways of minimizing endocrine-disrupting substances," said Andrew Skinner, director of environmental protection at the UKEA.

Sources: Anna Hilton, *United Kingdom Environment Agency Survey*, 7/9/04; Charles Clover, *London Telegraph*, 7/10/04; Paul Brown, *London Guardian*, 7/10/04;

Steve Conner, *London Independent*, 7/10/04; and *Greenwire*, 7/12/04

## **Lawmakers Urged to Respect Science, Avoid Politicization of Data**

One of the few academics to serve in Congress called on federal lawmakers to speak out against what he characterized as the misuse of research in environmental regulation and other areas of public policy. Rep. Brian Baird (D/WA), a three-term lawmaker, said, scientists must fight the politicization of science because adequate public debate "and the underpinnings of the federal decision making process itself" are at stake.

Baird, a clinical psychologist and a Pacific Lutheran University administrator, made his comments at a Washington, D.C., conference hosted by the *Center for Science in the Public Interest*, where academics, environmental groups and industry officials debated how scientific research is used to protect the public from threats ranging from pollution to prescription drugs.

Virtually all types of research produced by federal agencies are susceptible to unfair politicization by members of the executive branch and Congress who seek to limit what types of questions are asked and what outcomes are reached. Elected officials are also prone to constrain certain research methods and cut funding for controversial research, Baird said. Research on controversial topics or that using controversial methods must be funded, according to Baird. He urged the audience to imagine how the world would be different without the science produced by Galileo, who was initially ridiculed for suggesting that the Earth was round rather than flat. Ensuring a science that produces "real results" not only requires the sacrifice of hard work, but also requires the risk of defending it against political attacks, Baird said.

Another presenter, Jim Tozzi, former White House deputy director of information and regulatory affairs, praised Baird for an "excellent speech," but said scientists should avoid involving themselves too much in the political process. "A lot of scientists go into their business because they don't want to be street fighters," said Tozzi, who now leads the *Center for Regulatory Effectiveness*, which lobbies the White House and federal agencies on behalf of industry clients. Tozzi's primary aim was to show how the 2001 Data Quality Act, a



law trumpeted by sound science advocates, has been implemented. Tozzi told conference participants that the law has made the process of lobbying the executive branch on regulations more transparent and open to public scrutiny.

But critics like Sean Moulton, an analyst at the nonprofit group *OMB Watch*, said the law has been used by industry to slow the implementation of important regulations. "There are still problems with transparency and accuracy of the data being given to the administration," Moulton said. Eric



Shaeffer of the *Environmental Integrity Project* said at a separate panel discussion that the executive branch regularly issues environmental and public health rules without spelling out all the benefits provided by those rules. "It's something we probably need to change in law," he said.

Marty Coyne, *Greenwire*, 7/13/04

## Endangered Species, Habitats, and Costs

The U.S. Fish and Wildlife Service (FWS) was dealt a heavy blow in early June when a district court judge ruled it illegal for the agency to ignore citizen petitions to list a species under the Endangered Species Act (ESA). FWS has been operating under "Petition Management Guidance" that allows it to ignore citizen listing petitions if the species at issue is already on the agency's candidate list. The ruling by Judge Reggie Walton of the U.S. District Court for the District of Columbia, said FWS must stop following that guidance provision immediately.

FWS maintains that the candidate list is used to identify species that warrant listing, but for which the agency lacks sufficient money, staff or time to protect. The candidate list also helps alert local governments and landowners of species that face extinction and that should be considered when permitting new development or

drafting new land-use plans. Plaintiffs in the case, including the *American Lands Alliance*, the *Larch Co.* and *Sinapu*, say species on the candidate list can remain stuck there for decades while their habitat is destroyed and their numbers dwindle to the brink of extinction.

Under the disputed petition guidance, FWS often responds to petitions by telling filers that the species in question is already on the candidate list, an answer that rarely satisfies petitioners but that has been interpreted as meeting ESA rules requiring that such petitions be answered within 90 days. FWS also often advises whether a petition contains sufficient information on a species' condition to warrant further review. If sufficient information is provided by petitioners, FWS is required to make a listing decision within 12 months under the ESA.

FWS and Justice Department officials did not comment on the issue, but Judge Walton's ruling affirms an earlier decision from the D.C. District Court, which last year found that the Petition Management Guidance violates ESA. But rather than change or revoke the guidance, the agency instead asked the court to reconsider. The court refused and issued the permanent injunction against its use nationwide.

The initial lawsuit dealt specifically with the Gunnison sage grouse of Colorado and Utah, which was placed on the candidate list in 2000. But the court struck down the agency's reasoning on the grouse and extended its order to nearly 300 additional species awaiting formal action by the FWS. "The service has created a black hole into which it's dropped [279] species, none of which will ever see the light of day without the success of a lawsuit like the sage grouse lawsuit," said Jay Tutchton of the University of Denver *Environmental Law Clinic*.

The ruling could have broad significance for future listing decisions. In May, the FWS received a mammoth 1,000-page petition from the *Center for Biological Diversity* to list 225 of the species on the candidate list. The legal action is more broadly aimed at spurring the FWS to request funding to deal with all imperiled species in the U.S. Many environmentalists argue that the FWS's budget crisis is self-engineered and that if the agency really wanted to protect all deserving species, it would request enough money from Congress to at least list those plants and animals that it concedes worthy of protection.

The candidate list's 229 species are not the only ones that the FWS has acknowledged merit ESA protection. Another 25 to 30 species have been deemed "warranted but precluded" by other higher priorities given the agency's limited budget. Additionally, an analysis (released in late June) by the National Wildlife Federation (NWF) accuses the Bush administration of increasingly using lopsided economic calculations to reduce by approximately half the amount of acreage offered as critical habitat for endangered species.

The NWF study comes as Congress looks toward possible ESA reforms, including revisions to how the FWS accounts for the costs of actions like critical habitat designations that are aimed at helping recover species. Critical habitat is one of many ESA provisions that continually comes under fire from both environmentalists and industry groups who say the law is not being followed. From 2001 to 2003, federal wildlife biologists proposed almost 83 million acres of land for critical habitat designations. But federal records show the government reduced the size of those designations by 42 million acres in its approval of the plans, according to the NWF report. Many of those acreage cuts have been justified based on cost-benefit analyses that show species preservation would come with major economic downsides.

Such cost-benefit analyses are required by ESA, but environmentalists say the studies have been wrongly interpreted by the Bush administration to justify slashing critical habitat acreage for species. From 2001 to 2003, acreage reductions, based on findings from economic analyses, have risen from less than 1% to 69%, the NWF report states. Interior Department spokesman Hugh Vickery said that while it is true FWS has excluded large areas from critical habitat over the past three years, such reductions are allowed under the ESA. "The viewpoint of the department is that critical habitat offers very little if any additional conservation benefit to species, so these exclusions are not harming the effort to recover these species," Vickery said.

FWS maintains that over 30 years of ESA implementation, biologists have seen little or no additional protection benefit for species from critical habitat designations. In its standard preamble for critical habitat proposals, FWS says the provision has evolved into "a process that provides little real conservation benefit, is driven by

litigation, and the courts rather than biology, limits our ability to fully evaluate the science involved, consumes enormous agency resources, and imposes huge social and economic costs.”

Yet despite the Interior Department’s disdain for critical habitat designations, ESA mandates that acreage be set aside for species to recover. Once critical habitat is in place, federal agencies and developers seeking permits to alter the area must consult with the FWS before undertaking activities that could harm the species or its habitat. While the administration has used economic analyses as the basis for cutting more than 1 million acres of critical habitat proposals, NWF contends that the government’s economics are flawed.

“When it comes to habitat protection, this administration is exaggerating the costs and keeping the public in the dark about the benefits,” said John Kostyack, an attorney with NWF and coauthor of the report. The federation contends that the economic analyses overestimate the costs of critical habitat because they consider the entire cost of ESA compliance for the species, rather than simply the cost of critical habitat designation. Further, the government does not attempt to calculate for the added benefits to society of saving species.

Vickery defended the agency’s economic studies, saying regulators follow procedures that have been clearly laid out for them. For example, in its analysis of critical habitat for bull trout, FWS removed a 57-page section on the benefits of protecting the habitat. Vickery said they had to do so, because the regulations and court rulings do not allow for such analyses. Randy Simmons, a professor at Utah State University, said calculating the benefits of saving species is a difficult thing to do. But he said he would not support attempts to calculate benefits of critical habitat proposals, since he has not seen compelling evidence that critical habitat saves species.

“If designating critical habitat does not increase the chances of species surviving, then there are no benefits of establishing it,” Simmons said. “NWF starts with the assumption that it increases species chance of surviving, but if that is incorrect, then the whole analysis is meaningless.” Simmons also said the agency’s estimates are far less than the actual costs to society because they focus on land management costs and do not fully examine effects on the larger economy and private landowners.

In a report Simmons authored earlier this year for the free market think tank PERC, he found that ESA enforcement and compliance costs for federal and state governments and taxpayers is upwards of \$3.5 billion a year.

Source: Natalie M. Henry, *Greenwire*, 6/4/04; and Allison A. Freeman, *Greenwire*, 6/25/04

### **A Look at the Numbers on the Upper Mississippi River and Illinois Waterway**

The group Public Employees for Environmental Responsibility (PEER) recently released their stark results an economic analysis of the costs and benefits of constructing a few new 1200 foot navigation locks on the Upper Mississippi River and Illinois Waterway. On a best case basis with:

- no increases in congestion levels created elsewhere in the navigation system that result from the re-utilization of the increased newly productive barge time,
  - no increases in barge company operating costs required to actualize these increases in barge productivity, and
  - no decreases in observed revenues per unit (value) required to entice shippers to ship more product and to utilize the newly created barge productivity,
- had these “modernized” locks been operational in 2003, **they would have produced a net average annual economic loss to the national economy of over \$181 million.** Similar annual economic losses are evident for the entire thirteen-year period represented in the data.

The estimated economic benefit to cost ratio of Alternative 6 (the so-called preferred alternative) measured at today’s real world barge prices is approximately 1 to 20. In other words, the level of congestion exhibited on the system right now (and in the recent past) **will need to increase by nearly a factor of twenty** to even begin to justify constructing new 1200-foot long lock chambers at Locks 20 through 25 on the Upper Mississippi River and at Lagrange and Peoria Locks on the Illinois Waterway on the basis of the observable economic value of the extra transportation output afforded by the new locks.

And put another way, at current traffic levels, the Corps of Engineers will irretriev-

ably and forever waste 95 cents on the dollar in costs expended in constructing Alternative 6. On the other hand, the results of this analysis do indicate that there are some water transportation inefficiencies that small-scale, low cost measures can immediately remedy by better managing the existing navigation system and reducing the low levels of congestion currently experienced at these locks.

Indeed, inexpensive structural measures such as extending guide walls and installing nearby mooring buoys as well as low cost non-structural measures such as altering the lock queue discipline or scheduling lock availability have some prospect of immediately making positive contributions to the national economy. These inexpensive measures further afford the additional national benefits of both postponing the future need for costly lock capacity expansions and permitting the continued monitoring of the real world demand for waterborne transportation before irretrievably committing to such a risky and costly lock construction program.

Source: *PEER Looks at the Numbers Upper Mississippi and Illinois Waterway June 7, 2004*, Public Employees for Environmental Responsibility, 2001 S Street, NW, Suite 570, Washington, DC 20009, (202) 265-7337, info@peer.org

### **Where Have All the Barges Gone?**

A recent ruling by Judge Paul Magnuson (U.S. District Court for the District of Minnesota) called the Missouri River water level management plan recommended by the Corps of Engineers (Corps) a masterful balancing act. Under the plan the Corps has to provide water to northern states for recreation and to environmentalists for endangered species, while still sending enough water downstream so barges can haul cargo. But there is just one problem — there are almost no barges left to float.

After dwindling for years, barge traffic has now disappeared upstream from Kansas City and all but disappeared downstream to St. Louis, according to reports recently released by the Corps themselves. Low river levels, caused by drought and previous legal rulings, have pushed the two last major shippers off the Missouri River. “The situation put us out of business,” said Roger Blaske, who owned *Blaske Marine*. As a result, some say, the Corps should abandon

its attempt to provide enough water for shipping and instead focus on retaining more water for drought-stricken northern states and to better protect threatened species.

"The Corps is still insisting on maintaining artificially high water levels throughout the summer as though there were something to float," said Liz Birnbaum, director of government affairs for *American Rivers*, an environmental group. But in light of negligible barge traffic, the Corps said it will re-evaluate river levels, a spokesman said. The Corps will consider lowering flows between Sioux City, IA, and Kansas City while attempting to maintain enough water for the remaining barges below Kansas City, said Paul Johnston, a Corps spokesman in Omaha, where Missouri River operations are overseen.

Ironically, Magnuson's ruling made none of the parties happy in a time of severe drought when there isn't enough water to supply everyone. For barges, recent years have been disastrous — no long-haul barges travel upstream from of Kansas City, even though St. Joseph, MO spent \$1.3 million to build a new port. The new port opened amid fanfare in 2002 but docked only eight barges during its first year of operation, and this year docked none. Downstream, only two tows are hauling from Kansas City to St. Louis. One moves 2-6 barges loaded with asphalt oil once a week. The second pushes barges carrying cement from *Lafarge Cement Co.* near Sugar Creek to the Mississippi River. In Jefferson City, a tow also moves barges carrying cement to St. Louis. The Corps has said it will end the 2004 season in October, 47 days early.

The number of barges has been drifting downward for years, Corps records show. Last year the main two barge companies shut down entirely because a court order in another case forced the Corps to lower the river. *Blaske* left 45 loaded barges stranded when river levels dropped, and shippers lost an estimated \$8 million. Then in January, barge officials announced they wouldn't ship this spring because the Corps couldn't promise water levels that would permit barge traffic in July and August. They said that the associated unreliability eroded their customer base.

Remaining barge owners say it's too early to tell whether they will return next year or ever. It looks doubtful because many businesses with goods to ship will have already signed contracts with railroads and

trucking companies by the time the Corps decides on summer water levels. "There are a lot of questions that need to be answered before we can say we have a reliable system," said Don Huffman, who had a family-owned barge company that operated on the river since 1962. Two years ago, his company was taken over by *Memco Barge Line*. "The summer shutdowns really just kind of pulled the rug out from everybody," said Huffman, who now works for *Memco*. "We have no plans at this time to have a permanent presence on the river."



But some say barge traffic on the Missouri has never been a sure thing. Because of its swift current and railroad competition, the river was never going to support shipping to any great degree, they say. "It was a bad idea from the start," said Gerald Mestl, Missouri River program manager for the Nebraska Game and Parks Commission. He coauthored a report about the river's navigation that was released last month. The report shows that tonnage shipped on the river peaked in 1977 at 3.5 million tons, which is minuscule compared with the Mississippi River. Corps statistics show it dropped to 600,000 tons last year, not counting short-haul barges carrying sand and gravel, and this year some in the industry predict it will drop to 60,000 tons.

"We hauled a lot of tons in there over the years but it just went away," says Blaske, whose great-grandfather piloted the mountain steamboats up to Montana on the Missouri. Each year, Missouri River tows would drop off barges at about 150 commercial terminals that dotted the banks from St. Louis upstream to Sioux City. But most of the terminals are now closed, while a few are used only for shipping by rail or truck. At *DeBruce Fertilizer* in Kansas City, vice president Denny Gibeson said they had shipped by water until this year.

The result will be higher rail prices, Gibeson thinks. Customers received a letter from *Union Pacific* (UP) two weeks after the barge

season was supposed to have gotten under way, indicating that rates may be on the way up. A UP spokesman said any increase had nothing to do with the lack of barge traffic. "We are kind of indifferent to what happens on the Missouri River," UP spokesman John Bromley said. Jay Nixon, attorney general of Missouri, one of the states that was a party to the lawsuit, said maintaining river levels was important even if barge traffic is currently low. Many other interests are at stake, he said, including flood control.

But not all barge companies have given up on the river. *Excell Marine Corp.* in Cincinnati is trying to regain the confidence of shippers on the Missouri River, said Bob Noland, a port captain. *Excell*, which tows for *Lafarge Cement*, has bought another towboat that can run the Missouri, he said. And a company that offers barge cruises on the Missouri already has sold out four excursions in August for different stretches of the river. *River Barge Excursion Lines*, based in New Orleans, can carry 190 persons with tickets running from \$1,890 to \$2,540 each. No barges ran last year because of low water, but Liz Smith, marketing manager, said, "This year we felt that with Lewis and Clark, it would be a disservice not to."

Meanwhile, on July 9, a coalition of environmental groups asked the 8th U.S. Circuit Court of Appeals to reverse Magnuson's ruling, forcing the Corps to change its operations. Environmentalists said the ruling contradicted a separate federal decision in July 2003 holding the Corps in contempt for disregarding an order to reduce water levels. In that decision, Judge Gladys Kessler ruled in favor of environmentalists who sued to alter the Missouri River to more closely mimic its natural flows before it was dammed. Kessler found that the Corps failed to implement a federally binding U.S. Fish and Wildlife Service (FWS) plan calling for reduced summer flows on parts of the river. "The law hasn't changed — the Bush administration has rewritten the scientific and administrative basis for the earlier rulings," said environmental attorney Brian O'Neill.

"Americans deserve more than ecological decline, economic stagnation and political stalemate along the Missouri River," said Rebecca Wodder, president of the lead group, *American Rivers*. "We will not



give up the fight to save this river for future generations.” North Dakota Gov. John Hoeven (R) said he was disappointed in Magnuson’s decision. “I think this emphasizes the need for a new law, one that reflects today’s realities on the river,” he said. “I think Pick-Sloan [i.e., the Missouri Basin management program] was passed close to 60 years ago. That idea is totally out of sync with today’s realities.”

In a joint statement South Dakota Democratic Sens. Tim Johnson and Tom Daschle issued a joint statement calling Magnuson’s decision disappointing for South Dakota and other upstream states. “The Army Corps of Engineers consistently sides with downstream navigation interests at the expense of fish, wildlife and recreation in upstream states,” Daschle said in the release. Johnson said science and not politics should be used to decide how to manage the river. The decision “affirmed the controversial and unwarranted set of actions by the Corps of Engineers and U.S. Fish and Wildlife political appointees,” Johnson said.

The Missouri River’s natural state is very wide and shallow. Low summertime flows are necessary for birds such as the endangered least tern and piping plovers to nest on sandbars. The current Corps’ plan included a project to restore up to 20,000 acres of shallow water habitat along the river for the endangered pallid sturgeon and the two bird species. The additional habitat was intended in part to help stabilize water flow for barge traffic. The first installment of that project (1,200 acres) was finished on June 25.

The Corps created the habitat by carving notches in more than 500 wing dikes that extend out into the river, creating the navigation channel. The idea is to allow river water to flow through the notches, creating the slow-moving shallow water that the juvenile sturgeon need to survive. The Corps also has dredged in 23 locations to open up side channels that had long been closed off from the river, creating more shallow waters. The FWS ordered the Corps more than three years ago to elevate flows in the spring and reduce summer water levels to protect habitat and encourage spawning and nesting. The total bill for the project was about \$18 million, said Corps spokesman Johnston. About \$13 million of that went toward the shallow water work, and the remainder was used to fund FWS hatcheries and studies needed to complete the project, Johnston said.

The ancient pallid sturgeon, which has inhabited the river’s depths for millions of years, has struggled for survival over the last half-century under the Pick-Sloan Plan which was used to dam and straighten the Missouri River for flood control and to create a highway for barges. Without creating the new habitats, the FWS said the Corps would have to drop river levels this summer, possibly to levels that would threaten industrial and large recreational craft interests that have come to depend on a high and stable river during the summer.

The Corps said the Magnuson’s ruling shows that the agency has balanced all the demands on Missouri River water. “That’s been our goal forever, is to look at all the authorized purposes, plus the Endangered Species Act, and see if we can’t make sure that we serve all of these purposes,” said Johnston. “The number of lawsuits points out it’s a pretty narrow line, and apparently we’ve managed to stick to it for the time being,” Johnston said.

Interestingly, recreational boaters in the Omaha area have found that some of the shallow, slackwater habitats created for the pallid sturgeon also make excellent “gathering place(s) for boaters to hang out together or relax in their boats without the constant strain of watching the shoreline or worrying about hitting a buoy or other floating debris”. “It is a much safer to jump in and cool off (with life jackets on of course) without the current and other boats going by. Wouldn’t it be cool to double the size of it ...”, one user wrote. So it turns out that people and pallid sturgeon do have something in common — a need for shallow, quiet water! Who knows, maybe the idea will catch on and the people of Missouri, Iowa, Kansas and Nebraska will begin demanding that more of the river be dedicated to recreational use which in itself can generate a better regional economy than barge traffic ever has. Wouldn’t that be nice!

Sources: Karen Dillon, *Kansas City Star*, 7/9/04; *Billings Gazette*, 7/10/04; *Omaha World Herald*, 6/22/04; Libby Quaid, *AP/Omaha World Herald*; Henry J. Cordes, *Omaha World Herald*, 6/25/04; and *Omaha World Herald*, 6/23 and 6/27/04; *San Francisco Chronicle*, 6/25/04; Libby Quaid, *AP/The Bismarck Tribune*, 6/22/04; *The Bismarck Tribune*, 6/26/04; Nancy Neurohr, *OmahaRiverFront.com*, 7/16/04; and *Greenwire*, 6/22, 6/28/04; 7/12 and 7/14/04

## Oil Industry Challenging Navigable Waters Definition

The oil industry in early June urged a federal court to strike down what it believes to be an overly broad definition of “navigable waters” adopted by the U.S. EPA for regulating oil spills. The *American Petroleum Institute* (API), the *Petroleum Marketers Association of America* (PMAA), and *Marathon Oil Co.* called for the action in a summary judgement motion filed in U.S. District Court for the District of Columbia. API, PMAA and *Marathon* sued EPA nearly two years ago for its July 2002 oil spill rule, which plaintiffs maintain ignores a landmark 2001 Supreme Court decision and an earlier appeals court decision narrowing the definition of waters that can be regulated by the agency and the Army Corps of Engineers (Corps).

In their summary judgment request, the plaintiffs claim that EPA failed to provide adequate justification for its definition of navigable waters. Calling the definition arbitrary, the plaintiffs assert that “EPA did not discuss the statutory language or its legislative history, address highly relevant recent decisions of the Supreme Court and the lower federal courts, or even provide any policy reasons for the breadth of its definition.” The plaintiffs also claim that the definition goes against case law and that applying the definition ignores major court decisions barring the agency from regulating certain waters.

The first of two key wetlands cases cited by the plaintiffs are *Solid Waste Agency of Northern Cooke County (SWANCC) v. Army Corps of Engineers*, a 2001 Supreme Court decision invalidating the ability of the Corps and EPA to regulate isolated, intrastate waters solely because those waters might be used by migratory birds. Up to 20 million acres of isolated ponds could be stripped of federal protection by the SWANCC decision, according to a U.S. Fish and Wildlife Service analysis, but EPA and the Corps last year abandoned plans to issue a rule interpreting the case. The second case cited in the motion is a 1997 ruling by the 4th U.S. Circuit Court of Appeals in *United States v. Wilson*. In that decision, the court held that the Corps and EPA could not regulate isolated waters based on the notion that migrating waterfowl using such wetlands were essential to interstate commerce.

In crafting the oil spill rule, EPA ignored these important decisions, according to the

plaintiffs. "EPA has failed to carry out its duty to engage in reasoned decisionmaking. It is not right to demand compliance by the public with a rule not grounded in reason," the motion states. Environmentalists are concerned that the Bush administration will not mount a spirited defense. "The stakes are very high. If the oil industry gets its way, more than half the places where we fish and swim could be fair game for anyone who doesn't want to take basic steps to prevent oil spills," said Jennifer Kefer, an *Earthjustice Legal Defense Fund* attorney representing groups that have intervened in the case. "Basically, the oil industry believes that the vast majority of America's waters do not deserve to be protected from pollution by the Clean Water Act."

Marty Coyne, *Greenwire*, 6/14/04

## Glen Canyon Dam Flow Regime Failure

A 13-year-old experiment aimed at improving ecological conditions in the Colorado River watershed below Glen Canyon Dam is failing and needs a management overhaul, according to a draft report by a group of scientists that monitors the dam's environmental effects. Since 1991, Glen Canyon Dam has operated under "modified low fluctuating flows" (MLFF) intended to help recover the endangered humpback chub and other species downstream in Grand Canyon National Park without scaling back power production or recreational activities such as rafting.

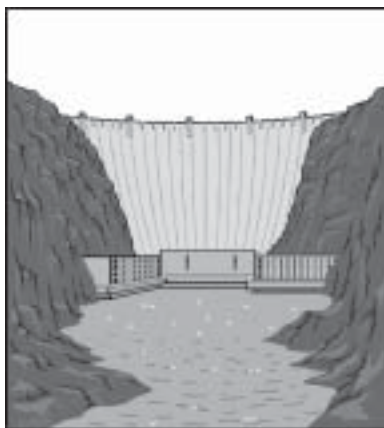
MLFF involves daily variations in flow. For example, on weekdays in July, daily fluctuations vary from 10,500 cubic feet per second (cfs) during the late evening and early morning off-peak hours to 18,500 cfs during peak times in the late afternoon and early evening. Still, the MLFF is a highly regulated version of the river's historic flows, which seasonally ranged from as little as 500 cfs to as much as 100,000 cfs.

Under the current flow regime, the endangered humpback chub, which once thrived throughout the Colorado River Basin has declined by an average of 14% each year, according to the draft report. Hydropower production of the Western Area Power Administration (WAPA), which sells power from Glen Canyon Dam, has also had to cut its electricity generation by roughly 25 to 30%, or 400 to 440 megawatts, in recent years. To make up the difference and meet

power contract commitments, WAPA purchases power from other producers — an expensive stopgap measure.

According to the report, no beneficial effects are evident in the ecological system (except the abundance of exotic trout), and in fact the move to MLFF is correlated with a relatively sharp decline in humpback chub recruitment. The only beneficiaries of the MLFF have been exotic trout that eat endangered chub and the rafting industry, the report concludes. The issue of flows from the dam needs to be addressed "openly and quickly" before it "leads to a breakdown in collaboration among stakeholders that has made adaptive management possible in Grand Canyon in the first place," the authors warn.

Management of Glen Canyon Dam and the Colorado River's resources in the park is overseen by a diverse group of stakeholders called the Adaptive Management Work Group. Participants range from Bureau of



Reclamation officials to fisheries biologists, environmentalists, hydropower interests and American Indian tribal representatives. The stakeholders periodically examine the latest scientific information on the river and make management recommendations to the Interior secretary, who decides whether to implement them.

The draft report suggests that a switch to a more variable flow pattern may benefit both ecological resources and power production in the Grand Canyon. Carolyn Hinkley, a spokeswoman for the WAPA agrees. "When we have fluctuating flows", she said, "it does allow us to meet demand more easily." Experimental flows over the past two winters that have increased daily fluctuations in an attempt to reduce the exotic trout have enhanced power production, Hinkley said.

But others contend dam managers should embrace more variable flows that mirror natural, seasonal fluctuations. These "seasonally adjusted steady flows," which were recommended by the Fish and Wildlife Service a decade ago, would attempt to mimic the Colorado River's highly dynamic natural flow, advocates of such measures say. But mimicking the river's historic low-flows would result in drastically reduced power production and revenues for WAPA, said Owen Lammers, executive director of *Living Rivers*, an advocacy group based in Moab, Utah.

*Living Rivers* and about 200 other environmental groups have asked the U.S. Bureau of Reclamation to draft a new environmental impact statement that would examine both seasonally adjusted steady flows and the decommissioning of Glen Canyon Dam, either of which they say could reverse the decline of the humpback chub. Hinkley said WAPA and other stakeholders are meeting to sort out an experimental flow regime to address concerns laid out in the draft report.

A copy of the full report, "*Evidence for the Failure of the Modified Low Fluctuating Flow Alternative (MLFFA) to Benefit Most Ecological Resources in Grand Canyon*", can be found on line at: <http://www.usbr.gov/uc/envprog/amp/twg/mtgs/04jun30/JK-MLFFA.pdf>

Source: April Reese, *Greenwire*, 7/26/04

## Climate Change Update

The sun is brighter now than at any time over the past 1,000 years, according to a team of European scientists. The researchers said their findings suggest that changing solar activity is influencing the global climate, causing the world to get warmer. But that over the past 20 years the number of sunspots has remained roughly constant, while the Earth's average temperature has continued to increase. This suggests, they say, that the human-produced greenhouse effect is the cause. The Earth's temperatures are thus being effected by the combined influence of increased levels of solar radiation and greenhouse gases, stated Sami Solanki and Manfred Schuessler of Germany's *Max Planck Institute* and Ilya Usoskin of Finland's *Sodankyla Geophysical Observatory*. The trio presented their findings at an astronomers conference held in early July in Hamburg, Germany.

"The sun has been at its strongest over the past 60 years and may now be affecting global temperatures," Solanki said. The findings add to concerns that massive solar eruptions can cause blackouts similar to one that occurred in Sweden in October 2002. Sunspots, caused by magnetic storms on the surface of the sun, typically erupt and fade in 11-year cycles, the last of which peaked in 2000. However, a period of unusually intense solar activity sent massive solar flares toward Earth last fall.

Meanwhile, deforestation in the vast Amazon region of South America has turned Brazil into one of the world's biggest carbon dioxide (CO<sub>2</sub>) polluters, scientists say. "Through the burning of millions of hectares of the Amazon every year, Brazil is emitting ridiculously high levels of CO<sub>2</sub>," said Professor Carlos Alberto Gurgel of the University of Brasilia. The findings were reported by a team of scientists from Brazilian and U.S. universities who studied illegal clearances through burning of the world's largest jungle — often described as "the lungs of the Earth".

According to the study, deforestation is pumping 200 million metric tons of gas into the atmosphere every year, Brazilian media report. Some 14,754 sq km (9,170 square miles) of jungle was lost in 2003, according to the Brazilian government. Brazil, the world's fifth largest country, is thought to have the greatest biodiversity on Earth. Experts say as much as 20% of the 1.6 million square miles (four million sq km) of rainforest has already been destroyed by development, logging and farming.

In Indonesia illegal logging has become such a problem that it would be punishable by death, under new legislation proposed by Indonesian Environment Minister Nabel Makarim. Makarim said he has asked for a temporary law while Parliament debates permanent new penalties because of severe air pollution caused throughout the region by forest fires and rainforest destruction. Under the parliamentary legislation, loggers could face a minimum jail sentence of 12 years and a maximum sentence of execution. Indonesia has been criticized for not signing the Asian Agreement on Trans-boundary Pollution. Makarim said he would like any deal he signs to include forest management provisions. "Illegal logging and forest fires to us are the same," Makarim said. "When forests are cleared, the land is prone to fires"

Related to this problem is the fact that air pollution appears to be altering rainfall patterns around the world, said Veerabhadran Ramanathan of the *Scripps Institution of Oceanography* in La Jolla, CA. It is the latest fallout from an exploding human population that over the past half-century has pushed untold tons of smog, soot and ash into the atmosphere, he said in early July at the nation's first state-sponsored global warming research program at the *California Energy Commission's Climate Change Center*. The vast sprawl of Los Angeles, with its millions of cars pumping greenhouse gases into the air, are in effect driving away the very rainfall its population needs to survive as pollution forces rain to fall outside the state. Instead of accumulating as snow in California's Sierra, a smaller amount lands in neighboring Nevada. Ramanathan co-led a 1999 study that reported the existence of a vast "brown cloud" of pollution, dust and chemicals that he believes is slowing solar evaporation from the oceans and leading to a net reduction in world rainfall.

It is part of a band of pollution encircling the globe, helping produce a 10% to 20% reduction in the amount of sunlight reaching the earth over the past 50 years. The phenomenon cools the earth's surface but heats the middle atmosphere. Minuscule flecks of black carbon make up perhaps only 10% of the pollution cloud, but play a dominant role in altering the way the atmosphere behaves, Ramanathan said. The dark particles absorb solar radiation and scatter sunlight, helping produce that characteristic haze that today coats not only cities such as Los Angeles but once-pristine areas such as Yosemite National Park downwind. They also form the nuclei that attract cloud moisture into water droplets. Clouds are getting thicker and darker because they retain more moisture, adding to the darkening effect on the earth below. When enough moisture accumulates around natural dust particles — clouds of which have been circling the globe for eons — the droplets fall as rain. But Ramanathan said the carbon specks are often too small to produce drops big enough to hit the ground.

Across the Western U.S. climate change has caused snowpacks to melt earlier in the year, leading some to warn that a warmer climate could mean less water for that growing region. Researchers at the *Scripps Institution of Oceanography* said that this year's snowmelt was one of the earliest in nearly 90 years. Stream gauges along the Merced River in California show that

snowmelt has moved over the last two decades from mid-spring to early spring or late winter. The earlier the snowmelt, the less water is left for reservoirs and plants. "The mountain ranges are essentially draining and drying earlier," said Dab Cayan of the *Scripps Institutions' Climate Research Division*. "I would say there's enormous concern about this." Water officials are attempting to catch the snowmelt runoff earlier to get more of it to users. The *Friant Water Users Authority*, which serves the San Joaquin Valley, is asking the federal government to build a new dam higher up on the San Joaquin River from the existing dam to catch more runoff and improve flood control. "Is this a short-term cycle or is it longer? That's the big question, and everyone's looking for the answer," said Frank Gehrke of the California Department of Water Resources.

A report released in mid June by the *Pew Center on Global Climate Change* recommends that the U.S. develop strategies aimed at helping citizens adapt to climate change in addition to seeking ways to prevent it. For example, government policies that encourage certain inflexible management techniques, such as pledging water allocations to communities from Western rivers, need to be rethought to take climate change into account, the report states. While climate change is likely to present major problems for natural ecosystems and biodiversity, human activities can be more easily altered, the report says, to adjust to different temperature and precipitation regimes. "Those systems that are managed by humans, such as agriculture, water resources and coastal development, can be handled in ways to reduce the severity of adverse impacts," the report states. A key challenge for policymakers will be developing policies flexible enough to allow man-made systems to change along with the climate.

The report concludes that much of the U.S.'s adaptive response is likely to be reactive, such as responding to observed changes from droughts in the West and higher storm surges from coastal storms along the East Coast and Gulf of Mexico. The report recommends that leaders from all levels of government take climate change scenarios into account when determining how to invest in infrastructure such as dams and irrigation systems as well as shoreline barriers and other projects susceptible to risk from climate change-induced events. Government at all levels



should consider the implications of climate change when making investments in long-lived infrastructure,” the report states.

The authors recommend funding increases for research to help integrate adaptation planning into management decisions. Thus far, most climate change funding has gone to basic climate research to understand past climate changes and predict future developments through computer modeling and other techniques. Author William Easterling of Pennsylvania State University said that while it is vital to obtain better forecasts of regional temperature and precipitation changes, research should not come at the expense of applied adaptation research. “It’s going to require a balance,” he said.

Eileen Claussen, president of the *Pew Center*, said its report drew four conclusions:

- Even if measures to reduce global warming are put into place today some increase will still occur and ways will be needed to adapt to it;
- Adapting will be challenging, costly and imperfect;
- Ecosystems around the world are already being affected by global warming; and
- Acting in advance of problems is necessary to reduce damage.

Meanwhile, ten leading U.S. climate scientists spoke of the need for more urgent action to tackle global warming in mid July at an open gathering of researchers at the *American Association for the Advancement of Science* (AAAS), in Washington, D.C.. They warned that climate models might have grossly underestimated the rises in temperature that will soon occur. The team called for a major shift to cleaner fuel technologies to constrain the rapid growth in greenhouse gases. “We’re in the middle of a large, uncontrolled experiment on the only planet we have,” said Don Kennedy, the editor-in-chief of *Science* magazine. “Global warming has taken place and at our present rate of doing business, there is going to be a lot more of it and it will have serious consequences,” he added.

The day-long conference, organized by Kennedy and Albert Teich, director of science and policy for the AAAS, was aimed at convincing the public and politicians that there is ample evidence that the buildup of CO<sub>2</sub> is transforming ecosystems worldwide. The researchers urged U.S. policymakers and the public not to get hung up on the uncertainties that still surrounded climate science — and not to use gaps in knowledge

as an excuse for inaction. “A combination of the models and the data, including the deep-past climate records, are really pretty convincing that if you increase the CO<sub>2</sub> levels from today’s values of 370 ppm to 1,000 ppm — which we are going to do within the next 150 years without a doubt — it is going to be a very different world,” said David Battisti, from the University of Washington in Seattle. “There are good reasons to believe the projections from the models that we have now are actually underestimating the changes.”

Michael Oppenheimer, from Princeton University, added: “The overall message is that the science has been pointing in the same direction for a long time now; and it’s time for politicians to sit up, take notice and actually start to act on the problem, as political leaders are doing in other parts of the world.

In addition to Kennedy, Teich, Battisti and Oppenheimer; other researchers at the AAAS meeting included Daniel Schrag, of Harvard University; Joyce Penner, from the University of Michigan; Thomas Crowley, of Duke University; Richard Alley, from Pennsylvania State University; Jerry Meehl, of the *National Center for Atmospheric Research*; Lonnie Thompson, from Ohio State University; and Chris Field, of the *Carnegie Institution* of Washington.

Also in late June, four supercomputing centers — the National Center for Atmospheric Research, the Oak Ridge National Laboratory, Lawrence Berkeley National Laboratory and the Earth Simulator in Japan — released a new version of the *Community Climate System Model* (CCSM), making the simulator available to climatologists worldwide. The massive computer simulation shows that global temperatures may rise “significantly more” than earlier models had predicted. The CCSM simulates the interaction of greenhouse gas emissions, clouds, ocean currents and agricultural trends. “This model makes substantial improvements in simulating atmospheric, oceanic and terrestrial processes,” said William Collins, who helped oversee the project. “We’re now ready to begin using it to study the climate of the next century”. For now, the simulator can predict short-term and local trends in climate change, but scientists said the simulator may be able to calculate long-term trends within a few months.

Then in early July NASA launched a highly technical atmosphere-monitoring satellite at

Vandenberg Air Force Base in CA. NASA plans to use the 6,542 lb., \$785 million spacecraft to monitor the upper and lower layers of the atmosphere, tracking levels of stratospheric and tropospheric ozone, chlorofluorocarbon, chlorine, CO<sub>2</sub>, water vapor and other potentially harmful gases and pollutants, as well as radiation from the Earth and its atmosphere. The satellite, named *Aura*, could be in orbit for at least the next six years. Scientists hope information from the satellite will help them understand atmospheric chemical and air pollution transport and mixing. *Aura* eventually will join a fleet of international satellites directed to scan the Earth’s entire surface and monitor global climate change. Scientists hope to use the satellite to test whether pacts such as the *Montreal Protocol*, a 1987 United Nations treaty, are working. Scientific measurements are scheduled to begin by early October.

Meanwhile, within the industrial sector *Shell* Chairman Ron Oxburgh and *American Electric Power* (AEP) CEO Michael Morris both came out in June in favor of addressing the climate change problem. Oxburgh said that he is “really very worried” about climate change and that industry officials should help control CO<sub>2</sub>. He said further that the industry should capture and then store CO<sub>2</sub> emissions through a process called carbon sequestration. “Sequestration is difficult, but if we don’t have sequestration then I see very little hope for the world,” he said. “You can’t slip a piece of paper between David King [the government’s chief science adviser, who said climate change was a bigger threat than terrorism] and me on this position,” Oxburgh said. *Shell*, in addition to *BP*, has said it considers climate change to be real, and environmentalists said they would like to see more oil firms recognize the issue. “This is an important statement to make but it does have to come with a commitment to follow through,” said Robin Oakley of *Greenpeace*.

Michael Morris, who heads the nation’s largest power company, said AEP would participate in an international climate change agreement. “We are more than prepared to go forward. We are absolutely dedicated to improving the air performance at our power plants,” he said. However, while environmentalists praised Morris for talking about the issue, they pointed out that AEP is fighting a federal lawsuit alleging the company did not install proper pollution controls at 11 of its plants in Indiana, Ohio, West Virginia and Virginia.

A poll conducted in late June by the *Program on International Policy Attitudes and Knowledge Networks* with funding from nonpartisan charitable foundations found that a large majority of Americans support enacting the greenhouse gas (GHG) reduction legislation currently pending in the U.S. Senate. According to the poll, 81% of respondents favor targets of the bill S. 139 offered by Sens. John McCain (R/AZ) and Joe Lieberman (D/CT) that would mandate a reduction in GHG emissions by industrial sectors to 2000 levels by 2010. Experts say the poll is consistent with past data showing Americans believe climate change is a serious problem that must be addressed. However, critics of the legislation said the poll included questions that do not fully reflect the legislation's effects on businesses and consumers.

The bill was defeated on a 43-55 vote in October but could come up for a second vote again this summer. The prospects for passage in the Senate are dim, but McCain and Lieberman have said they will continue to force votes until the bill does pass. "The larger point is that most people are concerned about climate change, there is substantial public support for action, and our Congress is not taking action," said Willet Kempton, a professor at the University of Delaware and an expert on public opinion and climate change. This poll is unique in that it focuses on a specific piece of legislation, but its wider finding of support for taking action on climate change is not new. "The battle over public opinion about the existence of global warming has been won," said Roger Pielke Jr., a researcher at the University of Colorado in an e-mail correspondence. "The public overwhelmingly believes global warming to be real and consequential."

Within the religious sector, a coalition of 30 evangelical leaders agreed in early July during a two-day national conference in Maryland, to engage in broad faith-based environmental activism. Declaring that caring for the environment is part of following Jesus, the group agreed to work for faith-based environmental activism among the nation's most conservative Christians. The low key, but potentially pivotal move, toward a wider engagement in environmental affairs comes at a time when 1,000 mainline Protestant, Jewish, Roman Catholic and Orthodox clergy from 45 states have been stepping up calls for another vote on the McCain-Lieberman bill.

The group of 30 conservative Christian leaders did not take a position on the McCain-Lieberman bill, saying they avoided a group stance in an effort to avoid becoming involved in an environmental campaign in an election year. "We took the long view. I'm not in it for a quick press hit," the Rev. Ted Haggard, the association's president, said after the conference. "What I saw working was the Holy Spirit." Their primary purpose, the delegates said, was to build trust among each other and then reach out to other evangelical leaders on environmental issues.

But on July 2, the *U.S. Conference of Catholic Bishops* did take a position on the bill by sending letters to senators asking them to revisit it in another vote. Members of the *Interfaith Climate and Energy Campaign* have been writing similar letters and visiting senators in their district offices. "We have never had broader signatures on a statement in 12 years," said Paul Gorman, executive director of the *National Religious Partnership for the Environment*. "It really tries to make a case for why this is a universal moral issue and what it means when religious values meet scientific evidence," he said.

Meanwhile, the Archbishop of Canterbury, Rowan Williams, announced the Church of England's support for a *Global Commons Institute* proposal to garner faith-based support for "contraction and convergence," or cutting global emissions and equalizing the amount of pollution emitted per person in rich and poor countries. In a lecture in London, entitled *Changing The Myths We Live By*, he said we had to avert a global ecological crisis that could ultimately jeopardize "our viability as a species".

If evangelicals do become fully engaged in environmental policy debates, those at the conference said their approach would bear a distinctive evangelical stamp — grounded in Jesus' love for the created order and for the market-based solutions favored by many members. "We are pro business. We're pro free enterprise, we're pro free market because of our concern for the poor," said Haggard. "People need goods and services. We would become corporate-friendly environmentalists, which would be a totally different political and economic force than the current popular image of a granola tree-hugger."

But the fact that evangelicals would be engaging in environmental issues, even from a business-friendly perspective, could

change the political calculus in Washington and state capitals, those present said. "It's an inescapable fact that the evangelicals are the Republican party's base. If that base were to say at some point that this [climate change] is an important concern to them, one would only imagine that Republicans would take note of that," said Richard Cizik, the Christian Environmental Association's vice president of governmental affairs. "These are some big ifs, but over the course of the next five months if an evangelical consensus were to develop on climate change, it's obvious that consensus would seem at odds with the present Bush policies."

Until now, most efforts by evangelicals to influence public policy — whether their successful efforts to help save the U.S. Endangered Species Act in 1994, or their more recent efforts to encourage Christians to drive fuel efficient cars by asking, "What would Jesus drive?" have been mounted by autonomous groups such as the *Evangelical Environmental Network* (EEN). The Rev. Jim Ball, executive director of the EEN, said many evangelicals have viewed environmentalism, as a "liberal" issue bordering on pagan idolatry and unfriendly to business. David Neff, editor of *Christianity Today*, a magazine founded by evangelist Billy Graham, said there was "high distrust" of environmental groups. "That suggests to me that if the right trustworthy organizations came to that evangelical constituency, it could be mobilized. Right now, anything that sounds like an environmental organization is going to have a little bit of a credibility problem."

Melissa Carey, a climate change policy specialist with *Environmental Defense*, said that religious activism was important to any success. "It adds a dimension to the case for climate action that no one else can make, which is the moral case for action," Carey said. "The religious community has the unique ability in a highly credible way to urge policy makers to look beyond the facts, figures and parliamentary procedures." Ball said that as evangelicals speak to politicians, the point they will make is that "caring for God's creation is part of being a Christian."

Sources: David Whitehouse, *BBC News online*, 7/2, 7/6 and 7/15/04; *BBC News*, 6/15/04 and 7/16/04; Leidig/Nikkhah, *London Telegraph*, 7/18/04; Don Thompson, *AP/Contra Costa Times*, 6/11/04; Bruce Lieberman, *San Diego Union Tribune*, 6/10/04; Randolph E. Schmid, *AP/San Francisco*

*Chronicle*, 6/16/04; Juliet Eilperin, *Washington Post*, 6/16/04; David Adam, *London Guardian*, 6/17/04; Mark Williams, *Newsday*, 6/22/04; Mike Toner, *Atlanta Journal-Constitution*, 6/23/04; Steve Hymon, *Los Angeles Times*, 6/28/04; Jonathan Kent, *BBC News online*, 7/2/04; Teoh Teik Hoong, *Malaysia Star*, 7/2/04; *USA Today*, 7/15/04; Larry B. Stammer, *Los Angeles Times*, 7/4/04; Alex Kirby, *BBC News online*, 7/5/04; Andrew Freedman, *Greenwire*, 6/15 and 6/28/04; *Greenwire*, 6/11, 6/16, 6/22, 6/23, 6/25, 6/28, 7/2, 7/6, 7/12, 7/15 and 7/19/04

## Adopt a Wetland

Oakdale, MN has joined a handful of other cities in wanting to prevent their 250-plus wetland areas from succumbing to pollution and invasive plants by asking the residents for help. To this end, the City Council recently voted to make Oakdale the second community in the Twin Cities to start an "Adopt-a-Wetland" program, with the hope that dozens of local groups will help improve the city's water by tending nearby swamps and bogs.

Modeled after the successful *Adopt-a-Highway* program, volunteers would choose a wetland and keep it clear of trash, tear out

invasive plants such as buckthorn and purple loosestrife, plant native species and monitor wildlife populations and water quality. "We're trying to get the citizens to take care of the wetlands in their back yard," said Scott Carver, who sits on the city's Environmental Management Commission. Once a group commits to maintaining a site, the city would install a sign honoring their efforts, much like the signs along roads in the highway program.

Wetlands help keep groundwater pure, slow erosion, control floods, provide habitats for native plants and animals, and filter sediment that might otherwise cloud and damage streams and rivers. Ron Rogstad, who manages Oakdale's program, said the city's drinking water comes from an aquifer and, at less than 25 years old, is very young by geological standards. This means the health of the area's wetlands is even more important than in places using "older" water. As Carver points out, a vibrant wetland full of birds and frogs can also control the resident mosquito and tick populations — not to mention offer the aesthetic appeal of a redwing blackbird's song or a bullfrog's thrum.

Other locations where the idea has been tried include Bloomington, MN, Ortonville, MN (which is along the South Dakota border);

Iowa; New Jersey; Delaware and Georgia. Rogstad's counterpart in Bloomington, Jean Buckley, said her city has been running an *Adopt-a-Wetland* program since the late 1990s, and said residents have adopted about a dozen of Bloomington's 300-odd wetlands.

Source: Hank Shaw, *St. Paul Pioneer Press*, 7/21/04



**"In the end we will only conserve what we love.**

**We will love only what we understand.**

**We will understand only what we are taught."** -- from a 1968 speech of Baba Dioum from Dakar, Senegal, Africa at the *International Union for Conservation of Nature and Natural Resources*, New Delhi, India.

## Meetings of Interest

**Sep. 20-22:** Wild Trout VIII Symposium: Working Together to Ensure the Future of Wild Trout. Yellowstone National Park, WY. See: [www.wildtrout8.org](http://www.wildtrout8.org). Contact: Robert Carline, [rcarline@psu.edu](mailto:rcarline@psu.edu), (814) 865-4511

**Sep. 23-24:** Assessing and Re-naturalizing Streams Impacted By Dam and Dam Removal, University of Montana, Missoula. See: [http://www.umt.edu/rivercenter/Conf\\_Program04.htm](http://www.umt.edu/rivercenter/Conf_Program04.htm). Contact: Manny Gabet, [manny.gabet@mso.umt.edu](mailto:manny.gabet@mso.umt.edu)

**Sep. 23-26:** The Organization of Fish and Wildlife Information Managers Annual Meeting and Workshop, San Diego, CA. See: [www.ofwim.org/meetings/OFWIM2K4-SecondCP.html](http://www.ofwim.org/meetings/OFWIM2K4-SecondCP.html). Contact: Bruce Schmidt, (503) 595-3113.

**Oct. 25-28:** 7th Annual Wetlands Workshop: The Protection of Aquatic Ecosystems Using Watershed-Based

Approaches, Atlantic City, NJ. See: [www.wetlandsworkgroup.org](http://www.wetlandsworkgroup.org). Contact: Frank Reilly, [Frank@wetlandsworkgroup.org](mailto:Frank@wetlandsworkgroup.org), (540) 286-7523.

**Oct. 28-29:** 31st Annual Conference on Ecosystems Restoration and Creation, Tampa, FL. See: [www.hccfl.edu/depts/detp/ecoconf.html](http://www.hccfl.edu/depts/detp/ecoconf.html). Contact: Patrick Cannizzaro, [pcannizzaro@hccfl.edu](mailto:pcannizzaro@hccfl.edu), (813) 253-7523.

**Nov. 1-3:** Watershed Planning: Approaches, Challenges, and Strategies for Success II, Stevenson, WA. Contact: [ssf@island.net](mailto:ssf@island.net), (250) 729-9623 or C. Susan Weiler, [dialog@whitman.edu](mailto:dialog@whitman.edu), (509) 527-5948.

**Nov. 3-5:** 24th International Symposium of the North American Lake Management Society, Victoria, BC, Canada. See: [www.nalms.org](http://www.nalms.org). Contact: Carol Winge, [winge@nalms.org](mailto:winge@nalms.org), (608) 233-2836

**Dec. 3-4:** Fourth Biennial Northeast Aquaculture Conference and Exposition: From the Mountains to the Sea, Manchester, NH. See: [www.northeast.aquaculture.com](http://www.northeast.aquaculture.com). Contact: J. J. Newman-Rode, [jj.newman@unh.edu](mailto:jj.newman@unh.edu), (603) 749-1565.

**Dec. 12-15:** Midwest Fish and Wildlife Conference, Indianapolis, IN. See: [www.in.gov/dnr/midwest2004](http://www.in.gov/dnr/midwest2004). Contact: Chris Grauel, [cgraue1@dnr.state.in.us](mailto:cgraue1@dnr.state.in.us), (812) 352-8486.

**Jan. 11-13, 2005:** *Scaphirynchus* Conference, St. Louis, MO. See: <http://bio.slu.edu/mayden/conferences/sturgeon.html>. Contact: Tom Keevin, [thomas.m.keevin@mvs02.usace.army.mil](mailto:thomas.m.keevin@mvs02.usace.army.mil), (314) 331-8462.

**Sep. 11-15, 2005:** 135th Annual Meeting of the American Fisheries Society, Anchorage, AK. Contact: Betsy Fritz, [bfritz@fisheries.org](mailto:bfritz@fisheries.org), (301) 897-16, ext. 212.



## Congressional Action Pertinent to the Mississippi River Basin

### Conservation

**S. 2590.** Alexander (R/TN) and Landrieu (D/LA). Provides a conservation royalty from Outer Continental Shelf revenues to establish the Coastal Impact Assistance Program, provide assistance to States under the Land and Water Conservation Fund Act of 1965, ensure adequate funding for conserving and restoring wildlife, assist local governments in improving local park and recreation systems, and for other purposes.

**H. R. 2036.** Isakson (R/GA). Amends the Internal Revenue Code of 1986 to provide economic incentives for the preservation of open space and conservation of natural resources, and for other purposes.

**H. R. 4100.** George Miller (D/CA) and Young (R/AK). Establishes a permanent trust fund to get Americans outdoors by providing access to parks and recreation areas in urban and rural communities; preserving historic places; promoting healthy and active lifestyles; and providing for hunting, angling, and wildlife viewing for the people of the United States.

### 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 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.

**H. R. 4475.** Graves (R/MO). Amends the ESA to focus conservation efforts under that Act on the 109 species most in danger of extinction, and for other purposes.

### 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.

### 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.

**S. 2550.** Crapo (R/ID) and 2 Co sponsors. Amends the FWPCA and the Safe Drinking Water Act to improve water and wastewater infrastructure in 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.

### Floodplain Management

**S. 2301.** Inouye (D/HI). Improves management of Indian fish and wildlife and gathering resources, and for other purposes.

**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. 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. 1453.** Leahy (D/VT) and Boxer (D/CA)

Expedited procedures for hazardous fuels reduction activities and restoration in wildland fire prone national forests 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. 652.** Andrews (D/NJ). Assures large areas of land in healthy natural condition throughout the country to maximize wildland recreational opportunities, 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. 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.

**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.

## 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) and **H. R. 4067.** Gilchrest (R/MD) and 19 Co sponsors. Provides for scientific research on abrupt climate change, 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.

**S. 1164.** Collins (R/ME) and 4 Co sponsors. Provides for the development and coordination of a comprehensive and integrated U.S. research program that assists the people of the U.S. and the world to understand, assess, and predict human-induced and natural processes of abrupt climate change.

**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 (NANPCA) 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.

**S. 2490.** Inouye (D/HI) and Stevens (R/AK). Amends the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 to establish vessel ballast water management requirements, and for other purposes.

**S. 2598.** Akaka (D/HI) and 5 Co sponsors. Protects, conserves, and restores public land administered by the Department of the Interior or the Forest Service and adjacent land through cooperative cost-shared grants to control and mitigate the spread of invasive species, 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 issuance of regulations to assure that vessels

entering the Great Lakes do not discharge ballast water that introduces or spreads nonindigenous aquatic species and that such ballast water and its sediments are treated through the most effective and efficient techniques available.

**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.

**H. R. 3122.** Miller (R/MI). Amends the NANPCA directing the U.S. Coast Guard to prohibit vessels with ballast tanks containing more than 5% ballast water from entering the Great Lakes.

## Mining

**S. 2049.** Specter (R/PA) and **H.R. 3778.** Petersen (R/PA) and Sherwood (R/PA). Amends the Surface Mining Control and Reclamation Act of 1977 (SMCRA) to reauthorize collection of reclamation fees, revise the abandoned mine reclamation program, and make sundry other changes.

**S. 2208.** Rockefeller (D/WV) and 2 cosponsors. Amends the SMCRA to reduce the amounts of reclamation fees, modify requirements relating to transfers from the Abandoned Mine Reclamation Fund, and for other purposes.

**S. 2211.** Rockefeller (D/WV) and **H.R. 3796.** Cubin (R/WY) and Rahall (D/WV). Amends the SMCRA to reauthorize and reform the Abandoned Mine Reclamation Program, and for other purposes.

**H. R. 504.** Udall (D/CO). Provides for the reclamation of abandoned hardrock mines, 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 Nat'l. Forest Ecosystem Protection Program.

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

#### **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

#### **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.

**S. 2301.** Inouye ( /HI). Improves the management of Indian fish and wildlife and gathering resources, and for other purposes.

**S. 2470.** Bond (R/MO) and 7 Co sponsors, and **H.R. 4785.** Hulshof (R/MO) and 17 Cosponsors. Enhances navigation capacity improvements and the ecosystem restoration plan for the Upper Mississippi River and Illinois Waterway System.

**S. 2554.** Frist (R/TN) and 4 Co sponsors and **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.

**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.

#### **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>



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