River Crossings

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Reader's Survey

It's been some time since we conducted our last Reader's Survey, and with a new Coordinator coming onboard soon, we felt it appropriate to ask our readers for input as to how we've been doing. So please take a few moments of your time to provide feedback on the enclosed form or send a note by return email to ijrivers@aol.com. As always, your input will help *River Crossings* remain focused and meeting your needs in keeping you abreast of important natural resource issues in the Mississippi River Basin. So please let us know what you like, what you don't like, and what you'd like to see more of in future issues of *River Crossings*.

Thanks in advance for helping to keep us on point!

Chris O'Bara
MICRA Chairman

Yazoo Backwater Project Revived

The U.S. Army, Corps of Engineers (Corps) has once again pulled the Yazoo Backwater Pumps Project (first crafted in 1941) off the shelf and the U.S. EPA and the Interior Department are reviewing the Corps' latest rendering of the project. Meanwhile, environmental interests have raised significant concerns because the proposed water-diversion project in Mississippi's Yazoo River Basin carries a $220 million price tag and has the potential to destroy as much as 200,000 acres of bottomland forest and other wetlands in the alluvial plain of the Lower River Mississippi Delta.

View of seasonally flooded bottomland hardwood forest in the Pearl River Basin, Louisiana and Mississippi. (Louisiana State University Photo.)

But the Corps maintains that the project provides vital flood protection and an economic boost for a region that desperately needs it. And the project's powerful congressional patron, Sen. Thad Cochran of Mississippi, the Senate's top Republican appropriator, shares the Corps' view. In fact, Cochran has helped provide about $50 million over the years to get the project back on the Corps' drawing board.

In a statement, Cochran called the project "the last leg" in a long-sought flood control plan for his state, noting that the delta region has endured nearly a century with inadequate protection. It was,

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after all, the devastating 1927 Mississippi River flood, he said, that "cemented the role of the federal government in understanding that flooding is a national issue rather than a state or local one."

But the Yazoo River Basin is a critical backchannel of the Mississippi River, that absorbs periodic flood tides of the Mississippi, while augmenting its freshwater flows during drier times — features which provide for flow control and flood protection for other locations in the region such as New Orleans.

The heart of the Yazoo Pumps Project is a proposed pumping station — capable of moving 14,000 cubic feet of water per second — that would be built atop a levee wall separating the Yazoo Backwater Area from the Mississippi River's main channel. To mitigate the project's environmental damage, the Corps is proposing "nonstructural improvements" that include the restoration of more than 62,000 acres of forest and improving conditions for fish and waterfowl. But most of the wildlife habitat that the project would drain or partially drain is on federal property: the Yazoo and Panther Swamp National Wildlife refuges managed by the U.S. Fish & Wildlife Service (FWS) and the Delta National Forest, managed by the U.S. Forest Service.

"The Yazoo pumps would cause catastrophic damage to some of the richest resources in the nation that are under the protection of the Department of the Interior," leaders of 13 environmental groups told Interior Secretary Dirk Kempthorne in an October letter. The Corps acknowledges that the construction of water-intake structures for the project would destroy as many as 26,000 acres of wetlands. But a spokesman for the Corps' Vicksburg District in Mississippi refuted environmentalists' claims that more than 200,000 acres of wetlands would be drained. "That's a distortion of the facts," spokesman Frank Worley said. "There are actually 200,000 acres that will remain flooded during the pump operation." The difference, he said, is that the Corps — not nature — would determine the extent of the flooding.

But project opponents released a second letter in mid December signed by more than 500 biologists, hydrologists and other scientists asking EPA Administrator Stephen Johnson and Kempthorne to halt the project. The letter cites benefits provided by wetlands in the Yazoo River Basin for fish and wildlife habitat, stormwater storage and treatment, drought mitigation and carbon dioxide storage. And even if the Corps keeps its promises to purchase conservation easements and take other mitigation measures, such steps "could not replace the wetland acreage or functions lost to the Yazoo Pumps," the letter says.

Among the high-profile critics of the project is Theodore Roosevelt IV, great-grandson of the 26th president whose legacy as a conservationist includes the establishment of national parks, forests and wildlife refuges. Roosevelt and other critics said the Yazoo pumps project, if approved, would violate the Bush administration's "no net loss of wetlands" pledge. Moreover, they say the Corps' assurance that the project will actually enhance wetland function is "at best a misleading statement." "If the [Bush] administration truly intends to live up to its goal of no net loss of wetlands, then EPA must veto this project and do it now," said *National Wildlife Federation* President and CEO Larry Schweiger.

The Clean Water Act allows EPA to veto Corps' wetland permits, but the agency has used the power sparingly — only 11 times since regulations giving it that authority took effect in 1979. EPA had in fact opposed the Yazoo Pumps project as recently as 2000, citing its extensive wetlands impacts. But agency spokeswoman Enesta Jones, said EPA would give the Corps' latest proposal a full review.

The FWS also has raised strong doubts about the Yazoo Pumps project. Tom MacKenzie, a spokesman for the FWS regional office in Atlanta, said the project's "negative impact on fish and wildlife is larger than the Corps has acknowledged," and that the proposed mitigation for wetlands losses "does not fully offset the negative impacts" of the project. In a 2001 fact sheet stating its position, the FWS expressed concern that the project "could ultimately reverse the current landowner-driven wetland restoration trend ... by increasing drainage for agriculture, in this instance, to benefit a relatively few landowners."

River Crossings

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But the Corps maintains that the Yazoo Pumps project is needed to protect more than 1,000 homes, businesses and farms from persistent flooding caused by back-channeling of the Mississippi River in the Yazoo River Basin during the wet season and by increased stormwater flows entering the basin from upstream tributaries. A Corps' cost-benefit analysis shows the $220 million project reaping $23.3 million in annual economic benefits to the region. The public, the report says, will reap $1.40 in benefits for every dollar spent on the project.

Sen. Cochran said, "Maintaining and improving our flood control measures is critical to the future and further development" of the Yazoo Basin. But according to the Corps' analysis, the Yazoo Backwater Area's economic prospects are limited to government jobs and mechanized farming of corn, soybeans and other row crops. A relatively small number of wealthy landowners would reap the lion's share of the Yazoo project's benefits. Over the last half-century, farm ownership in Sharkey and Issaquena counties, the Yazoo region's core, dropped precipitously — from 2,036 farms in 1954 to 192 farms in 2002. The region's population also has steadily eroded, with half of the core counties' population leaving between 1950 and 2000.

Sixty-one percent of the roughly 9,000 people who remain in the region are minorities, while 31 percent live below the federal poverty threshold, according to government estimates. But Kent Parrish, the Corps' senior manager for the Yazoo pump station project, said the delta's low-income residents have much to gain from the project, though he acknowledged farmers also will benefit by the increased acres expected to be made available for crop cultivation. Many of the region's residents "don't have the resources to recoup after the floods or move someplace else," Parrish said in an interview. "So you're digging a deeper hole for them."

But critics aren't swayed. Rebecca Wodder, president of the advocacy group *American Rivers*, called the Corps' rationale for the project "mind-numbing." "It's quite simply insane that the Corps still wants to build this project, but they do," Wodder said. "Our country is faced with many complicated environmental challenges, but this is not one of them."

Source: Daniel Cusick, *Greenwire*, 12/13/07

Levee Mania

The St. Louis, Cape Girardeau, Monarch Chesterfield and Festus/Crystal City levees in Missouri can no longer provide their levee districts with the 500-year level of protection promised by the Corps of Engineers (Corps). In fact, they cannot currently provide even a 100-year level of protection without human intervention, said Corps' St. Louis District Col. Lewis Setliff.

Rep. Russ Carnahan (MO/D) and the Corps held a Missouri levee summit in St. Louis County in November to talk to community and business leaders about the problem and the importance of flood protections. Setliff said that temporary measures could be taken to decrease flood risks, but the Corps is seeking more permanent solutions to the levee problems. "With every levee, there's a different story," Setliff said. He added that, in total, there are nine levee systems in Missouri and Illinois with deficiencies that are being addressed in his district.

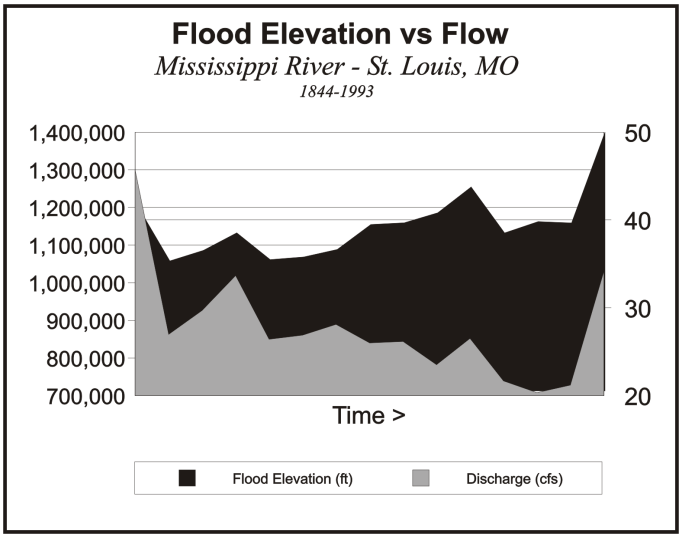


Figure showing the historic effect of levee construction in the St. Louis area. As levees were raised over time, even as discharge went down, flood elevations rose. Then in 1993 when the levees failed (right side of the graph), discharge and flood elevation rose in unison. It is clear that raising levees is not the answer to flood control, a more comprehensive plan is needed.

How can that be? Were the levees not engineered correctly when built? Have other changes occurred (i.e. other levees been raised) since the flood of 1993 that are now impacting the levees in question? Is this just is a continuation of the trend that has occurred over the history of flood control in this country (see Figure above) This is a major issue that the Clinton White House's Floodplain Management Review Committee (i.e. Galloway Committee) discussed in their report in the aftermath of the 1993 flood.

Rather than continuing to raise these levees in a piecemeal fashion as we have in the past (looking only at localized impacts), we need to look at the River system as a whole and engineer it accordingly for flood control. We also need to include adequate floodwater storage capacity within our floodplains by providing vast areas open to flooding during high water events. This is the concept under which the Big Muddy National Fish and Wildlife Refuge was developed. Expansion of that and other refuges or open lands needs to be included in any flood prevention scheme. Continually raising levees in a never ending cycle is not the answer to flood control. Neither is leveeing off a natural flood control channel such as the Yazoo River discussed in the previous article.

In both instances the Corps needs to go back and revisit the floodplain management issues discussed by the Galloway Report in 1994. In case anyone has forgotten that document it can be referenced as follows: *Interagency Floodplain Management Review Committee. 1994. Sharing the Challenge: Floodplain Management into the 21st Century. Report of the Interagency Floodplain Management Review Committee to the Administration Floodplain Management Task Force. USGPO. ISBN 0 16 045078 0. Washington, D.C. 191 pp. + Apps.* Commonly known as the *Galloway Report*, this document can be purchased online through numerous sources.

Sources: *AP/Kansas City Star*, 11/26/07; and *Greenwire*, 11/28/07

Upper Mississippi River Barge Traffic Down Again in 2007

Barge traffic on the Upper Mississippi River and Illinois Waterway continued an 18-year downward trend through 2007, according to the latest U.S. Army Corps of Engineers (Corps) figures compiled and released in mid January by *Public Employees for Environ-*

mental Responsibility (PEER).

Despite this long, steep decline in demand for barge transportation, Congress brushed aside a veto to make expansion of the lock system on these rivers one of the centerpieces of its new Water Resources Development Act (WRDA). The question now is whether Congress finds the funds to authorize the $2 billion lock expansion plan. The WRDA authorized some 940 projects that would cost a total of approximately $23 billion to complete. The Upper Mississippi Lock project is the second largest project in that bill, behind the multi-year Everglades "restoration" effort.

Large, cumulative and sustained decreases in barge traffic have occurred at every Upper Mississippi River and Illinois Waterway lock, with the most heavily utilized locks experiencing an average 36% traffic reduction since the Corps and its boosters began advocating for lock expansion back in the early 1990s. This downward trend is likely to continue as the leading barge line forecasts even lower grain traffic in coming years. Barge demand in the region consists primarily of grain and other agricultural products.

Barge traffic is now so light that the locks sit idle more than half of the year. At the same time, an aggressive rehabilitation program pursued by the Corps is keeping lock unavailability at historic lows. "Traffic is so sparse that the Corps doesn't even bother to schedule the barges to minimize congestion," stated PEER Executive Director Jeff Ruch. "The Upper Mississippi lock expansion is the poster child for pork barrel myopia in Congress."

This project has been steeped in controversy since the mid 1970's. Then in 2000 the Corps' own lead economist on the project, Dr. Donald Sweeney, filed an explosive whistleblower disclosure documenting how top Corps commanders had grossly manipulated the cost-benefit study used to justify the project. This scandal triggered a battle about how to "reform the Corps" which was a major factor in holding up subsequent WRDAs until late 2007.

Nonetheless, the Corps ultimately endorsed the lock expansion but, in response to scathing critiques from the *National Academies of Science* and other authorities, promised to correct its economic models to eliminate systematic biases favoring construction. Its revised study on the Upper Mississippi project is still not completed.

"When it comes to public works, Congress and the Corps are two addicts who feed off each other," added Ruch, whose organization represented Dr. Sweeney. "As we did with military base closures where it was recognized that corrosive parochial politics could not be controlled, we need an independent national commission to rank our infrastructure priorities."

Source: *Public Employees for Environmental Responsibility News Release*, 1/15/08. Contact: Carol Goldberg (202) 265-7337

Gulf Dead Zone Progress Delayed

The government goal of restoring the sprawling "dead zone" in the Gulf of Mexico by 2015 is unlikely to be met, according to a plan released recently by a federal and state task force. The new plan updates a decade-old blueprint for restoring water quality in the zone, which stretches from the mouth of the Mississippi River to the Texas state line. The revised document calls for states along the Mississippi River to enact strict water quality standards and encourages farmers to limit fertilizers on lands near streams.

A decade ago, a team of government experts and environmental researchers banded together to tackle the problem of a growing lifeless, oxygen-depleted zone of ocean water stretching over more than 6,000 square miles, an area larger than the state of Connecticut. Four years later, their research on the Gulf "dead zone" led to an agreement among nine states, numerous federal agencies and two American Indian tribes to significantly reduce the size of this zone by 2015. But solving the problem is a vast undertaking.

Fertilizer runoff and wastewater from farms and towns upstream in the nation's heartland wash billions of pounds of excess nutrients into the Mississippi, and eventually the Gulf, each year, sparking unnatural algae blooms that die and decay choking off the oxygen supply vital for marine life in the deeper waters of the Gulf. A diffuse network of streams and creeks feed into the tributaries of the Mississippi River draining more than 40 percent of the continental United States. So pinpointing and halting the source of the problem is very complex and has eluded policymakers over the years. Additionally targeted federal financing to address the problem has never materialized.

Now at the halfway mark for the 2015 goal, the dead zone is still growing — reaching nearly 8,000 square miles this year — one of the largest ever recorded. And the federal and state task force acknowledges that the 2015 goal is unlikely to be met. A major contributing factor is that record high corn prices from the ethanol boom are bringing more farmland on line increasing fertilizer use in the Basin. In fact, U.S. farmers planted more than 93 million acres of corn this year, the most since 1944. EPA estimates that up to 210 million pounds of nitrogen fertilizer enter the Gulf of Mexico per year. And scientists say they expect the tonnage to increase with corn acreage, especially since corn absorbs less nitrogen per acre than other crops such as soybeans and alfalfa.

Without more political will from all of the Mississippi River Basin states many researchers say the dead zone problem will persist long into the future, at the peril of the Gulf's ecosystem. Environmentalists are warning that the Gulf could reach a tipping point where it is unable to maintain stability. "The ecosystem might change or collapse as opposed to being just impacted," said Matt Rota of the New Orleans-based *Gulf Restoration Network*. "These are things we all were well aware of in 2000 and 2001. There's nothing particularly new in what they're proposing," said Don Scavia, a professor of natural resources and environment at the University of Michigan who led one of the first federal studies of the dead zone in 2000. "We're now starting to find impacts on the shrimp catch. . . . We're at the point where it may be hard to recover, because the ecosystem has changed so much."

After the 2001 agreement, federal agencies and Mississippi River states went forward knowing they would have to reduce pollutants in the river using existing federal programs because no "dead zone" line item exists in any federal budget. Along those lines, the USDA provide incentives to encourage farmers to retire farmland to prevent erosion, restore wetlands that could soak up fertilizer runoff, and install buffers between fields and streams. And the EPA programs encourage states to set limits on the nutrients released into their waterways. But the majority of these programs are voluntary, relying on farmers or municipalities who may never have seen the Gulf of Mexico to take the initiative.

"The lag times are tremendous . . . it may be four, five, six years before a farmer sees reductions in nitrogen," said Otto Doering, a professor of agricultural economics at Purdue University in Indiana. "This is something you have to do on faith . . . and

it's tough to go on faith when faith costs you something."
USDA officials point to nearly 4 million acres of farmland taken out of production for wetlands or buffer zones between 2000 and 2006, and 18.3 million acres under nutrient management plans. But with corn prices reaching record highs to feed the nation's hunger for ethanol production, more than 15 million new acres of farmland were devoted to corn this year than in 2006. Gary Mast, USDA's deputy undersecretary for natural resources and environment, points out that additional farmland doesn't necessarily translate to more nutrient pollution. "It depends how those extra acres are managed," he said. "If they're managed correctly, we don't have to go backward. "

Conservation farming practices and reduced runoff can go a long way toward solving the dead zone and other environmental issues in our rivers and streams. (USDA - NRCS Photo).

But in the years since the 2001 report, many researchers have criticized a lack of coordination among the states and a lack of leadership by the EPA. And a recent *National Research Council* report calls on the EPA to be much more vigilant in enforcing nutrient pollution, calling the Mississippi River system an "orphan" in need of guidance (See the November/December issue of *River Crossings*).

The original goals from the 2001 report that were not achieved include:
• water quality monitoring stations in the Mississippi were scaled back instead of being expanded; and
• regional limits on nutrients were supposed to be set by late 2002, but still are not in place.

New goals in the revised plan include getting more specific data about whether conservation programs are working and targeting conservation programs to farmland and cities that contribute the most nutrients to the river system. Benjamin Grumbles, U.S. EPA Assistant Administrator and the chairman of the federal task force to address the dead zone said that even though it may not be possible to achieve the plan's original goals by 2015, "We're not taking it off the table, and at the very least we're going to make progress toward this.

But some researchers say the new plan retreats from the specific timelines set in 2001, simply calling for progress to be made again in five years. "All of the items in the plan should be pursued, for sure, but it comes as too little too late in many respects," said Donald Boesch, president of the University of Maryland *Center for Environmental Science*, who has studied dead zones in Chesapeake Bay and the Gulf since the 1980s. "I would say based upon past practice, I don't have any great reason to think the action plan means 'action.' "

Sources: Chris Kirkham, *New Orleans Times-Picayune*, 12/3/07; Henry C. Jackson, *AP/MSNBC.com*, 12/17/07; and *Greenwire*, 12/4 and 12/18/07

Green Development Techniques and Runoff

Changing development practices to improve stormwater management could help curb water pollution and lower developers' costs, the U.S. EPA said in a report released in early January. Pollution from stormwater is expected to rise with the tide of development. About 25 million acres were developed between 1982 and 1997 and an additional 68 million acres are expected to be developed between 2000 and 2025 if recent trends continue, the report says.

EPA's report urges what it calls low-impact development practices to supplement traditional control-and-treatment strategies that aim to limit peak flows of stormwater and reduce concentrations of silt and other suspended solids. Current practices "fail to address" widespread changes in a watershed that increase runoff, cause erosion and degrade stream channels, the study says.

Low-impact development attempts to manage runoff on a regional level, within a neighborhood or at a specific site. EPA conducted 17 case studies across the country, examining strategies that include limiting road widths, designing more compact residential lots and creating rain gardens. Low-impact practices aim to replicate the predevelopment hydrology. Often, this strategy results in reduced control-and-treatment costs, saving communities' money. Low-impact development also can be used to retrofit existing sites as well.

The report recommends maximizing a development's open space to let stormwater filter gently into the ground and using engineered structures or landscape features to capture runoff. It also advocates using landscaping to reduce runoff. Although some runoff-reducing infrastructure, such as green roofs, is expensive, many other practices reduce initial costs for site grading and stormwater infrastructure. Total capital cost savings range from 15 to 80 percent for low-impact projects, the report says; although it notes there are exceptions where low-impact projects cost more than conventional treatment practices.

The study did not take into account aesthetics, expanded recreational opportunities and increased property values in its cost-benefit analysis. A .pdf copy of the report can be found online at: http://www.epa.gov/owow/nps/lid/costs07/

Source: Katherine Boyle, *Greenwire*, 1/9/08

High Levels of Atrazine Found in Midwest Waterways

Pesticide manufacturer *Syngenta Corp.* recently conducted an analysis of one of its most popular chemicals (atrazine) used to kill weeds in corn crops and found that the substance is turning up in streams and rivers nationwide at levels that are high enough to potentially harm amphibians, according to documents obtained by the *Natural Resources News Service*. The analysis was conducted by the company for use in a U.S. EPA database on the chemical.

In the Midwest, the level of atrazine in two Missouri watersheds spiked to reach a "level of concern" in both 2004 and 2005, according to the EPA. Also, an Indiana watershed exceeded the threshold for atrazine in 2005. The emergence of the analysis is important because environmentalists maintain that much of the data on atrazine levels in water sources has remained private in years past because EPA was conducting a reregistration analysis of the chemical that was finished last year.

Atrazine, the second most widely used

weedkiller in the country, has been linked to sexual abnormalities in frogs and fish in several scientific studies, but the EPA ruled in September that the evidence was not sufficiently compelling to restrict use of the pesticide. EPA spokeswoman Jennifer Wood said the agency "has concluded that atrazine does not adversely affect gonadal development in frogs, based on a thorough review of 19 laboratory and field studies, including studies submitted by [*Syngenta*] and others in the public literature."

The pesticide is popular among corn and sorghum farmers despite the controversy because it is inexpensive and blocks photosynthesis, thus killing plants to which it is applied. "It works and it's inexpensive, and that's what farmers love," said Tim Pastoor, head of toxicology at *Syngenta*. "It's magic for them. It's like the aspirin of crop protection." The federal government first approved atrazine in the 1950s, but it came under increased scrutiny in the late 1990s after Tyrone B. Hayes, a professor of integrative biology at the University of California at Berkeley, did a series of studies — first for chemical companies and then on his own — that indicated that tiny amounts of the pesticide de-masculinized tadpoles of African clawed frogs.

The European Union declared atrazine a harmful "endocrine disrupter" and banned it as of 2005, but the EPA decided to allow its continued use after determining that the agency lacked a standard test for measuring the hormone-disrupting effects of chemicals. Instead, EPA officials and company representatives agreed on a plan to monitor atrazine levels in "40 of the most vulnerable watersheds in the country," said Jim Jones, deputy assistant administrator for the EPA's Office of Prevention, Pesticides, and Toxic Substances. *Syngenta* has collected more than 10,000 samples since 2004, Pastoor said, taking readings at least every four days at each site

Nancy Golden, a biologist and toxicologist at the U.S. Fish and Wildlife Service who studies how chemicals affect aquatic creatures, said fish exposed to as little as 0.5 parts per billion of atrazine in the lab demonstrate behavioral problems. At higher levels, they experience stunted growth. And the levels of atrazine in 2004 in the two Missouri sites were more than 100 times the 0.5 parts per billion concentration, *Syngenta* data show. Golden said the data documented "atrazine levels that are sustained at pretty high levels for several weeks. That's definitely a cause for concern." Peter L. deFur, a biologist at Virginia Commonwealth University, said "chronic low-level exposure" to atrazine can harm aquatic life. "I don't think low levels of atrazine exposures are safe," deFur said.

EPA has asked *Syngenta* to do additional monitoring at the two northeastern Missouri sites where atrazine concentrations significantly exceeded the 10 parts per billion level at which the agency believes impacts to aquatic systems occur. In fact atrazine concentrations in these two watersheds reached more than 50 parts per billion for days at a time. Wood, the EPA spokeswoman, said the Indiana watershed did not trigger the agency's level of concern in 2006 and the company will be monitoring it for another year.

Pastoor, who noted that atrazine's effect of stunting plant growth is reversed as soon as the pesticide is taken away, said the fact that two watersheds showed high levels of exposure "doesn't mean there's a problem there. It just means there's a yellow flag that says you should take a look." The two sites in question, he added, were prone to excessive runoff because they have an impervious clay soil that channels runoff into waterways, the land is sloped, and one of the farmers working the land had cleared much of the vegetation. *Syngenta* sales agents and local corn growers are trying to reform the practices of the farmer in question, he said. "We anticipate that site will significantly improve," Pastoor said, adding that the computer models *Syngenta* ran suggest there has been no ecological damage to the watersheds the company has monitored.

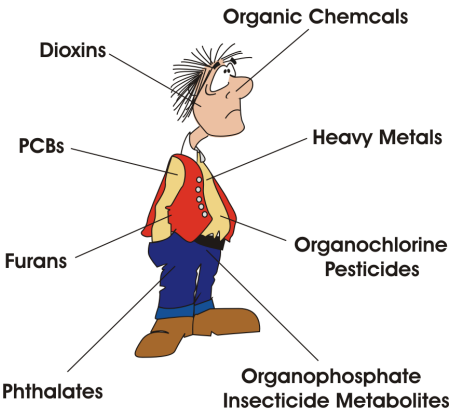
Hayes, who stopped working as a contractor for a coalition of chemical companies years ago and is now one of atrazine's most vocal opponents, said he does not think the federal government is surveying the pesticide enough in light of its pervasive influence. "What's most disturbing about the information you're talking about is all that EPA requires *Syngenta* to do is monitor atrazine in a few key sites," Hayes said. "Industry's been allowed to have such a huge hand in the regulation of atrazine," he said.

Sources: Juliet Eilperin, *Washington Post*, 12/9/07; and *Greenwire*, 12/10/07

Hormonal Effects of Pesticides to be Tested

Next year the U.S. EPA will begin requiring chemical companies that manufacture pesticide products and their various ingredients to screen the substances in the products for their ability to negatively affect human hormones, the agency announced in mid December. The 73 chemicals set for testing were announced earlier this year as a part of EPA's Endocrine Disruptor Screening Program. The draft list includes both pesticidal chemicals and chemicals added to pesticide products — called "inerts" — that enable the pesticidal chemical to distribute over a surface more efficiently or give it certain qualities that cause the pesticide to kill its target more effectively.

Endocrine disrupters affect glands and hormones that regulate many bodily functions, most notably reproduction. They are also suspected to be the cause for sex reversals observed in fish and other organisms in many of our nation's rivers. The 1996 Food Quality Protection Act requires EPA to screen certain chemicals for their potential health effects. If the agency finds that any chemical acts as an endocrine disruptors, then it will take regulatory action, including potentially banning the chemical's use.



TOXIC WASTE DUMP

EPA's Office of Prevention, Pesticides and Toxic Substances (OPPTS) is asking companies that make pesticides and their ingredients to submit testing data on the chemicals. The agency will use that data to determine if the chemicals cause harm to the human endocrine system via a variety of exposure pathways such as air, water and food. EPA will administer the testing by sending out test orders to all registered manufacturers of a pesticide product or, in the cases of companies that manufacture inerts, to the direct manufacturer of the chemical being used as an inert and not a smaller company that buys the inert and then formulates it into a product.

EPA plans to begin sending test orders out to companies in June. All of the testing work

and EPA evaluations of the subsequent data is scheduled for completion sometime in 2010. When necessary, EPA will require companies to form groups to offset the costs of the testing work, which in most cases will be farmed out to various private research labs contracted by the companies ordered to conduct the testing, as opposed to being done in-house. The companies will then send the data to EPA, and the agency will assess it and make a regulatory decision on whether to ban a chemical or change the allowable legal status of its use.

If a company feels it is being asked unfairly to conduct testing on a substance for endocrine effects, then it must file a lawsuit in federal court against EPA seeking a stop order on the testing requirement. Otherwise, if a company refuses to conduct the required testing, EPA can fine the company as much as $32,500 per day under the federal statutes governing pesticides and toxic chemicals. But OPPTS senior policy adviser Bill Jordan said that EPA hopes to avoid a situation where progress on the Endocrine Disruptor Screening Program is tied up by numerous federal lawsuits. "Before a company files a lawsuit, we would like the contestants to come in to meet with us informally and make their case as to why they feel they should not be required to conduct testing," he said.

But pesticide product and chemical manufacturers said there are a lot of unanswered questions about the endocrine screening program, chief among them being how much all of the testing work will cost the industry in both paperwork/administrative fees and in actual testing and reporting fees. "I think it will be quite an extreme burden," said Ray McAllister of the leading pesticide trade association *CropLife America*. "EPA is estimating that the paperwork burden alone over a three-year period will cost the industry $6.8 million."

But, despite many unknown details about how the program will eventually play out, McAllister, Sarah Brozena of the *American Chemistry Council* and Michael White attorney for the *Chemical Producers and Distributors Association* all said they felt EPA was doing its best to not make the screening work overly burdensome for the industry. "I do think there is some sense of fairness in this program on EPA's part to use methods for obtaining data that they've used in the past through test orders," White said. "They haven't gone off half cocked and set up some new system."

As to their expectations that the screening work will identify harmful qualities in some of the 73 chemicals, McAllister and White said they expected there will be some regulatory repercussions from the tests once they are complete. "I would be surprised if you went through 73 compounds and didn't see an endocrine disrupting effect in at least some of them," McAllister said. "But a practical effect from those evaluations is what will not be clear. In many cases already, a substance has been identified as harmful by the agency or another regulatory body and mitigation has taken place." "I think [the program] will shed some light on some chemicals that there previously has not been a whole lot of public data on," White added.

Source: Russell J. Dinnage, *Greenwire*, 12/19/07

Cumberland River/Wolf Creek Dam Update

Maintaining lower water levels in Kentucky's Lake Cumberland behind the leaky Wolf Creek Dam will hurt that region's economy and threaten the environment, a U.S. Army Corps of Engineers (Corps) study has found. But the document reiterates what Corps officials have already said — Not fixing the dam risks a break and flooding along the Cumberland River, with a potential loss of more than 100 lives and billions of dollars

Normally, environmental studies are done before a federal agency takes an action as significant as lowering water levels in a major reservoir by more than 40 feet, as the Corps did last winter, said Wayne Easterling, a Corps biologist who helped write the report. In this case, however, the study came later because lowering the lake was considered an emergency, he said.

Officials said they've been working to offset any dire consequences by extending boat ramps, helping communities extend drinking water intakes, tweaking dam operations and promoting recreation. "Everybody did a really good job," said Marcheta Sparrow, the new Kentucky Commerce Cabinet secretary who previously headed the *Kentucky Tourism Council*. "State and local tourism officials worked very well to communicate the message that Lake Cumberland was still a great lake to visit," she said.

The Corps lowered the lake surface to 680 feet above sea level in January after declaring Wolf Creek among its highest-risk dams. Less water means less pressure on the dam — and less damaging consequences in the event of a breach, officials said. The Corps plans to spend more than $300 million over seven years to repair leaks that formed because the dam was built decades ago on limestone full of fissures and caves.

In the report, the Corps confirms its preferred fix: filling gaps with grout and installing a 275-foot deep concrete wall along the 4,000-foot-long earthen portion. In doing so, it rejected a proposal from outside advisers who said replacing the earthen portion with a new one made of concrete would be the best long-term solution. Easterling said that would cost too much, take too long and require emptying the lake.

Sources: James Bruggers, *Louisville Courier-Journal*, 12/18 and 12/19/07

$177 Million Settlement in MO Dam Collapse

Missouri-based utility *Ameren Corp.* and Missouri Attorney General Jay Nixon (D) announced in mid November a $177 million settlement over the 2005 collapse of the Taum Sauk Dam. The settlement clears the way for *Ameren* to rebuild the reservoir on top of Proffitt Mountain. Federal regulators already have approved *Ameren's* rebuilding plans, and the utility has hired contractors and a design firm. "At long last we've gotten a settlement with the state agencies," *Ameren* Chief Operating Officer Thomas Voss said. "We now can concentrate on rebuilding."

About 1 billion gallons of water spilled from the Taum Sauk project's upper reservoir in 2005 when a breach in the dam caused a large portion of the structure to collapse. The water flowed through a state park and into the East Fork of the Black River, causing flooding in nearby towns. Last year, the Federal Energy Regulatory Commission found that improperly maintained and installed water-level monitors were to blame for the accident.

The lawsuit filed by the state attorney general last year accused *Ameren* of delaying repairs even though it knew the water monitoring systems were not working. Nixon acknowledged though that there was not enough evidence to pursue criminal charges against the utility. Settlement terms call for most of the $177 million to be spent cleaning up the flooded park, including $51 million that already has been spent. Another $18

million will go toward extending the Katy Trail, a 225-mile biking and hiking path that traverses most of the state.

But Susan Flader, a policy coordinator for the *Missouri Parks Association* says Missouri was shortchanged in the settlement because it leaves problems for a Katy Trail link from Windsor to the Kansas City area and doesn't protect a pristine natural area near Taum Sauk. The group plans to file objections during a 30-day public comment period, Flader said.

While the Katy Trail is atop an abandoned rail bed, the extension described in the settlement will be built beside the rail bed. *Ameren* wants to retain the rail bed for possible future use. The agreement requires the trail to be 25 feet from the rail bed's center line, and *Ameren* agreed to pay $18 million toward the trail's construction. But the state will have "all the trail crossings, bridges and culverts to build," Flader said. "It can't be done for $18 million." She said she feared opposition from the farm lobby, and that the General Assembly would balk when it is time to appropriate the money. "I'm afraid they're (legislators) going to decide they can't responsibly do it," Flader said. But state park officials say the trail is doable.

Sources: Tomich/Young, *St. Louis Post-Dispatch*, 11/29/07; Bill Graham, *The Kansas City Star*, 12/2/07and *Greenwire*, 11/29/07

Billion Dollar Reservoir Lawsuit

Environmental groups and American Indian tribes in early December filed a $1 billion lawsuit against *PacifiCorp*, accusing the power company of producing hazardous waste in the Klamath River. The lawsuit, filed in federal court in San Francisco, claims the company's hydroelectric dams on the river produce toxic algae that harms both salmon and people. "*PacifiCorp* is both creating and releasing this algae, and they are refusing to take responsibility for the pollution their dams are creating," said Regina Chichizola of *Klamath Riverkeeper*, a nonprofit river conservation group that filed the suit with elders of the Yurok and Karuk tribes, and the owner of rental cabins along the river.

The lawsuit demands $1 billion in damages under the Resource Conservation Recovery Act, which governs hazardous waste disposal, and an order by the court to *PacifiCorp* demanding it put a stop to the algae, an action that could require removing the utility's four dams along the river. But *PacifiCorp* claims the algae is a natural result of agricultural wastes, not dam-related waste. A spokeswoman said the utility is funding studies of the algae in reservoirs and looking at options to reduce it.

Sources: Jeff Barnard, *AP/Portland Oregonian*, 12/6/07; and *Greenwire*, 12/10/07

KS/NE Water War

Kansas Attorney General Paul Morrison (D) and the state Division of Water Resources have informed Nebraska Attorney General Jon Bruning (R) and Nebraska Department of Natural Resources Director Ann Bleed that they intend to sue Nebraska unless it reduces the amount of water it is taking from the Republican River. The letters also said that Nebraska must pay penalties for taking too much water from the river in the past, exceeding what it was allowed under an interstate agreement for the years 2005 and 2006 by about 27 billion gallons. That is enough to supply a city of 100,000 people for 10 years.

Water use from the Republican River is governed by a 2003 decree from the Supreme Court, which approved a settlement among

Colorado, Kansas and Nebraska from a lawsuit that Kansas filed in 1998. Morrison said that Kansas would consider going to court if Nebraska did not agree to its demands. "Absent such a resolution, we will have no choice but to pursue a litigation solution," he wrote.

"I don't think there's any question that they've overused the water," Morrison spokeswoman Ashley Anstaett said of Nebraska. "We believe that our remedy package is fair and will begin to get them on the right track with compliance." Kansas Division of Water Resources Chief Engineer David Barfield said the amount of water overused is "certainly in the tens of millions" of gallons.

Bruning called the letters "another step in the process of resolving this dispute." He added that he hoped the matter could be resolved without a lawsuit and that he was confident Nebraska would achieve compliance without the "drastic actions" proposed by Kansas. Barfield said that meeting Kansas' demands to reduce irrigation would require the shutting down of wells supplying about 500,000 acres of the roughly 1.2 million irrigated acres in Nebraska's part of the Republican River Basin.

Nebraska Gov. Dave Heineman (R) said that state and local officials imposed water management plans that would resolve Kansas' concerns. "We intend to continue in good faith with that effort," he said.

Sources: *AP/New York Times*, 12/20/07; and *Greenwire*, 12/20/07

MT/WY Water War

The Office of the Solicitor General in early January filed a brief urging the Supreme Court to accept Montana's lawsuit against Wyoming over water rights on the Tongue and Powder rivers. In response to a request by the Supreme Court last summer to submit a brief expressing the position of the United States, the solicitor general's brief said, "In the view of the United States, the state of Montana's motion for leave to file a bill of complaint should be granted."

Montana contends that Wyoming violated the *Yellowstone River Compact* by taking more water out of the river systems than is allowed under the 57-year-old agreement. It argues that the compact includes all waters in the basins, not just surface flows in the main streams, so Wyoming violated the agreement with groundwater depletion from the development of coalbed methane.

But Wyoming interprets the agreement differently, saying it was not intended to apply to tributaries of the stream or to groundwater. In addition to proposing that the court accept Montana's complaint, Solicitor General Paul Clement also invited Wyoming to file a motion to dismiss. The next step is for the Supreme Court to decide whether to follow Clement's advice, Montana Attorney General Mike McGrath (D) said.

Sources: Lorna Thackeray, *Billings Gazette*, 1/3/08; and *Greenwire*, 1/3/07

WY Issues First Mercury Advisory for State Fish

Wyoming became the last state in the lower 48 to warn about possibly unhealthy levels of mercury in fish, advising anglers in mid December to be cautious about eating some saltwater fish and fish taken from Big Horn, Seminoe and Pathfinder reservoirs. "Eating fish with high amounts of mercury can cause health problems, especially in children," said Timothy Ryan, environmental public health section chief with the state Department of Health.

"In general, Wyoming fish are low in mercury," Ryan said. "But we are recommending that women of childbearing age, pregnant women, nursing mothers and children under the age of 15 should eat more small Wyoming-caught fish and fewer large fish, and should avoid eating channel catfish, bass, sauger and walleye from certain waters." For others, the agencies advise prudent consumption of fish low in mercury and no more than one to two meals per month of fish high in mercury. Freshwater fish low in mercury include Wyoming-caught trout and farm-raised tilapia and catfish.

Mike Stone, fisheries chief with the Wyoming Game and Fish Department, explained that the size of fish is a factor in mercury levels in the fish. "The longer a fish lives, the greater its chances of accumulating mercury in its tissues," Stone said in a joint news release issued by the state health and game agencies. "In general, fish that feed on other fish or bottom-feeders are also more likely to accumulate mercury."

State Game and Fish spokesman Erik Keszler said only Alaska has yet to issue a mercury advisory. Mercury is a naturally occurring element that is distributed throughout the environment by both natural processes and human activities. High amounts of mercury can damage the human nervous system, particularly in developing fetuses.

Source: Bob Moen, *AP/Casper Star-Tribune*; 12/11/07

Corps Reconsiders Mountaintop Coal Mine Permit

The Army Corps of Engineers (Corps) in early January told a West Virginia-based mining company to stop a large-scale mountaintop-removal expansion in Leslie County Kentucky that it approved in December. Col. Raymond Midkiff, Louisville district commander for the Corps, said in a letter that he was suspending a permit to fill streams with waste rock at an *International Coal Group* (ICG) Hazard mine near Hoskinston. Midkiff said he wants to review issues environmentalists raised in an early December lawsuit against the Corps.

"We're going to take a closer look," said spokeswoman Carol Labashosky. It is the first time the Corps' Louisville District has withdrawn a valley fill permit for surface mining, Labashosky said — though environmentalists note that Corps officials who oversee waterway protection in West Virginia have done the same, only to re-issue them later. The decision was outlined in both the letter sent to the coal company and in a motion filed December 27 in U.S. District Court in Louisville, where the environmental groups filed suit.

In that lawsuit, the *Sierra Club* and *Kentucky Waterways Alliance* (KWA) claim that rock and other mining "spoils" pushed into valleys from surface-mining activities would bury two miles of Kentucky streams, and that the Corps erred in determining that the mining would not degrade water quality. The expansion would allow the destruction of about two square miles of mountains, the environmentalists claimed.

"This is a great victory," said Judith Petersen, executive director of KWA, adding that it "is an admission that the Army Corps' regulatory program has serious problems." She said the Corps had not adequately assessed how the new mining might add to water-quality problems that exist from other mining in the area. At the same time, Petersen said she expects the Corps eventually will re-issue the permit and that further court challenges might follow. "We'll follow it just as far as we have to follow it," said Teri Blanton, a *Sierra Club* member. Blanton said there are other places besides streams where coal companies can put the excess material and that the Corps had not seriously looked at those options.

Ira Gamm, vice president of public and investor relations at ICG, said the parent company and its subsidiary would cooperate with the Corps. "Opponents of coal mining are attempting to shut down the industry in Kentucky on the basis of this challenge, so we are not disappointed that the Corps chose to take adequate time to evaluate the documentation on which the permit decision was made," Gamm said. "Valley fills are essential for all types of coal mining in the steep terrain of Eastern Kentucky, which makes the successful defense of this lawsuit critical to a significant part of Kentucky's economy."

Source: James Bruggers, *Louisville Courier-Journal*, 1/3/08

Coal Giant to Pay $20M in Fines to KY/WV

Central Appalachia's largest coal mining firm, *Massey Energy Co.*, will pay a $20 million civil penalty to resolve alleged Clean Water Act violations stemming from massive pollution discharges at its mines in Kentucky and West Virginia, U.S. EPA and Justice Department officials announced in mid January. The fine, based on more than 4,500 documented incidents of permit violations, was touted by regulators and the Justice Department as the largest civil penalty in EPA history levied against a company for wastewater discharge violations.

"This is a landmark settlement for the environment, and it raises the bar for the mining industry," said Granta Nakayama, EPA's assistant administrator for enforcement and compliance assurance, in a statement. In addition to the civil penalty, EPA said Massey has agreed to spend $10 million to implement procedures to prevent future violations, and it will set aside 200 acres of riverfront land in West Virginia for conservation purposes, according to terms of the agreement.

EPA filed a multiple count complaint against *Massey* last May, citing repeated violations of wastewater discharge permits between January 2000 and December 2006. Among other things, the complaint alleged that *Massey* discharged excess quantities of heavy metals, sediment and acid mine drainage into hundreds of rivers and streams in West Virginia and Kentucky. The complaint also alleged that *Massey* spilled large amounts of mine slurry — a highly toxic mixture of water, sediment and coal tailings — into the region's streams numerous times, destroying fish and other aquatic life. "The spills occurred as a result of failures in the processing, storage and transportation of coal slurry," EPA and the Justice Department

said in a release announcing the settlement.

Roger Hendriksen, *Massey's* director of investor relations, declined to answer questions about the agreement. But he said the company was pleased to have reached a settlement "that provides local environmental benefits, adds to our efficiency in handling environmental issues and resolves shareholder concerns about potential liability." Environmental groups said they were generally pleased with the settlement, though some noted the $20 million fine was disproportionately small given the extent of the damage done by *Massey's* mining operations, which include 33 underground mines and 11 surface mines in West Virginia, Kentucky and Virginia.

"The settlement is not perfect, but it's a move forward to hold accountable one of the worst actors in the mining industry," said Margaret Janes, senior policy analyst for the *Appalachian Center for the Economy and the Environment* in Lewisburg, WV. Hugh Rogers, president of the *West Virginia Highlands Conservancy*, said the consent decree, which is subject to a 30-day public comment period, represents a "startling change" in the Bush administration's approach to regulating the coal mining industry. "I would have liked to see them take more," Rogers said of the fine. "But I'm glad they settled. I think that's a confession that [*Massey*] really screwed up."

Robert Klepp, EPA's lead attorney involved with the settlement, said the $20 million fine was in accordance with the Clean Water Act's guidelines for how EPA can collect for a particular set of alleged violations. He added that the civil penalty, combined with the other measures *Massey* agreed to under the decree, should have a "deterrent effect" on mining firms that attempt to skirt environmental laws in the future. "A lot of what we've done in terms of settling this matter is future-looking," Klepp said. "We want to ensure compliance from this day forward. ... This [settlement] says you don't get to benefit by avoiding environmental requirements."

Source: Daniel Cusick, *Greenwire*, 1/17/08

Filter Could Reduce Coal-mine Runoff

An experimental filter could be the key to curbing toxic runoff from abandoned mines according to scientists at *Battelle Research. Company.* Thousands of miles of streams in Ohio, West Virginia and Pennsylvania are orange and lifeless, poisoned by toxic waters that spew from coal mines abandoned decades ago. The states struggle to keep up with the volume and with cleanup costs. So state officials are watching the experimental treatment that *Battelle* scientists say cleans the water and separates chemicals that can be sold to farmers and sewage-treatment plants.

"It takes it all out," said Nicholas Conkle, a *Battelle* researcher who tested the system near a Pennsylvania stream late last year. Pennsylvania paid $1.5 million of the project's $3.4 million cost. Ohio officials said that about 1,300 miles of their state's streams are contaminated with acid mine drainage. And twenty-three miles of Raccoon Creek... have been fully restored, said Mitch Farley, chief of Ohio's acid mine drainage program. "Most of these watersheds are eaten up with mining," he said. "There are always many, many projects to do."

Battelle and its business partner, *Winner Global Energy and Environmental Services* of Sharon, PA, are now looking for a new site to test a full-scale filtering system. "We believe the chemistry is doable. We're showing that," said Michael von Fahnestock, a *Battelle* researcher. Farley said his state is interested. "If they're willing to come and look at some projects in Ohio, we definitely have some areas that would be suitable."

Sources: Spencer Hunt, *Columbus Dispatch*, 1/8/07; and *Greenwire*, 1/8/08

Invasive Species and Waterfowl Botulism

The mounting toll of Type E botulism on migrating birds in the Great Lakes has stoked fears among researchers and ecologists that blame for the deaths lies with invasive populations of zebra mussels and round gobies — which arrived in ballast tanks in the 1980s and 1990s — spreading over the Great Lakes and effectively creating a new food chain.

Zebra mussels and their deep-water kin, quagga mussels, filter naturally occurring botulism and other toxins from the water. Gobies eat the mussels, and birds, in turn, eat the gobies. Scientists theorize this new food chain is concentrating botulism and other toxins and passing them up to predators. The theory is the subject of a handful of scientific papers and upcoming research proposals.

Whatever the mechanism of transmitting the botulism, scientists in 1999 counted 311 birds in Lake Erie that appeared to die of it. The next year they counted 8,000, and the toll has remained in the thousands in the Great Lakes every year since. And instead of fading quickly as outbreaks did in decades past, the toxin has spread — first through Lakes Erie and Ontario, then Huron. In 2006, Lake Michigan was the most recent lake to be affected and by last autumn was one of the hardest hit.

In spreadsheets, scientists have noted the fatal effects of the annual outbreaks on more than 50 species of birds throughout the Great Lakes, from bald eagles to lowly pigeons. The list names 16 species of ducks, four types of grebes and six types of gulls. It includes double-crested cormorant and four of Lake Michigan's tiny piping plovers, a bird so threatened its nests get protection from police tape and fences at Sleeping Bear Dunes National Lakeshore.

Gull infected with botulism. (Michigan Department of Natural Resources Photo)

Recently, the deaths of many hundreds of loons have focused a new urgency on the now-annual die-offs that occur from summer to fall. Loons live in small numbers, are slow to reproduce and are a symbol of the northern wilderness. The die-off that ended in November claimed an estimated 3,500 to 8,500 birds — including the loons and plovers — over hundreds of miles of beach in seven northern Michigan counties. It spread from an estimated 2,900 birds in 2006 along just 14 miles of shoreline at Sleeping Bear Dunes, said dunes biologist Ken Hyde.

The die-off has sparked preparations for a sprawling and macabre bird count in 2008 that will involve scores of volunteers combing hundreds of miles of Lake Michigan beaches over the summer and fall — to add up, bury and haul off what are expected to be thousands more poisoned birds and fish. "We wish we weren't dealing with this," said Mark Breederland, extension educator for the *Michigan Sea Grant* research program which is organizing the upcoming response."

In 2007 the heightened threat to Lake Michigan became clear over the summer, when shore birds began dying, possibly of picking maggots off infected fish carcasses that washed ashore. Then came autumn. "We were getting so many loons," said Thomas Cooley, a Michigan Department of Natural Resources biologist who performed necropsies on the birds. It takes 10 or 12 of the big birds to cover a laboratory table, he explained. "When you have two or three tables covered with those, it's pretty sobering to look at that."

Among the birds found dead was one of the most-studied loons in Michigan, a venerable male with four boldly colored tags on his legs and a name: C-3. Each year since 1993, he had been observed at an Upper Peninsula pond in the Seney National Wildlife Refuge, said Damon McCormick, a biologist at *Common Coast Research and Conservation* who studied the bird. Researchers knew C-3 had spent much of his life with the same female loon on a secluded pond in a corner of the refuge and that for unexplained reasons, he had recently left her for another loon on a neighboring pond in the refuge.

They knew that he stayed behind at the new pond a few weeks this year to supervise one late blooming chick as other loons began their fall migration, which may have timed his migration perfectly to a botulism plume and indirectly spelled his doom. To their knowledge, C-3 had raised more than 15 chicks over the years, and only once let a chick drown — when its leg got caught on a submerged log. For a loon, that made him a good father, researchers said.

Adult loons return to their northern nesting grounds by early spring about 93 percent of the time, McCormick said. This year, researchers will be watching for them anxiously. A decline in adult population would almost certainly spell a decline among loons. "We expect to see all our birds," McCormick said. "But based on finding the C-3 male, there's a lot more trepidation of what we'll find this spring."

Source: James Janega, *Chicago Tribune*, 1/16/08

Ballast Tanks to be Flushed with Seawater

A new rule for oceangoing vessels entering the Great Lakes requires them to flush saltwater through their ballast tanks before coming to inshore waters as part of an effort to kill invasive freshwater animals and plants living in the tanks.

Invasive species such as zebra and quagga mussels which arrived in the Great Lakes via ballast water discharges are responsible for an estimated $5 billion per year in economic and environmental damages. "Ballast water is the most important way these species get into the lakes, and this new rule will be very helpful," said Hugh McIsaac, a researcher at the University of Windsor, who said a study he participated in last year showed that flushing tanks with saltwater killed 95-99 percent of foreign organisms in the tanks.

But nearly everyone said the saltwater flushing will not stop all invasive species. Terry Johnson Jr., administrator of the *St. Lawrence Seaway Development Corp*., said the rule was an interim measure until Congress acts on pending legislation, which would require more high-tech methods to sterilize tanks than saltwater. The shipping industry has lobbied against the legislation, saying it is too costly.

Sources: Tina Lam, *Detroit Free Press*, 1/18/08; and *Greenwire*, 1/18/08

Zebra Mussels Reach West Coast

Dozens of zebra mussels turned up early this year in a Hollister, CA area reservoir that serves growers and residents in San Benito County, causing officials to worry they will clog irrigation lines and pumps. State officials do not know how the mussels traveled west of the Rockies, although they suspect that they arrived on a recreational boat transported by trailer.

Zebra mussels attached to boat's lower unit.

"It's not good news. If they're as invasive as they say, it could be a nightmare for our infrastructure," said Arman Nazemi, assistant San Benito County public works director. "Once they're in a waterway, there's not much we can do," said Alexia Retallack, spokeswoman for the California Department of Fish and Game, which announced the zebra mussel's discovery. "They're prolific breeders. A female can produce 40,000 eggs in a single spawning, and over a season about a million. That's a lot".

Sources: Deborah Schoch, *Los Angeles Times*, 1/16/08; and *Greenwire*, 1/17/08

Bugs Used to Fight Invasive Species

Biological control is seen as an alternative to pesticides and herbicides, which are contributing to pollution problems worldwide, and in Florida, researchers have been evaluating biological controls for decades So far, they have unleashed about 70 predator species from other countries hoping to rid the state of pests such as alligatorweed, the pink hibiscus mealybug, citrus canker, hydrilla and, most recently, the Mexican "evil weevil," which threatens to wipe out the state's native bromeliads.

Nationwide, hundreds of other such predator species have been released. The goal is to protect native species from falling victim to pests because the non-native plants and animals, also known as invasive exotics, compete for the same environment as the natives. "What bugs me is that it's easy to bring in these exotics," said Bill Overholt, associate professor of entomology at the *Norman C. Hayslip Biological Control Research and Containment Laboratory* in Fort Pierce, part of the University of Florida's (UF) *Institute of Food and Agricultural Sciences*.

Overholt said exotic plants are routinely brought into the state from other countries, many for the horticulture industry. In fact, about one exotic bug a month likely piggybacks and becomes established in Florida. "To bring in a natural enemy to control that plant once it's become a problem is a really complex and time-consuming process," he said. Researchers conduct lengthy studies to make sure any new predator won't affect any species besides the targeted prey or cause other problems for Florida's environment. And it can take several years from field study to final widespread release if scientists discover the biological control seems to work.

In years past, there were unexpected consequences when the bugs went after different species than scientists intended. Or they reproduced so much they became a noxious pest themselves. Success rates run about 30 percent, Overholt said, fueling criticism of

such programs. Consequently, pesticides are sometimes preferred because they are fast-acting. "We aren't very patient as a species," Overholt said.

However, while some view invasive exotics as damaging, others disagree. *Melaleuca*, for instance, introduced from Australia as an ornamental, is described as "Florida's most infamous invasive species" by state officials. It clogged the Everglades, so in 1997, scientists introduced the melaleuca snout beetle, which feeds on *Melaleuca's* stems and leaves, and this treatment appears to be working. But Florida's beekeepers say *Melaleuca* is one of the state's top nectar producers because it blooms several times a year, providing food lacking elsewhere for honeybees. Beekeepers, who also sometimes rely on the exotic and typically unwanted Brazilian pepper tree for the same reason, usually oppose biological controls. "They arbitrarily decide what's a weed," said longtime commercial beekeeper Bert Kelley, secretary of the *Florida State Beekeepers Association.*

Melaleuca Snout Beetle feeding on Melaleuca plant. (USDA - ARS Photo)

But scientists insist that their methods are sophisticated and that they are considering what is best for entire ecosystems. "All the mistakes all happened . . . years ago," said Ronald Cave, a researcher at the UF facility in Fort Pierce who discovered the franki fly — a new solution to bugs attacking Florida's wild bromeliads. He also is studying two wasps he hopes might combat Asian cycad scale, which is wiping out the sago palm in Florida.

"It is no more appropriate to criticize modern biological control for disastrous introductions of the distant past than to criticize modern surgery for deaths through lack of antiseptic methods used in the past, but many have learned from such errors," said Cave's colleague, Howard Frank, a professor and entomologist at the UF's I*nstitute of Food and Agricultural Sciences*, who is also working on the franki-fly project — which is named after him.

Biological control, some say, will be essential in the future, as the world population is projected to reach 8.9 billion by 2050. Despite use of chemicals, 30% of all crops are lost to pests in developed countries, and presumably more in undeveloped nations. Biological controls are one way to attack pests with or without the cooperation of a landowner because bugs aren't confined to property lines.

But Tom Broome, owner of *The Cycad Jungle* in Polk County, FL and past president of *The Cycad Society*, an international organization of enthusiasts who study and collect the plants, said he holds little hope the parasitic wasps will do much good. "I've never seen the biological controls totally take care of the problem," he said. "It will help but never really takes care of it." Even Cave and Overholt agree that chemicals are a fast track to ridding a problem pest and often are still the method of choice. But research continues.

Sources: Kumari Kelly, *Orlando Sentinel*, 11/26/07; and *Greenwire*, 11/27/07

Non-Native Fish Impact Western Rivers

According to a four-year study of rivers and streams in 12 Western states more than half of the river and stream miles contained nonnative species. The study conducted by Oregon State University (OSU) and U.S. Environmental Protection Agency scientists sampled 1300 locations.

In Arizona, Colorado and Montana, the rate was more than 80%. About 20% of Oregon's river and stream miles contain nonnative fish and amphibians. "I don't know whether (Oregonians) can breathe a sigh of relief," said Thom Whittier, a faculty research assistant in the OSU department of fisheries and wildlife. He mentioned how smallmouth bass populations, once prevalent only near Portland, spread further upstream in the Willamette River every year, and now are established near Albany. "They're a fish-eating fish, and they are likely to eat juvenile salmon," he explained.

"It's one more factor out there that's a human-caused disturbance on those natural ecosystems, in addition to pollution-type impacts that are out there," said Gregg Lomnicky, a scientist with the *Dynamac Corp.*, which contracted with the EPA for portions of the research. "You never know what species loss will trigger a domino effect on an ecosystem," said Bob Hughes, an OSU senior research professor. "How many rivets can you remove from the wing of an airplane and still have it fly?"

Whittier said Oregon's lower infestation rate was partly a result of geography. "Fewer of the nonnatives live in higher elevation, smaller streams, and we have a lot of those," he said. The slower-moving waters of the Willamette River, however, are home to such nonnative species as largemouth bass, smallmouth bass, carp, yellow perch and even goldfish, Lomnicky said.

Unlike Arizona, where eight of the 12 most common fish are nonnative, the Willamette is dominated by local species such as trout and suckerfish. Five Willamette River sites or tributaries were part of the study. The smallmouth bass, however, now may be the top species in the Umpqua and John Day rivers, Hughes said. Some people don't believe bass and other fish are a problem, because they add another opportunity for local anglers, Whittier said.

A large portion of the nonnative species actually were brought from the Midwest and introduced by state wildlife agencies seeking to improve fishing in the West, he said. "Some of the new ones just starting to show up are aquarium fish," he added. Fishermen using live bait also can introduce species to waterways. Whittier said nonnative fish in streams could potentially impact the surrounding food chain. If a certain fish decimates insect populations that emerge from a waterway, that could potentially reduce food for birds and bats.

Sources: Kyle Odegard, *Corvallis Gazette-Times*, 11/19/07; and *Greenwire*, 11/27/07

National Governors Association Invasive Species Recommendations

The *National Governor's Association* (NGA) recognizes the severe ecological and economic problems associated with invasive species, and the significant risks they pose for the future. It has been estimated that invasive species cost the U.S. economy more than $137 billion annually, and invasive species are implicated in the decline of 46% of the species listed under the Endangered Spe-

cies Act so they are indirectly responsible for regulatory constraints that listing poses for human activity.

In an effort to improve cooperative federal and state management of the more than 4,500 invasive species in the U.S., the NGA made the following recommendations in its Policy Position dated 7/24/07:

• The federal government, in partnership with the states and the private sector, should enhance cooperative efforts to prevent the introduction, monitor the distribution, and control the further unintentional or illegal spread of invasive species. The President and Congress should consult Governors prior to enacting administrative or legislative proposals to achieve these ends.

• Federal agencies should implement the recommendations of the National Invasive Species Council outlined in the National Invasive Species Management Plan.

• The National Invasive Species Act of 1996 should be reauthorized, along with legislation that will address invasive species management for public and private lands. Since the problems associated with invasive species are nationwide, a consistent nationwide prevention strategy is more effective than individual state-by-state strategies. Congress should work with states to ensure that any nationwide strategy is collaborative and does not impose any unfunded mandates or take away from the ability of a state to manage species within its borders. Governors support a screening and approval mechanism to ensure that organisms that are deemed likely to be spread by human or natural means are kept out of the country.

• Invasive species threaten the success of federal and state endangered species and wetland conservation programs. This significance should be reflected in federal funding for planning for invasive species, control of invasive species, and mitigating their harmful impacts, in order to both achieve better environmental results and lessen the regulatory burden on human activity.

• Because it is often most efficient to deal with invasive species by controlling their further spread beyond areas where they are already established, the federal government should work with states to establish regional programs to help prevent their spread.

• In those instances where the issue is not already addressed in law, the federal government should engage the states and the private sector, through trade associations and professional organizations, to develop and promote mutually agreed on protocols to guide the international trade in nonnative species so that any potential economic and environmental risks can be adequately addressed before importation takes place.

• The federal government should engage the states and the private sector, through trade associations and professional organizations, to develop and promote mutually agreed on protocols to prevent the incidental introduction of invasive species through interstate commerce. The federal government also needs to work with the transportation industry to identify simple and cost-effective means to prevent the incidental introduction of invasive species as an unintended consequence of increased international trade. In addition, efforts to promote the use of native species where possible should be pursued.

• The federal government should establish and support regional interagency and intergovernmental teams including state and public representatives, to establish priorities, coordinate efforts, and launch joint activities for invasive species control at the regional level.

• After conferring with the states and the private sector, the federal government should establish an electronic information clearinghouse on invasive species, comprised of a network of online cooperators, not a new centralized bureaucracy.

• Congress should remove obstacles resulting from the Federal Advisory Committee Act or other mandates that impede the flexible use of appropriated funds for joint public-private projects to control invasive species.

• Federal programs such as those administered at international borders and points of entry by the U.S. Department of Agriculture's Animal and Plant Health Inspection Service, the Aquatic Nuisance Species Task Force led jointly by the U.S. Departments of Interior and Commerce, and the Federal Interagency Committee for the Management of Noxious and Exotic Weeds, should be appropriately funded given their vital role in protecting U.S. commerce and ecosystems.

• The federal government should provide adequate funding for scientific research on the basic biology and ecology of invasive species, so that control efforts may be more specific, environmentally benign, cost-efficient, and effective.

• The federal government should assist states in conducting and funding research to develop effective control methods for aquatic invasive species.

• The federal government should budget for invasive species emergency projects similar to budgeting for wildland fire emergencies to allow prompt treatment and controls to minimize long-term expenses.

• The federal government should provide appropriate funding for enforcement of existing ballast water control requirements.

• The federal government must determine whether the U.S. Environmental Protection Agency or the U.S. Coast Guard will be the primary regulating agency for aquatic invasive species in ships' ballast water; and that agency must set an environmentally protective discharge standard in 2007.

• The agency must implement regulations that require immediate application of best performing ship-board ballast water treatment and hull management (with a set approval period), with continued upward ratcheting of the treatment floor as treatment performance improves. Approved treatment must be to the environmentally protective standard by 2011.

• The agency must immediately require that ships in the no ballast on board condition implement management practices or treatments that are an improvement over current practices.

• Through state and local government agencies and academic institutions, states are often likely to be the first to detect invasive species. The states should explore efficient and inexpensive mechanisms to share this information promptly with each other and the federal government to allow for the most effective cooperative response.

• Because they have a greater local presence than do federal agencies, states are often in the best position to educate the public about the potential problems for local communities

that may be caused by invasive species and steps that can be taken by local communities to prevent their introduction. The federal government should provide financial support for such state efforts.

• As they consider appropriate, and with adequate federal financial support, states should prepare and implement targeted and integrated management measures for the prevention, early detection, and eradication or control of invasive species, including emergency response efforts to eradicate the first footholds of invasive species that are not yet firmly established in a region.

The NGA agrees with many of the positions MICRA has advocated in the fight against invasive species over recent years. Now Congress needs to recognize these problems as real and act accordingly in passing legislation which can effectively begin to address the problem.

Source: *National Governors Association*, http://www.nga.org/portal/site/nga/menuitem.8358ec82f5b198d18a278110501010a0/?vgnextoid=260b9e2f1b091010VgnVCM1000001a01010aRCRD

Ammonium Rain Falling on Western Parks

Nine national parks in the intermountain West are experiencing "significant worsening trends" of ammonium in the air, according to a recent National Park Service report on air quality trends from 1996 to 2005. Park Service officials say they've seen increasing amounts in national parks in Montana, Wyoming, Idaho, Colorado, South Dakota, Utah and Arizona.

Ammonia is made of nitrogen and hydrogen. When it mixes with water, it becomes ammonium. It's often associated with large animal feeding operations and fertilizers. It also occurs naturally. Ammonia is part of a mix of elements that's swept up from vehicle exhaust, factory emissions and agricultural operations and travels in clouds before it's deposited with rain and snow.

In high enough levels, ammonium can trigger subtle changes in the natural functions of ecosystems. For example elevated levels of ammonium can trigger subtle changes in the natural functions of lakes, ponds, insects and flowers.

Yellowstone and Glacier National parks are among nine parks where "significant worsening trends" of ammonium in the air were found. In Colorado's Rocky Mountain National Park, scientists studying the effects of increasing ammonium for years are starting to see shifts on the alpine tundra, where wildflowers are giving way to grasses. That not only reduces the diversity of plants and impedes the growth of one of the park's main summer visitor attractions, but also could have a harmful effect on pollinating insects. Scientists are watching for other changes, too, including to forests in the park and to tiny life forms that live in high-elevation lakes.

A Colorado State University study of Rocky Mountain park pollution indicated that the ammonium there was originating from east of the park and being deposited during rain and snowstorms. This is not surprising since the front range of the Rockies from Fort Collins to Denver has become very developed in recent decades. "What we're experiencing now could easily be something that Yellowstone could see in the future," said Jeff Connor, a natural-resource specialist at Rocky Mountain National Park. For now, though, Rocky Mountain Park has higher levels than Yellowstone or Glacier.

Overall, the air quality in Yellowstone is still good. Visibility is improving and the presence of ground-level ozone - listed as a concern for several years in the trend studies appears to have leveled off. But over the past several years, monitors have been picking up more and more ammonium in the air in Yellowstone and elsewhere. "The real question is why it's increasing. ... It's not just in Yellowstone, it's up and down the western Great Plains," said John Vimont, chief of research and monitoring in the Park Service's air resources division in Denver. "We really don't know what the answer is."

It's still unclear where increasing levels at other national parks are coming from, Vimont said. The effects, if any, will probably be slightly different at every park. In some cases, more ammonium could reduce visibility or have ecological effects on sensitive environments. "I think we should be watching it from the standpoint that we don't really know what's going on," he said.

Mark Wenzler, clean-air program director for the *National Parks Conservation Association*, said it's been troubling to see increasing levels of ozone and other pollutants over national parks in the West, especially as so much of the focus has been improving air quality at eastern national parks such as at Great Smoky Mountains National Park. "We can see these threats coming but it's not too late to stop them," Wenzler said.

Sources: Mike Stark, *Billings Gazette*, 12/22/07; and *Greenwire*, 1/3/08

High Court Supports Alabama Sturgeon Listing

The Supreme Court in early January upheld the government's decision to protect the prehistoric Alabama sturgeon, striking down an industry group's argument that the fish did not warrant protection. Efforts to protect the fish, which was added to the Endangered Species List (ESA) in 2000, will thus continue to receive federal funding and benefit from programs aimed at restoring its dwindling populations.

Advocates of protection cheered the Supreme Court decision, saying it could help stave off what has been called a "biological meltdown" in the Southeast, one of the most species-rich regions of the country. "It's gratifying," said Ray Vaughan, an Alabama-based attorney with the nonprofit group *WildLaw*, which has argued for the sturgeon's protection for more than a decade. "I don't know if it's too late for this species, but maybe it'll get us to the point where we're not having to play these games anymore and can get on with cleaning up our rivers and protecting our species."

Alabama sturgeon (FWS Photo)

The Supreme Court appeal was brought by the *Alabama-Tombigbee Rivers Coalition*, which represents commercial, industrial and navigation interests on Alabama's waterways. The coalition initially argued that the Alabama sturgeon, which occurs only in the lower Alabama and Mobile rivers, was not genetically distinct from the shovelnose sturgeon, which occurs in the Mississippi River Basin. The 11th U.S. Circuit Court of Appeals rejected that argument last February.

In its Supreme Court petition, the rivers coalition made a different argument — that the

U.S. Fish and Wildlife Service (FWS) could not justify protection under the interstate commerce clause of the Constitution because the sturgeon was found only in Alabama and had no commercial value. Bill Satterfield, a Birmingham-based attorney for the coalition, said the group believed the FWS had taken an overly broad interpretation of the Constitution's commerce clause as it pertains to ESA. "We thought those were important," he said, adding that he was disappointed with the court's refusal to hear the petition.

The Justice Department, in a legal brief arguing against the Supreme Court review, said the FWS's decision to list the sturgeon is "constitutional under any plausible conception of Congress' powers." The sturgeon, while rarely seen today, was during the 19th and early 20th century so abundant in Alabama's waters that it was a prized commercial species. But scientists say its population dwindled due to both overfishing and the construction of hydrodams along the state's rivers during the later 20th century. Today the fish's range extends for less than 130 miles up the lowermost portion of the Alabama River, experts say, and it has had only one confirmed sighting in the past seven years.

Source: Daniel Cusick, *Greenwire*, 1/7/08

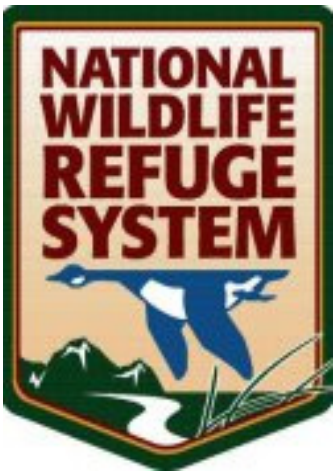
National Wildlife Refuges Bring Positive Economic Returns

National wildlife refuges return about $4 in economic activity for every $1 the government spends on them, according to a federal study released in late November. The report, *"Banking on Nature 2006: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation,"* shows that nationally, recreational uses of national wildlife refuges in the same year generated almost $1.7 billion in total economic activity — almost four times the $383 million appropriated to the National Wildlife Refuge System in fiscal 2006.

The report said further that nearly 35 million people nationwide visited national wildlife refuges in 2006, supporting almost 27,000 private sector jobs and producing about $543 million in employment income. Additionally, recreational spending on national wildlife refuges nationwide generated nearly $185.3 million in tax revenue at the local, county, state and federal levels.

Advocates of the system pounced on the results of the study as evidence that budget cuts under the Bush Administration have been ill-advised. "Refuges are economic engines in local communities. There's no doubt about it," said Desiree Sorenson-Groves, vice president for government affairs at the *National Wildlife Refuge Association*. "The budget cuts have an impact .... You have people who are going to refuges and there's no staff, or a wildlife drive is closed because it can't be maintained."

Under an ongoing restructuring, the U.S. Fish and Wildlife Service (FWS) is planning to cut 565 jobs from wildlife refuges by 2009 — a 20 percent reduction. The plan would leave more than 200 refuges unstaffed. The national system encompasses 548 refuges and more than 96 million acres in all 50 states. The refuge budget grew rapidly after Congress passed a landmark improvement bill in 1997. With new land acquisitions and a clearer mandate, the system's funding jumped from $178 million in 1997 to $391 million in 2004. But recent budgets have been stagnant or declining, even as refuge officials say they need a $15 million increases just to keep pace with inflation, and a much larger amount to chip away at an estimated $2.5 billion backlog for maintenance and operations.



FWS Director H. Dale Hall said that refuges provide everything from jobs and income to quality of life. Hall said the budget challenges are "fairly significant" and that "we'd be naive to think that we wouldn't lose some visitation" as a result of eliminating staff and restricting access in some areas." He said the agency would do its best to explain to decisionmakers "that we get tremendous return on the taxpayer's dollar".

Sources: Brodie Farquhar, *Casper Star-Tribune*, 11/28/07; and *Greenwire*, 11/28/07

Lawsuit Over Endangered Species Meddling

Environmentalists in early January filed a lawsuit against the U.S. Department of the Interior (DOI) in a bid to unearth more information on possible political tampering with decisions on Endangered Species Act (ESA) listings. The *Center for Biological Diversity* (CBD) filed the suit in hopes of acquiring more documents on the handling of these cases by Julie MacDonald, former DOI Deputy Assistant Secretary for Fish, Wildlife and Parks. MacDonald resigned last May after a scathing report by DOI Inspector General (IG) Earl Devaney found she violated ethics rules, edited scientific decisions on endangered species issues and passed internal agency information to outside parties suing the department.

MacDonald stood to profit from the DOI decision involving the Sacramento splittail and should have recused herself from the case, IG Devaney said in a report on the issue. "MacDonald was involved extensively and intimately in the final editing process of the splittail," he said. Although the Fish and Wildlife Service (FWS) made the decision to delist the fish as a threatened species before MacDonald was involved, she made more than 500 changes to the reasoning and scientific justification in the final decision, a finding that could affect property she owned and her future income.

MacDonald's Dixon, CA, farm is located in the Yolo Bypass, which provides flood control for the Sacramento River. It is valued at more than $1 million, and generated up to $1 million in income last year, according to MacDonald's financial disclosure report filed on May 1, the day she resigned from DOI. "Julie MacDonald came to her job with an axe to grind, she failed to recuse herself from critical decisions in which she had clear conflicts of interest, and she escaped punishment for those hidden conflicts by sneaking out the back door," said Rep. George Miller (D/CA) in a statement.

Before joining DOI, MacDonald was a vocal, local opponent of the listing after FWS classified the splittail as "threatened" in 1999. The splittail's population had declined by 62% between 1984 and 1999. MacDonald challenged the statistical analysis of fish population data, and a statistician hired to conduct the statistical analysis told the IG that MacDonald was "very dogmatic" in her opposition to his data. Because they were adopted in the final rule, MacDonald's changes could be used as a precedent in fu-

ture ESA decisions, a senior agency official said in the report.

IG Devaney's report also detailed MacDonald's efforts to find a new job between December 2006 and February 2007, at a time when she was still involved in ESA decisions. MacDonald applied for jobs with *Shell Oil Co*., the *American Forest & Paper Association* (AF&PA) and *Portland Cement Association.* At AF&PA, MacDonald interviewed twice for the position of vice president of forestry and wood products, a post that was eventually filled by David Tenny, then a deputy to Agriculture Undersecretary Mark Rey.

In November the FWS announced that it would revise seven rulings that denied endangered species listings or limited critical habitat designations because MacDonald inappropriately influenced the decisions. But environmentalists think more decisions may have been affected and through their lawsuit hope to find out if other Bush administration officials were involved. "We want to know how deep and wide did MacDonald's interference go, and in fact did it even go broader and deeper than MacDonald herself," said Bill Snape, CBD's attorney. "We have reason to believe that the answer to both those questions is 'yes,' and these are documents we are lawfully entitled to."

At issue are 10 Freedom of Information Act (FOIA) requests CBD filed last year requesting information on MacDonald's involvement. The DOI is legally required to respond to such requests or ask for an extension within 20 days. Snape said that CBD has only received partial responses. "This is not a full and complete set of MacDonald documents," Snape said. DOI spokesman Hugh Vickery said he could not comment on the litigation, but that FOIA officers at the FWS do review and respond to requests like those filed by the center. The DOI inspector general and the House Natural Resources Committee have also launched follow-up investigations of MacDonald's influence.

Adding support to CBD's position, two dozen scientists came to Capitol Hill in mid January to meet with lawmakers over what they say is the Bush administration's interference with environmental scientists. Researchers organized by the *Union of Concerned Scientists* (UCS) and the *Endangered Species Coalition* won time with more than 20 lawmakers to speak out against the role political appointees at DOI have taken in designating "critical habitats" for endangered species.

Francesca Grifo, director of the *Scientific Integrity Program* at the UCS in Washington, called the administration's interference "the systematic dismantling of the Endangered Species Act through the manipulation and suppression of science." Singling out MacDonald, the scientists accuse the appointees of altering the reports to favor industries whose interests conflict with the reports' findings.

Sources: Elizabeth Williamson, *Washington Post*, 1/16/08; Dan Berman, *Greenwire*, 11/28/07; and Allison Winter, *Greenwire*, 1/3/08; and *Greenwire*, 1/16/08

Federal Wildlife Law Enforcement Records Sought

In an early test of the new law strengthening the Freedom of Information Act (FOIA), *Public Employees for Environmental Responsibility* (PEER) in mid January sued the U.S. Department of the Interior's Office of Inspector General (OIG) to force release of the documents behind its recent investigation of declining law enforcement within the U.S. Fish & Wildlife Service (FWS).

According to FWS agents who cooperated with the IG, they submitted statements and records detailing high-level corruption and obstruction of enforcement that were not included, or even alluded to, in the final report. In February 2007 the OIG issued a report entitled *"Assessment of the U.S. Fish & Wildlife Service Office of Law Enforcement"* which was notable both for its sweeping harsh conclusions and for its utter lack of any specific case descriptions.

Alerted by FWS agents, PEER submitted a request under the FOIA for interview transcripts, correspondence and other materials relating, among other topics, to:

- The abrupt removal of Kevin Adams as the head of the FWS Office of Law Enforcement;
- Involvement by the *Safari Club* in FWS law enforcement investigations involving trafficking in animal trophies; and
- Obstruction of wildlife enforcement actions by political appointees within the Interior Department.

FWS special agents are charged with enforcing the Endangered Species Act, the Migratory Bird Treaty Act and other federal laws governing hunting and interstate or international transportation of wildlife. "According to the Interior Inspector General, federal wildlife enforcement is in deep trouble but the Inspector General fails to specify why or what should be done about it," stated PEER staff attorney Adam Draper, who filed the suit. "We are going to put on the record what the Inspector General kept closeted."

In a response to PEER's March 5, 2007 request, the Interior OIG wrote to PEER on April 3, 2007 that it would be "unable to respond to your request within the time limits established by FOIA due to a backlog of requests and other unforeseen circumstances." After receiving no update or indication as to when the OIG intended to respond, on November 9, 2007, PEER appealed the delay to the Interior Office of Solicitor, a step required before filing suit. In a letter dated January 4, 2008, the Interior Solicitor's Office indicated that it, too, would not make "a determination on your appeal within the time limits set in FOIA…"

"The Inspector General is supposed to police legal compliance by other Interior agencies yet routinely flouts laws that apply to it," added Draper, noting that the new FOIA legislation signed by President Bush on New Year's Eve is designed to put more emphasis on agencies meeting time limits for handling record requests and holding officials accountable for "arbitrary and capricious" disclosure denials. "When it comes to transparency, the Interior Inspector General strives to remain opaque."

Source: *Public Employees for Environmental Responsibility*, 1/10/08; Contact Carol Goldberg (202) 265-7337

Systematic White House Censorship of Climate Scientists

A 16-month investigation of the Bush administration's editing of federal climate studies concludes that: "The evidence before the committee leads to one inescapable conclusion: The Bush administration has engaged in a systematic effort to manipulate climate change science and mislead policymakers and the public about the dangers of global warming." The investigation was conducted by the House Oversight and Government Reform Committee Chaired by Henry Waxman (D/CA).

"White House officials and political appointees in the agencies censored congressional testimony on the causes and impacts of global warming, controlled media access to government climate scientists, and edited federal scientific reports to inject unwarranted uncertainty into discussions of climate

change and to minimize the threat to the environment and the economy," it continues.

The analysis is the culmination of a probe that began in July 2006, when then-committee Chairman Tom Davis (R/VA) and Waxman asked the White House for documents related to the role played by former Council on Environmental Quality (CEQ) chief of staff Phillip Cooney in editing climate reports. Cooney resigned from the White House in the spring of 2006 amidst news reports that he improperly altered government documents to soften the link between global warming and industrial emissions of greenhouse gases (GHGs).

Over the course of the investigation, the House panel examined more than 27,000 pages of documents from CEQ and the Commerce Department, held two hearings, and collected depositions from former and current administration employees. In the December report, Democrats said they have gathered evidence to prove that CEQ edited several climate reports — including the strategic plan for the *Climate Change Science Program*, U.S. EPA's draft *"Report on the Environment"* and its *"Air Trends Report"* — to "exaggerate or emphasize scientific uncertainties" or the human contribution to climate change. CEQ also vetted reporters' requests to speak with climate change scientists at the National Oceanic and Atmospheric Administration, the Democrats' analysis concludes.

In statements, the White House and CEQ denied that the administration in any way distorted climate science in federal reports or other communications. "We believe this report is a thinly veiled attempt to distract attention from the administration's effort to advance its commitment to the pursuit of sound environmental, energy and economic policy at the Bali summit," White House spokeswoman Emily Lawrimore said, referring to United Nations climate negotiations in Indonesia. Meanwhile, CEQ Chairman James Connaughton released a statement touting the administration's "unparalleled record of supporting, funding, advancing, and publicizing climate change research," spending nearly $12 billion since 2001.

But Rick Piltz, a former Climate Change Science Program (CCSP) employee who resigned in protest of what he said were improper White House edits of government climate documents, said he believed the report offers the most comprehensive view yet of the administration's attitude toward climate change science. "They begin with and validate a number of issues we raised earlier about the censoring of CCSP reports to play down the global warming problem, and interference with people's media contacts on hurricanes and global warming," said Piltz, now the director of *Government Accountability Program's Climate Science Watch*.

"This is the first time I've seen [the administration] be drawn out to the point that they have to acknowledge rather than spin ... the extent of the corrupting influence of the White House CEQ on everybody who had to deal with them," Piltz said. "Everybody was complicit. Everybody knew what was going on, although nobody had the full story, because the tentacles of CEQ were out in so many different directions."

But Republicans on the Oversight Committee, including Rep. Davis, have raised concerns about the report. A statement released by Davis' office called the Democrats' report "a partisan diatribe against the Bush administration" that is "seriously flawed." "This investigation was never directed at interference with science anyway," the Republicans said. "This investigation was directed at the role of policymakers in — guess what — making and expressing administration policy. But a report entitled *'Political Interference in Climate Change Policy'* would sound ridiculous — because that is what policymakers in the executive branch do."

Source: Lauren Morello, *Greenwire*, 12/10/07

Meetings of Interest

Mar. 4-6: Floodplain Ecosystem Symposium, The Peabody Little Rock, 3 Statehouse Plaza, Little Rock, AR. Contact: Rebecca McPeake, (501) 671-2285, rmcpeake@uaex.edu

Mar. 18-20: UMRCC/LMRCC Joint Meeting, Holiday Inn, Collinsville, IL. Contact: scott_yess@fws.gov

Apr. 6-10: National Shellfisheries Association, Providence, RI, http://shellfish.org/meetings.htm

Apr. 6-10: International Association for Landscape Ecology, U.S. Division, Madison, WI, http://www.cof.orst.edu/org/usiale/madison2008/index.htm

Apr. 9-13: Benthic Ecology Meeting 2008, Providence, RI., http://www.benthicecology2008.uconn.edu/main.htm

Apr. 10-12: Southwestern Association of Naturalists, Memphis, TN, http://www.biosurvey.ou.edu/swan/55th_meeting_ announcement.pdf

Apr 16-19: Association of Southeastern Biologists, Spartanburg, IL, http://www.asb.appstate.edu/meeting.php

May 12-13: American Institute of Biological Sciences, Washington DC, http://www.aibs.org/annual-meeting/

May 25-30: North American Benthological Society, Salt Lake City, UT, http://www.benthos.org/index.cfm

May 26-30: Society of Wetland Scientists, Washington, D.C., http://www.sws.org/2008_meeting/index.html

Jun. 20-24: American Society of Naturalists, Minneapolis, MN, http://www. evolution2008.org/

Jun. 29-Jul. 3: American Malacological Society, Carbondale, IL, http://www.malacological.org/meetings/next.html

Jul. 13-17: Society for Conservation Biology, Chattanooga, TN, http://www.utc. edu / Academic/ConferenceforSocietyof ConservationBiology

Jul 23-28: American Society of Ichthyologists and Herpetologists and Society for the Study of Amphibians and Reptiles, Montreal, CA, http://www.asih.org/annual meetings and http://www.dce.k-state.edu/conf/jointmeeting/

Aug. 13-17: Short Course on Geostatistical Analysis of Environmental Data, University of Florida, Gainesville. See: http://conference.ifas.ufl.edu/soils/geostats/index.html; Contact: Jhanna Crutchfield, (352) 392-5930, Fax: (352) 392-9734, jhanna@ufl.edu

Aug. 17-21: American Fisheries Society 138th Annual Meeting, Ottawa, Ontario. Contact: Betsy Fritz, bfritz @fisheries.org, (301) 897-8616, ext. 212.

Congressional Action Pertinent to the Mississippi River Basin

Climate Change

S. 280. Lieberman (I/CT) and 6 Co-Sponsors and **H. R. 620** Olver (D/MA) and 17 Co-Sponsors.. Establishes a market-driven system of GHG tradeable allowances to support the deployment of new climate change-related technologies to ensure benefits to consumers from the trading in such allowances, and for other purposes.

S. 309. Sanders (I/VT) and 10 Co-Sponsors. Reduces emissions of carbon dioxide (CO_2), and for other purposes.

S. 317. Feinstein (D/CA) and Carper (D/DE). Establishes a program to regulate the emission of GHGs from electric utilities.

S. 485. Kerry (D/MA) and Snowe (R/ME). Establishes an economy-wide global warming pollution emission cap-and-trade program to assist in transitioning to new clean energy technologies, protect employees and affected communities, protect companies and consumers from significant increases in energy costs, and for other purposes.

S. 1018. Durbin (D/IL) and 2 Co-Sponsors and **H.R. 1961** Markey (D/MA) and 7 Co-Sponsors. Addresses security risks posed by global climate change and for other purposes.

S. 1168. Alexander (R/TN) and Lieberman (I/CT). Establishes a regulatory program for sulfur dioxide, nitrogen oxides, mercury, and CO_2 emissions from the electric generating sector.

S. 1177. Carper (D/DE) and 7 Co-Sponsors. Establishes a national uniform multiple air pollutant regulatory program for the electric generating sector.

S. 1201. Sanders (I/VT) and 3 Co-Sponsors. Reduces emissions from electric power plants, and for other purposes.

S. 1321. Bingaman (D/NM) and **H. R. 2556**. Wilson (R/NM). Enhances the energy security of the U.S. by promoting biofuels, energy efficiency, and carbon capture and storage, and for other purposes.

S. 1389. Obama (D/IL) and 2 Co-Sponsors. Authorizes the *National Science Foundation* to establish a Climate Change Education Program.

S. 1554. Collins (R/ME) and Lieberman (I/CT). Addresses challenges relating to energy independence, air pollution, and climate change.

S. 1766. Bingaman (D/NM) and 5 Co-Sponsors. Reduces GHG emissions from the production and use of energy, and for other purposes.

S. 2191. Lieberman (I/CT) and 8 Co-Sponsors. Directs the Administrator of the USEPA to establish a program to decrease emissions of GHGs, and for other purposes.

S. 2204. Whitehouse (D/RI) and Boxer (D/CA). Assists wildlife populations and wildlife habitats in adapting to and surviving the effects of global warming, and for other purposes.

S. 2211. Whitehouse (D/RI) and Boxer (D/CA). Ensures the recovery, resiliency, and health of ocean, coastal, and Great Lakes ecosystems, and for other purposes.

S. 2307. Kerry (D/MA) and Snowe (R/ME). Amends the Global Change Research Act of 1990, and for other purposes.

S. 2355. Cantwell (D/WA). Amends the National Climate Program Act to enhance the ability of the U.S. to develop and implement climate change adaptation programs and policies, and for other purposes.

H. R. 906. Udall (D/CO) and Inglis (R/SC). Promotes and coordinates global climate change research, and for other purposes.

H. R. 1590. Waxman (D/CA) and 126 Co-Sponsors. Reduces GHG emissions and protects the climate.

H. R. 2337. Rahall (D/WV). Promotes energy policy reforms and public accountability, alternative energy and efficiency, and carbon capture and climate change mitigation, and for other purposes.

H. R. 2338. Dicks (D/WA) and 2 Co-Sponsors. Establishes the policy of the Federal government to use all practicable means and measures to assist wildlife populations in adapting to and surviving the effects of global warming, and for other purposes.

H. R. 2420. Lantos (D/CA) and 25 Co-Sponsors. Declares the U.S. policy on international climate cooperation, to promote clean and efficient energy technologies in foreign countries, and to establish the International Clean Energy Foundation.

H. R. 2556. Wilson (/NM). Enhances the energy security of the U.S. by promoting biofuels, energy efficiency, and carbon capture and storage, and for other purposes.

H. R. 2701. Oberstar (D/MN) and 14 Co-Sponsors. Strengthens the Nation's energy security and mitigates the effects of climate and ensures sound water resource and natural disaster preparedness planning, and for other purposes.

H. R. 2809. Inslee (D/WA) and 17 Co-Sponsors. Ensures that the U.S. leads the world baseline in developing and manufacturing next generation energy technologies, to grow the economy, create new highly trained, highly skilled American jobs, eliminate American overdependence on foreign oil, and address the threat of global warming.

H. R. 2950. Wilson (R/NM). Reduces our Nation's dependency on foreign oil by investing in clean, renewable, and alternative energy resources, promoting new emerging energy technologies, developing greater efficiency, and creating a Strategic Energy Efficiency and Renewables Reserve to invest in alternative energy, and for other purposes.

H. R. 3220 and **3221** Pelosi (D/CA) and 18 Co-Sponsors. Moves the U.S. toward greater energy independence and security, developing innovative new technologies, reducing carbon emissions, creating green jobs, protecting consumers, increasing clean renewable energy production, and modernizing our energy infrastructure.

H. R. 4226. Gilchrest (R/MD) and Olver (D/MA). Accelerates the reduction of GHG emissions in the U.S. by establishing a market-driven system of GHG tradeable allowances that will limit GHG emissions in the U.S., reduce dependence upon foreign oil, and ensure benefits to consumers from the trading in such allowances, and for other purposes.

Conservation

S. 50. 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.

S. 241. Wyden (D/OR) and Akaka (D/HI). Authorizes the Interior Secretary to enter

into coop agreements to protect natural resources of units of the National Park System through collaborative efforts on land inside and outside of units of the National Park System.

S. 272. Coleman (R/MN). Amends P.L. 87-383 to reauthorize appropriations to promote the conservation of migratory waterfowl and to offset or prevent the serious loss of important wetland and other waterfowl habitat essential to the preservation of migratory waterfowl, and for other purposes.

S. 919. Menendez (D/NJ) and 4 Co-Sponsors. Reauthorizes USDA conservation and energy programs and certain other programs to modify the operation and administration of these programs, and for other purposes.

S. 1424. Schumer (D/NY) and 3 Co-Sponsors, and **H. R. 2419** Peterson (D/MN). Provides for the continuation of agricultural programs through fiscal year 2013, and for other purposes.

S. 2223. Baucus (D/MT). Amends the Internal Revenue Code of 1986 to provide additional tax incentives to promote habitat conservation and restoration, and for other purposes.

S. 2228. Lugar (R/IN) and 7 Co-Sponsors. Extends and improves agricultural programs, and for other purposes.

S. 2302. Harkin (D/IA) and **H.R. 2419** Peterson (D/MN). Provides for the continuation of agricultural programs through fiscal year 2012, and for other purposes.

H. R. 2735. Young (R/AK) and Thompson (D/CA). Provides additional funding for operation of national wildlife refuges through increased Duck Stamp price.

H. R. 3036. Sarbanes (D/MD). Amends the Elementary and Secondary Education Act of 1965 providing grants that would allow states to develop environmental education in schools and help train environmental teachers who would also serve as mentors to students.

Endangered Species Act (ESA)

S. 658. Thomas (R/WY) and 4 Co-Sponsors. Improves the processes for listing, recovery planning, and delisting, and for other purposes.

S. 700. Crapo (R/ID) and 16 Co-Sponsors and **H. R. 1422** Thompson (D/CA) and 3 Co-Sponsors. Amends the Internal Revenue Code to provide a tax credit to individuals who enter into agreements to protect the habitats of endangered and threatened species, and for other purposes.

H. R. 110. J. Davis (R/VA). Imposes limitations on wetlands mitigation activities carried out through the condemnation of private property.

H. R. 1917. Herger (R/CA). Enables Federal agencies to rescue and relocate members of any threatened species that would be taken in the course of certain reconstruction, maintenance, or repair of Federal or non-Federal man-made flood control levees.

H. R. 2530. McMorriss-Rogers (R/WA) and 12 Co-Sponsors. Better informs consumers regarding costs associated with compliance for protecting endangered and threatened species.

H. R. 3459. Markey (D/MA). Amends the ESA to require the Director of the USFWS to publish a summary statement of the scientific basis for a decision concerning the listing or de-listing of an endangered species or the designation of critical habitat, and for other purposes.

Federal Water Pollution Control Act (FWPCA) Amendments:

S. 134. Allard (R/CO) and Salazar (D/CO), **H. R. 186** Musgrave (R/CO) and **H.R. 317** Salazar (D/CO). Authorizes construction of the Arkansas Valley Conduit in the State of Colorado, and for other purposes.

H. R. 720. Oberstar (D/MN) and 3 Co-Sponsors. Authorizes appropriations for State water pollution control revolving funds, and for other purposes.

Invasive Species

S. 336. Durbin (D/IL) and 7 Co-Sponsors and **H. R. 553** Biggert (R/IL) and 24 Co-Sponsors. Requires the Secretary of the Army to operate and maintain as a system the Chicago Sanitary and Ship Canal dispersal barriers.

S. 725. Levin (D/MI) and Collins (R/ME). Amends, improves and reauthorizes the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (NANPCA).

S. 726. Levin (D/MI) and 7 Co-Sponsors. Amends the Lacey Act to prohibit the importation and shipment of certain species of carp.

S. 791. Levin (D/MI) and 6 Co-Sponsors and **H.R. 1350** Ehlers (R/MI) and 12 Co-Sponsors. Establishes a collaborative program to protect the Great Lakes, and for other purposes.

S. 1578. Inouye (D/HI) and Stevens (R/AK). Amends the NANPCA to establish vessel ballast water management requirements, and for other purposes.

S. 1949. Reid (D/NV) and 3 Co-Sponsors. Directs the Interior Secretary to provide loans to certain organizations in certain States to address habitats and ecosystems and to address and prevent invasive species.

H. R. 83. Biggert (R/IL). Amends the Lacey Act, to add certain species of carp (black, bighead, silver and largescale silver) to the list of injurious species that are prohibited from being imported or shipped.

H. R. 260. Ehlers (R/MI). 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. 767. Kind (D/WI) and 12 Co-Sponsors. Protects, conserves, and restores native fish, wildlife, and their natural habitats at national wildlife refuges through cooperative, incentive-based grants to control, mitigate, and eradicate harmful nonnative species, and for other purposes.

H. R. 801. Kirk (R/IL) and 20 Co-Sponsors. Amends NANPCA to require application to all vessels equipped with ballast water tanks the requirement to carry out exchange of ballast water or alternative ballast water management methods prior to entry into any

port within the Great Lakes, and for other purposes.

H.R. 889. Miller (R/MI). Amends the NANPCA to establish vessel ballast water management requirements, and for other purposes.

H. R. 2423. LaTourette (R/OH) and 4 Co-Sponsors. Provides for the management and treatment of ballast water to prevent the introduction of nonindigenous aquatic species into coastal and inland waters of the U.S., and for other purposes.

Public Lands

H. R. 1463. Udall (D/CO) and Trancredo (R/CO). Provides for restoration activities on Federal lands under the jurisdiction of the Interior or Agriculture Depts, and for other purposes.

H. R. 1484. Tancredo (R/CO) and Udall (D/CO). Provides consistent enforcement authority to federal agencies (BLM, NPS, FWS and FS) to respond to violations of regulations regarding the management, use, and protection of public lands under their jurisdiction, and for other purposes.

Water Resources

S. 564. Feingold (D/WI) and McCain (R/AZ). Modernizes water resources planning, and for other purposes.

S. 752. Nelson (D/NE) and 3 Co-Sponsors and **H. R. 1462** Udall (D/CO) and 4 Co-Sponsors. Authorizes the Secretary of the Interior to participate in the implementation of the Platte River recovery Implementation Program for Endangered Species in the Central and Lower Platte River Basin and to modify the Pathfinder Dam and Reservoir.

S. 1116. Salazar (D/CO) and 3 Co-Sponsors. Facilitates the use for irrigation and other purposes water produced in connection with development of energy resources.

S. 2156. Bingaman (D/NM) and 3 Co-Sponsors. Authorizes and facilitates the improvement of water management by the Bureau of Reclamation, to require the Secretary of the Interior and the Secretary of Energy to increase the acquisition and analysis of water-related data to assess the long-term availability of water resources for irrigation, hydroelectric power, municipal, and environmental uses, and for other purposes.

H. R. 135. Linder (R/GA) and 5 Co-Sponsors. Establishes the 21st Century Water Commission to study and develop recommendations for a comprehensive water strategy to address future water needs.

H. R. 307. Pearce (R/NM). Imposes limitations on the authority of the Interior Secretary to claim title or other rights to water absent specific direction of law or to abrogate, injure, or otherwise impair any right to the use of any quantity of water.

H. R. 574. Whitfield (R/KY). Ensures the safety of residents and visitors to Lake Barkley, KY, improves recreation, navigation, and the economic vitality of the lake's region, and establishes a pilot program to maintain its pool elevation at 359 feet until after the first Monday in September.

H. R. 591. Musgrave (R/CO). Amends the Cache La Poudre River Corridor Act to designate a new management entity, make certain technical and conforming amendments, enhance private property protections, and for other purposes.

H. R. 1180. Udall (D/CO). Assures that development of certain Federal oil and gas resources will occur in ways that protect water resources and respect the rights of the surface owners, and for other purposes.

H. R. 2277. Lamborn (R/CO) and Tancredo (R/CO) and **H.R. 1833** Salazar (D/CO). Authorizes the Interior Secretary to conduct a feasibility study relating to long-term water needs for the area served by the Fryingpan-Arkansas Project, CO, and for other purposes.

Sources: http://www.gpoaccess.gov/bills/index.html; and http://thomas.loc.gov/cgi-bin/thomas

River Crossings

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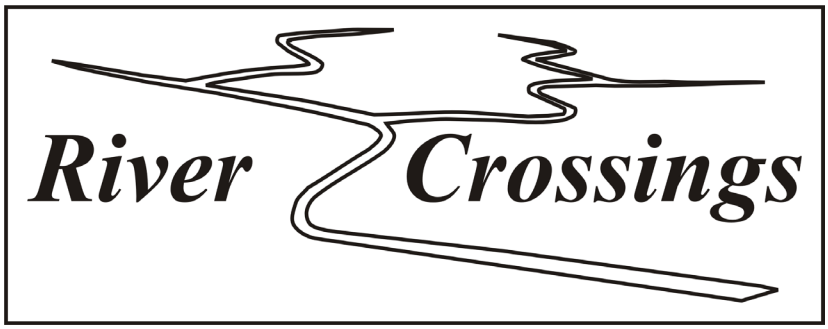

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Sincerely,

Chris O'Bara
Chairman

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