Reforming the Corp of Engineers

The Corps has tried to control nature. Now it's time to control the Corps.

By Ted Williams

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The US Army Corps of Engineers was established in 1779 when nature was seen as the enemy, and--despite the percolation of new ideas through the rest of our society--it has stayed the course in its war against nature ever since. "This nation has a large and powerful adversary," the Corps explained in one of its early promotional films. "We are fighting Mother Nature. . . . It's a battle we have to fight day by day, year by year; the health of our economy depends on victory." As with all wars on nature, this one has gone badly from the start.

More recently—in 1999—the Corps hatched an official prayer in which it thanks the "engineer of all eternity" for "holding the plumb line of the cosmos" and beseeches him to assist it in "making rough places smooth, crooked ways straight and . . . our calculations accurate." But aquatic life evolved in "rough" and "crooked" places--i.e., rivers--and when you convert them to straight gutters you wipe out fish and the ecosystems in which they function. Indeed, no federal, state or private entity has destroyed more fish habitat than the Corps. With bulldozers, dredges, draglines and more than 500 major dams it has degraded or destroyed 30,000 miles of river. It has hacked 11,000 miles of navigation channels through some of the nation's most valuable wetlands, and with 8,500 miles of levees and floodwalls it has cut off rivers from their floodplains and fish from their spawning and nursery habitat. When conservationists first asked the Corps to install fish ladders on its newly completed Bonneville Dam, lowermost impediment to salmon and steelhead migration on the Columbia River, its official response was: "We will not play nursemaid to the fish." That's one pledge it has kept.

What the Corps prays for and what it really wants are two very different things. At every opportunity it brazenly fudges its benefit-cost calculations, going so far as to enter conversion of flood-absorbing marsh to developable real estate in the benefit column. Upon review of its $286 million proposal to deepen the Delaware River's main channel, the Government Accountability Office found that the Corps' benefit-cost analysis "contained or was based on miscalculations, invalid assumptions, and outdated information" and that "the benefits for which there is credible support would be about $13.3 million a year, as compared to the $40.1 million a year claimed [by] the Corps."

In their review of the Corps' Upper Mississippi River Navigation Expansion--a monumental boondoggle that would devastate fish and wildlife by messing up flows and floodplain habitat--both the Army Inspector General and the National Academy of Sciences found that senior Corps officials had manipulated the economic model to justify the project. When Donald Sweeney, the Corps' own Ph.D. economist, demonstrated that his agency's plan to double the length of seven 600-foot locks on the Upper Mississippi would cost $1 billion but produce only $750 million in benefits he was, according to his sworn affidavit, ordered to "ignore" and "alter" data and "arbitrarily reduce" expenses in order "to produce a seemingly favorable benefit-to-cost ratio for immediately extending the length of existing locks" and "to find a way to justify large-scale measures in the near term for the [study], or the Mississippi Valley District office would find an economist who would, and I would be out of my job as

technical manager." Sweeney refused and, one week later, was dismissed as leader of the economic study team. When the new team leader, economist Richard Manguno, also found that the lock expansion was not economically justified, he too was ordered to fudge his figures, according to his sworn testimony. Eventually, however, he complied. Such is the Corps' commitment to keeping its "calculations accurate."

Most Corps projects are aimed at controlling floods, but the only flood control that ever worked is wetlands; and the Corps destroys them. Since World War II it has spent $100 billion attempting to stop US rivers from doing their thing, yet during the same period average annual flood damage has steadily climbed to nearly $8 billion. "We harnessed it, straightened it, regulated it, shackled it," bragged the Corps after it fitted the Mississippi with a corset of levees longer, higher and thicker than the Great Wall of China. Then in 1993, as it does every few decades, the river flexed into its floodplain, blowing out the levees, topping the dams, destroying $15 billion worth of property, and displacing 74,000 people. It was an act of engineers, but America called it "an act of God."

America called the destruction of New Orleans "an act of God," too. But it should have blamed the Corps and Congress (which funds and authorizes its wasteful, destructive and counterproductive projects). For the five millennia before the Army engineers "improved" the Mississippi, as they like to say, the river had built its own flood control--a rich mosaic of forests, ponds, swamps, sloughs, and five million acres of flood-absorbing, fish-and-wildlife-rich delta marsh. But with its levee system the Corps has converted the river into a sluiceway that shunts marsh-building sediments into the Gulf and over the lip of the continental shelf. Corps projects (along with oil-and-gas access canals) have destroyed 1,900 square miles of delta marsh, thereby bringing the sea 30 miles closer to New Orleans.

Immediately after Hurricane Katrina, Corps brass and President Bush expressed astonishment that the levees had failed. But everyone who had been paying attention, including a few rank-and-file Army engineers, had been predicting that failure for years. In 1999 about 50 conservation leaders--later to gel into the "Corps Reform Network"--met in Louisiana to strategize about how best to encourage the Corps to protect instead of destroy natural resources. Their first action was to go to the district engineer and implore him to close the Mississippi River Gulf Outlet (aka "Mr. Go"), a dangerous and essentially useless 76-mile navigation channel connecting the Gulf of Mexico to the Port of New Orleans' Inner Harbor Navigation Canal in eastern New Orleans.

To create Mr. Go the Corps slashed through natural levees and wetlands to a depth of 36 feet and a surface width of 650 feet. But the soft marsh soils kept sloughing off the banks. Today, in its 42nd year, Mr. Go is nearly a half-mile wide, and the Corps spends $22 million a year dredging out the dirt. This equates to $35,000 in maintenance fees for each vessel that passes through (on average only one per day). Basically, warned the conservationists, Mr. Go was good for nothing save delivering storm surges to New Orleans. The district engineer blew them off. Six years later Hurricane Katrina pushed the Gulf up Mr. Go, over the levees and into New Orleans.

The LSU Hurricane Center's deputy director, Ivor van Heerden, got blown off too when he warned the Corps of the danger in which it had placed New Orleans. "What bothers me the most is all the people who've died unnecessarily," he told NBC's Lisa Myers. "Those Corps of Engineers people giggled in the back of the room when we tried to present information." And the New Orleans Times-Picayune did not exaggerate when it blamed the Corps for "the deaths of more than 1,000 residents."
After I had inspected the damage to Louisiana habitat (both human and nonhuman) and interviewed

some of the victims and the conservationists who had forecast their fate, it was time to, well, go fishing. The coastal marshes south of Houma seemed endless and timeless, and save for the smashed and overturned boats there was no sign that anything was wrong. Shorebirds and roseate spoonbills worked the mudflats, sheepsheads swirled, dolphins herded panicked mullet, and flights of waterfowl hung over the horizons like black crepe. What guide Dan Ayo and I focused most on, however, were the "crawlers," as he and his fellow Cajuns call the redfish that sashay through the shallows with their bodies half out of water. In the deeper sections I had to drop the copper-foil fly within six inches of a redfish's snout, but crawlers are hunting crabs and will chase down a fly from six feet. When the tide got higher and the redfish vanished, Ayo put me on suitcase-size black drum that churned across the flats like draft horses, towing most of my backing.

These beautiful fish and all the life I was seeing in and around this marsh are vanishing because the marsh is vanishing. Thanks in large measure to the Corps' levee system, it is racing inland at the appalling rate of one half mile per year. The map on your GPS will tell you you're about to crash into shore, but local watermen ignore it and keep going because no map is up to date, and with some you don't have to touch the throttle for five miles after the monitor declares "landfall." As the water deepens, waves break apart more marsh, further deep-ening the water and allowing still bigger waves. Meanwhile, as the slug of saltwater moves inland, bass, crappies, turtles, alligators, frogs and entire freshwater ecosystems expire. Principally through her marshes, Louisiana produces one quarter of the nation's seafood. But unless something drastic is done so that the Mississippi can again drop its silt inshore, Louisiana will lose all its coastal marshes and the creatures they sustain. And New Orleans will become a levee-rimmed goldfish bowl submerged in the sea.

I can't think of a more important sportfishing river in the South than the 107-mile-long Apalachicola that drains 21,794 square miles in Alabama, Georgia and Florida and bisects Florida's Panhandle from north to south. It has produced the state record redeye bass (7.83 pounds), the state record spotted bass (3.75 pounds), the state record striped bass (42.25 pounds), and the state record white bass (4.69 pounds). Yet to facilitate imaginary barge traffic it has been hacked up and flushed toilet-style by the Corps.

Dredging and spoil dumping have dest-royed wetlands and bottomland forests for a quarter of the river's length, reducing gamefish populations in these areas by 50 to 75 percent. At 60 feet in elevation, one of the spoil piles, known as "Sand Mountain," is the highest point in northern Florida. The spoil blocks access to spawning and nursery habitat in a maze of sloughs and side channels. Dredging alone wasn't sufficient to float barges, so the Corps provided water releases for what it called "navigation windows," thereby exterminating fry and eggs and triggering spawning behavior at precisely the wrong times. In 2000 a navigation window eliminated the year class of all gamefish in the river and upstream reservoirs. The flushing and dredging has degraded critical habitat of the threatened gulf sturgeon as well as threatened and endangered mussels, and it has damaged an estuarine ecosystem that produces 15 percent of the nation's oysters.

All this went down despite the fact that barge traffic was essentially non-existent. As early as 2000 Assistant Secretary of the Army Joseph Westphal stated in writing that maintaining navigation on the river at an annual cost of $10 million was "not economically justified or environmentally defensible." That year a grand total of 33 barges used the river. In 2003 only nine barges used the river, at a cost to US taxpayers of slightly more than $1 million per barge. To borrow the words of Rep. Tom Tancredo (R-CO), it would have been "cheaper to ship cargo by limousine."

In 2004 the Corps applied for a new dredging permit on the Apalachicola River, then ignored the state's repeated requests for additional information. By October 11, 2005 the Florida Department of Environmental Protection had had enough. On that day it denied the Corps' request. "Florida has stood up to the Corps and given the river a new lease on life," declared Melissa Samet, senior director for water resources at American Rivers and co-chair of the Corps Reform Network. "As the river recovers from the damage that has been done, people can look forward to a healthier resource for themselves and their children to enjoy."

Attempts at reforming the Corps have been underway for some time. For instance, the House Ways and Means Committee complained of no less than 25 over-budget projects and called for "actual [Corps] reform, in the further prosecution of public works." The year was 1836. Upon vetoing a host of Corps boondoggles contained in the Rivers and Harbors Act, the President of the United States declared, "I cannot overstate my opposition to this kind of waste of public funds." The president was Dwight Eisenhower.

But the Army-engineered Katrina tragedy and the State of Florida's eloquent statement have gotten the public's attention as never before. Under the inspired leadership of Senators Russ Feingold (D-WI) and John McCain (R-AZ) the Senate has recently passed an omnibus bill (the Water Resources

Planning and Modernization Act of 2006) that would implement real Corps reforms, protecting fish, wildlife and taxpayers in the following important ways:

Priorities. The Senate bill would require the Corps to prioritize projects according to genuine needs of the American people rather than appetites and ambitions of the agency's congressional funders who use it as a conduit for funneling federal pork into their districts. And it would require the Corps to reduce flood danger by discour-aging unwise use of floodplains and by restoring flood-absorbing wetlands. Currently the agency has a $58 billion backlog of authorized projects--maybe 30 years worth. But it only gets $2 billion a year in construction funds.

Planning. The bill would modernize the Corps' planning process, which currently allows it to destroy wetlands and construct dams and levees that lure the public into harm's way. Under the new guidelines the Corps would be limited to projects that protect wetlands, fish, wildlife and the public.

Independent review. The bill would require outside review of projects to ensure that they are properly designed, cost effective, and that they reduce rather than augment flood damage. In July there was a major showdown on the Senate floor. After Senators Feingold, McCain and others got their independent-review amendment approved Sen. James Inhofe (R-OK), chair of the Committee on Environment and Public Works, and Sen. Kit Bond (R-MO), chair of the subcommittee that handles water-resources bills, moved to substitute their own sham review provision. It failed by a vote of 51-49.

Mitigation. The bill would hold the Corps to the same standards the agency imposes on other wetland developers--i.e. require it to compensate for impacts to wetlands and other fish and wildlife habitat by restoring or re-creating it elsewhere.

The House bill, on the other hand, is worthless. And at this writing compromise legislation has failed in conference due to conflicts over the reforms as well as more than 100 projects (many of them traditional Corps boondoggles). Still, the fact that reforms are at last being seriously debated is encouraging.

"This is a pregnant moment," says David Conrad of the National Wildlife Federation. "We're seeing the Corps involved in some important restoration activities critical to the long-term viability and health of some of nation's most important ecosystems. And Congress has been throwing all responsibility to the wind, authorizing anything and everything that comes along, including reducing non-federal responsibilities for existing projects and piling additional burdens on US taxpayers. As a result the chance for restoration--the really important work of the Corps in the 21st Century--is slipping away."

Occasionally the Corps does do some good work, most of which is undoing its past bad work. On Massachusetts' Charles River, for example, it flabbergasted the environmental community way back in 1972 by coming out against a proposal for an expensive and ineffective flood-control dam and instead recommending and later implementing permanent protection for 8,500 acres of upstream wetlands as part of its "Natural Valley Storage Project." On the Missouri River it restored a side channel near Nebraska City to aid native fish. On the Anacostia River in Washington, DC, it modified existing flood control to provide anadromous fish with access to five miles of the mainstem. On the Mississippi, between St. Paul and St. Louis, it restored 28,000 acres of aquatic habitat. In Washington state the Corps, in cooperation with the Department of Fish and Wildlife, invited combat engineers from the 14th Engineer Battalion to practice operations by blowing a hole in a levee near the mouth of the Skagit River, thereby restoring tidal flows and access of salmonid smolts to the rich estuary where they can grow large enough to stand a decent chance of surviving ocean predators. Having gutterized Florida's serpentine Kissimmee River so that it no longer filtered sediments but shot them directly into Lake Okeechobee (by most accounts the best bass lake in the world), the Corps set about restoring the "crooked" places created by "the engineer of all eternity." And, having nearly destroyed the Everglades with its drainage and channelization projects, the Corps is spending $8 billion on a partial fix-it job. "This is by far the largest aquatic ecosystem restoration project in history," says Conrad. "All eyes in the water-resources world are watching this to see what these Americans are trying to do."

American taxpayers need to insist that this kind of work be the new mission for the US Army Corps of Engineers. They won't get any argument from the Corps, which doesn't care what it does so long as it keeps busy. Like a hunting dog it is equally happy working constructively in the field or digging in the tulips. And, as it has demonstrated with a small percentage of projects, it can ladle out just as much federal pork by repairing fish and wildlife habitat as by destroying it.