

It's no surprise the oil and gas industry want the current permitting system changed.

But this would've been a welcome innovation for retirees Bob and Mary McMacken, too. Their case is an example of how the old wetlands law was used badly: They received permits to build a house on less than an acre in a still-developing subdivision in Pennsylvania's Poconos, and lived there four years before a letter arrived in the mailbox telling them to cease and desist. Their property was a wetland, the Corps wrote. The message: Get out.

"This was a real emotional process to go through," says Nancie G. Marzulla, president of Defenders of Property Rights, the nation's only public-interest legal foundation dedicated exclusively to protecting property rights. "It took us two years to work with the Corps to get them absolved of all liability."

Trouble is, government scientists say the Corps' new proposal would destroy more wetlands and streams than the current dredge-and-fill permits. It also expands the scope of waters that could be filled in, and the Corps hasn't gathered data on the resulting environmental impacts either, writes a concerned Jamie Clark, director of the U.S. Fish & Wildlife Service. And what about endangered species? It could take two to three years to consult with Clark's agency and the National Marine Fisheries Service to hash out the possible impact. But that's too late: Some of the 16 new permits could be the law of the land as early as March.

And, the proposal "may not be consistent with" the Clean Water Act, which requires only "minimal adverse environmental impact," Clark wrote in a



letter to Michael Davis, deputy assistant secretary of the Army, representing the Corps of Engineers.

"What we're demanding is that they withdraw the package," says environmentalist Mann, who is encouraging the public to write to Vice President Gore.

#### On the Front Lines

RADER, the EDF scientist, speaks quickly, matter-of-factly. Rader can mentally connect the dots between the tasty sea creatures on dinner tables—softshell crab, blue crab, and flounder—and the health of local wetlands. "All of those fish are directly linked to brackish-water estuaries that are gridled by wetlands," notes Rader.

Only four states have more wetlands than the popular resort destination of North Carolina, which has lost about half of its original soggy lands—transformed into homes for new retirees, developments, and farms. Time was when the state's two-legged population doubled just every 50 years. But as

resort towns and cities grow, residents in some counties may quadruple in 50 years, Rader says. "We're looking at a huge increase—particularly in the northern Outer Banks. It means all bets are off in terms of estuarine environments."

"In 20 years, will all the fish here come from fish farms and foreign waters? I think that's a possibility."

That may be surprising, since some of the nation's largest fish nurseries are found along North Carolina's Pamlico Sound. The estuaries also have been rocked by headline-grabbing outbreaks of a fish-killing neurotoxin called *Pfiesteria piscicida*, believed to be caused by a chain reaction that occurs when waste draining off farms enters the rivers. The puzzling toxin causes a variety of symptoms in anglers, including wheezing and nervous and respiratory system ailments. So people are advised not to eat fish when outbreaks occur.

Such suggestions aren't good for business: Commercial and sport fishing each year add at least \$152 billion to the U.S. economy and provide about 2 million jobs, and three fourths of the nation's fish production depends on marshes, estuaries, and other wetlands, according to the Izaak Walton League of America.

Though Rader feels a sense of optimism after the August announcement that about \$221 million in federal money is on the way to restore local watersheds, and a 1997 state Marine Fisheries Reform Act now requires "no net loss" of wetlands, that doesn't mean all is well. For one thing, pigs outnumber people in North Carolina, and some of the fecal waste of the 10 to 12 million

**In cold, hard, economic terms, each acre of wetland is worth 58 times more money than an acre of ocean in the benefits it provides, according to Science.**

swine end up in rivers. Meanwhile, farms and other development continue to eliminate wetlands and riparian buffer vegetation. So "the kidneys of these landscapes are being eliminated," Rader explains.

In trendy Portland, Ore., about 40 percent of area wetlands have vanished in a decade, even though protective regulations were in place, according to wetland ecologist Mary Kentula of Oregon State University. The lesson, Kentula determined, was the need for better monitoring and protection in fast-growing areas around the United States.

Down South, almost three quarters of Louisiana's bottomland hardwood swamps have vanished as farmers till land drained long ago by the U.S. Army Corps of Engineers. Such swamps have always been the most common type of wetland in the United States, claims the EDF. They're in the floodplains of rivers, such as the Mississippi, and they're found along slow-moving southern streams.