

WETLANDS IN THE MARKETPLACE

The marketplace rules, even in wetland conservation. A new approach to restoring the nation's fast-disappearing wetlands offers adventurous landowners and developers incentives for investing in the environment. It's called mitigation banking, and the appeal is to the pocketbook as much as to ecological stewardship.

*Story By Elizabeth Coleman
Photo by Dede Lusk*

The “bank” is a wetland that has been restored. The developers of proposed construction that will damage or destroy wetlands elsewhere can compensate by purchasing “credits” from the owner of the restored wetland. The landowner then uses the developers’ money to maintain or further enhance the restored wetland. Mitigation banking is seen by many as a more effective way to conserve and expand wetland habitats than current compensation requirements as outlined in Section 404 of the Clean Water Act.

“If any type of construction such as a shopping center, highway, or pipeline is built in a wetland, the Clean Water Act requires the builders to follow a three-step

mitigation sequence,” says Rex Caffey, Sea Grant Wetlands and Coastal Resources Specialist with the Louisiana Cooperative Extension Service.

First, developers are to plan their projects so as to avoid any impact at all on wetlands. If that isn’t possible, the impacts should be minimized. Thirdly, if impacts can’t be minimized, the developers must compensate for the damage to the wetland, either on the site of the construction or off-site in an area with similar functions and values.

“If it’s off-site,” says Caffey, “the mitigated area must be similar to the one damaged. For example, if you’re taking down



trees in a bottomland hardwood forest to build a shopping center, you can't restore a beach somewhere. It's a different kind of ecosystem."

The main problem with traditional compensation is that it often results in what has been called "postage stamp" mitigation—isolated little wetlands appearing in various urban settings. "When you see a fenced wetland in the middle of a shopping mall parking lot, it's probably a developer-mitigated wetland," says Caffey. "A small piece of the land was a wetland and the mall developers found that they couldn't avoid or minimize damage, so they built another wetland on site or restored the existing one."

More importantly, the restored wetland is no longer part of a larger natural ecosystem, even though it may be of equal acreage to the original. It is surrounded by urban development, subject to pollution, and has little value to wildlife. "It's difficult to defend the position that an acre or half-acre of wetlands in downtown Atlanta is going to have the same functions and values as that same acreage inside a large, contiguous area," observes Caffey.

Wetland restoration burdens developers who may know little about wetland functions. Hiring environmental consultants to design and plant the wetland, conducting environmental analyses, obtaining regulatory approvals, and maintaining the reconstructed wetland can cost as much as the original project. Sometimes restored wetlands fail to thrive because they barely meet requirements and aren't monitored properly afterward.

The movement toward mitigation banking began about seven years ago.

Interest grew rapidly as landowners saw a potentially more profitable way to use their property, developers saw a simpler way to compensate for damaged wetlands, and environmental regulatory agencies saw a more effective way to restore valuable wetland habitats.

Some mitigation bank operators are farmers who had a couple of bad years and looked for alternative uses for their land. Others are investors who formed corporations to seek and purchase acreage suitable for mitigation banks. "It's an industry," says Caffey, "and the investors are entrepreneurs who call themselves "enviro-capitalists". The premise is that competitive markets are ultimately the most efficient means of getting something done."

How the Process Works

To qualify, the proposed bank site must be officially determined to be a wetland, by its hydrology, vegetation, and soils. Altered wetlands with the potential for enhancement or restoration are prime candidates. "Much of our state's agriculture is situated on converted wetlands," says Caffey. "Before 1985, the Farm Bill provided incentives for farmers to drain and plant wetlands. Now the same legislation has incentives for restoring them." There must also be reasonable certainty that returning land to its natural state will restore wetland functions, for example, fish and wildlife habitat, water treatment, waste assimilation, groundwater recharge, and flood control.

According to Jim Holcomb of the Louisiana Department of Natural Resources, coastal Louisiana currently has only one approved mitigation bank, located in Terrebonne Parish, but there are over 25 operating mitigation areas in the

state. A true mitigation bank must be restored and functioning as a wetland before the owner can begin selling credits, but a mitigation area may be completed in stages, as the owner sells credits to pay for the work.

It takes perseverance to have land established as a mitigation bank or area, and the process can take up to three years. First the landowner must apply to the U.S. Army Corps of Engineers for a determination that the property is a wetland. Then the owner must go through a lengthy approval process by an appointed mitigation banking review team, composed of people from various federal and state regulatory agencies. In Louisiana, a Mitigation Area Review Team, or MART, includes representatives of the state departments of Natural Resources, Wildlife and Fisheries, and Environmental Quality, as well as federal agencies such as the U.S. Army Corps of Engineers, Environmental Protection Agency, Fish and Wildlife Service, and sometimes National Marine Fisheries Service. The Corps of Engineers and the Louisiana Department of Natural Resources have regulatory oversight of the state's mitigation program.

The MART decides how much of the land may be used for mitigation and determines how many credits the owner of the new mitigation area will be able to sell. The ratio of restored wetland acreage to marketable credits can be as much as 1:1, or some fraction of this proportion as determined by a wetlands value assessment. The MART also approves the landowner's restoration plan, which may involve reintroducing original water patterns and replanting wetland trees such as cypress and tupelo gum.

“There’s a lot of project design required,” says Caffey. “Someone can’t just buy a wetland area, sell credits to developers, and pocket the money.”

In many states, review team approval requires the landowner to put in escrow a third or more of the total price of the allotted credits as a guarantee that the work of restoring the wetland will be done. The bank owner must also agree to participate in an after-restoration maintenance and monitoring program. Thus, there are significant upfront and maintenance costs associated with mitigation banks.

Establishing a bank requires creating, enhancing, or restoring a wetland, but not necessarily preserving, because preserving an existing situation does not mitigate wetland loss. A landowner may be allowed to sell one credit per acre of land, but if part of a proposed mitigation area is already a functioning wetland and can’t benefit from enhancement or restoration, no credits will be given for it. Likewise, if only 10 acres of a proposed 100-acre mitigation area were actually once a wetland, the landowner will be allowed to market credits only for those 10 acres.

Mitigation must be done in an ecosystem similar to the one being damaged. Every mitigation bank has a designated “service area,” or jurisdiction, determined by the limits of its watershed. Obviously, a mitigation bank located within the watershed of a developing urban area has a larger potential market for credits than one located in a remote agricultural area.

Buying and Selling Credits

Mitigation banking does not allow urban builders to ignore the wetland

conservation sequence described in the Clean Water Act, as they may purchase mitigation credits only if damage to an on-site wetland is unavoidable. Like landowners, they must submit to a lengthy application process to obtain the approval of the state mitigation banking review team. To a developer, however, it’s often worth the trouble. “Once they calculate the costs for wetland design and construction, maintenance, monitoring, and reporting to the Corps, developers may be glad to be able to simply buy credits,” says Caffey. “When they buy the credits, they’re technically off the hook and have no further legal responsibility.” Generally, the number of credits a developer must purchase depends on the quantity and quality of the wetlands destroyed. Pristine wetlands have a higher price tag than those that have already been altered.

The initial investment needed to create a mitigation bank or area can be large, as landowners must pay for projects such as replanting wetland vegetation, altering water flow (which often requires earth-moving equipment), and reintroducing wildlife. Ideally they recover that investment and make a profit as credits are sold to developers. One Florida company invested \$1 million in its first mitigation bank, and though it took three years to get the necessary approvals and to complete restoration, it sold \$20 million worth of credits. While such excessive profit is rare, stories like this one have unfortunately fueled speculation within the industry. For example, a company in Maryland reported spending \$1.4 million in 1998 for site evaluations alone, with no assurance of finding appropriate sites to buy.

The price of a credit varies, generally depending on local land values. According to Holcomb, the price of a mitigation credit in coastal Louisiana ranges from \$3000 to \$5000, though in the northern part of the state, prices may be somewhat lower. For a rural mitigation banker who might get only about \$600 an acre if he sold his land, such a price is good news. But in states like Florida, where land values are higher—especially near the Everglades—a credit can be worth up to \$20,000. In Rhode Island, developers have spent as much as \$200,000 per credit.

“Louisiana has more wetlands than most other states, but the price of mitigation credits is probably the lowest in the nation,” says Caffey. “It’s primarily because base land values aren’t very high, especially in rural areas. Low land values translate to low credit prices, which could be problematic for prospective bankers who fail to adequately budget for the long-term or perpetual operation and maintenance of a mitigation bank.”

Pitfalls and Problems

Not everyone has welcomed the growth of mitigation banking. Environmental groups and others have expressed doubts about its long-term effectiveness and concern about the potential for abuse that lurks in a market-based approach to wetland restoration.

They see the profit motive as shaky ground on which to build a national conservation program, fearing that mitigation bank owners are simply out to make a buck and will abandon their obligation to wetland maintenance afterward. Moreover, many in the environmental community do not trust

the regulatory agencies, charging them with supporting a system that encourages urban sprawl and allows developers to destroy valuable wetland resources.

Mitigation bankers themselves face a battery of risks, especially financial ones. A landowner can invest several years and considerable funds in establishing a mitigation bank, only to find, in spite of careful market analysis, that there isn't enough development taking place in the bank's service area to provide a market for credits.

When a bank is established, it is for perpetuity, but what happens after a landowner has sold all allotted credits but still needs income to maintain the wetland? The land may not be used for anything but an approved—and limited—list of activities such as recreational fishing and hunting, wildlife photography, boating, and camping. The owner may be caught in a financial crunch if the activities for which the wetland can be used don't cover the continuing costs of maintenance, monitoring, and reporting. Though it's

possible for a landowner to sell the property or turn it over to a conservation organization like The Nature Conservancy, says Holcomb, the obligation to maintain it as a wetland will fall on the new owner.

Another worry is a potential conflict of interest with regulatory agencies. In some states, the government agencies responsible for overseeing mitigation banks not only approve permits for urban construction and advise developers where and how to buy compensation credits, but also operate mitigation banks themselves. The possibility that developers will be encouraged to do one-stop shopping at a state office has some private mitigation bank owners nervous.

There are regulatory risks. In an industry created by regulation, landowners can be faced with confusion—and roadblocks—as agencies responsible for formulating mitigation policy interpret new regulations in accordance with old ones.

Risks notwithstanding, land investors throughout the nation are enthusiastic

about mitigation banking, denying that profit and environmental stewardship are mutually exclusive. Glossy marketing brochures from investment groups warmly assure the developers of subdivisions, office parks, and shopping centers that purchasing credits from mitigation banks will allow them to save money, prevent cost overruns, avoid legal problems, and reduce the time needed to obtain building permits. One even suggests that purchasing credits will help developers shed their former image as environmental despoilers. Mitigation banking is being widely described as a “win-win solution” for both developers and the wetland environment.

Is it? The success of mitigation banking, as of any plan adopted for wetland conservation, will depend in the long run on commitment to the future of wetlands—of landowners after the money is made, of regulatory agencies in making and interpreting policy, and of developers in observing the law's spirit as well as its letter.



Photo by Elizabeth Coleman

MITIGATION BANKING: AN INVESTOR'S EXPERIENCE

Reid Cancienne of Lockport, Louisiana, was a successful crawfish farmer until about two years ago when prices bottomed out and he began wondering what else he could do with his 600 acres. After a local doctor asked him what he knew about mitigation banking, Reid became curious and investigated. He quickly realized that his own property was a prime candidate for wetland restoration.

The land was once a cypress-fringed lake, a small neighbor of Lake Fields in Lafourche Parish. Migrating waterfowl broke

their autumn journeys to feed and rest in its shallow waters. Snowy egrets nested in the trees and long-legged cranes strutted there year-round, feeding on fish, crabs, and wild crawfish. In 1917, however, the lake was drained, the trees cut down, and the land converted to agriculture. For over 60 years, farmers raised sugarcane, corn, and soybeans in the former wetland.

In 1978, Reid and his wife bought the property, intending to build a residential subdivision laced with canals where homeowners could moor their boats. The downturn of Louisiana's oil industry in the early 1980s and a subsequent coastal recession doomed that project, so Reid turned to crawfish farming. He did well, so well in fact that he paid off the property's mortgage in the first two years. However, subsequent years proved less

profitable, and by the mid 1990s Reid was ready for a change.

The more he learned about mitigation banking, the more he was intrigued by the

again hosting waterfowl and wading birds, and alligators swim in the canals.

Eventually he hopes to establish the property as a wetland education center

where the public can come to learn about wetland ecology.

The new wetland has already served the community well. In July, a severe and sudden rainstorm dumped over 15 inches of water on the town of Lockport, which would have flooded the town if Reid had not opened culverts to allow the floodwater to surge over his property instead. The action saved many homes from flood damage and demonstrated the flood storage function of the wetland.

Though Reid

has recently finished the permitting and review process, which took over two years, and has already sold two hundred credits, a legal quirk may give him problems. After initially approving Reid's land as a mitigation area, one MART agency is reconsidering, now saying that because his property is "fast" land, or leveed, it may not qualify as a mitigation area. "But almost all the land below the Intracoastal Canal is leveed," says Reid, "and there are other mitigation areas operating on leveed property."

Still, he perseveres in restoring the land, hopeful that in time the regulatory confusion will be sorted out in his favor. "I've already invested a lot in this project," he says. "I want to see it through, not just for me and my family but for the community." — Elizabeth Coleman



Photo by Elizabeth Coleman

Reid Cancienne's 600 acres at Lockport have been approved as a mitigation area.

idea of remaking his land into the wetland it once was. Any doubts were erased when a neighboring developer recognized the wetland's mitigation potential and offered to buy the property for a million dollars.

Reid's original motive was money. "But now the money isn't very important," he says. "I'm excited about restoring this wetland for its own sake. It's a special place and will be a real benefit to the community."

So far, he has installed several weirs to control water flow on the property, removed undesirable vegetation, and will soon begin the task of replanting wetland trees. Two hundred acres will be devoted to a bottomland hardwood forest, and another 200 acres will be planted with cypress and tupelo gum trees. Ponds are