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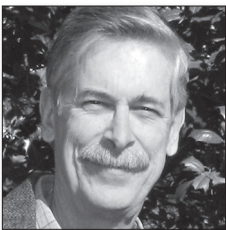
Saddam's Legacy

*Wetlands of Mass
Destruction*

The Hope of Habitat Banking

A tool to help fulfill the promise of state wildlife action plans

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and State Biodiversity Programs. Reprinted from www.wildlifejournals.org with permission.

State leaders are expanding their vision beyond traditional game species and highly endangered species to include wildlife species and natural places that may become endangered without targeted conservation efforts. Federal legislation and funding have provided the impetus for this new approach, requiring each state to develop a State Wildlife Action Plan. As of today, the U.S. Fish and Wildlife Service has approved plans from all 50 states and six territories.

Habitat banking in its various forms has the potential to help reach the ambitious, broad goals of these state plans. In general terms, banking is the practice of restoring, creating, or preserving wetlands or species habitat and saving the acreage to offset impacts from future development projects. Habitat bankers — which may be public agencies or private entities, depending on the project or location — assess, select, and manage the bank sites. Each site has a value measured in credits, based on a formula that factors in the size and quality of the restored or created habitat. When developers need to offset or mitigate their impacts on wildlife or habitat, they can go to a habitat banker to purchase the required number of credits, prices for which are set by market transactions.

Banking is just one of several powerful conservation tools — including land acquisition, conservation easements, economic incentives, and regulation — that states will need to employ to help protect at-risk wildlife, the ultimate goal of all State Wildlife Action Plans. But how can states put habitat banking to its best use in conserving priority species and habitats identified in the new plans?

Case Study: The Face of the Future

Development and land use practices invariably impact the environment, yet only a small fraction of those impacts are offset by legally required compensatory activities under the Clean Water Act or Endangered Species Act. By adopting new federal and state provisions that require compensation for impacts to significant but unprotected species or habitat types, public agencies can more effectively seek to offset environmental damage that currently goes unaddressed. Across the country, new compensatory programs have been emerging that reflect the public's concern over the loss of wildlife habitat.

In Wyoming, for example, growing concern over the fragmentation of sagebrush habitat due to energy development led Governor Dave Freudenthal to cre-

ate a special advisory team charged with recommending actions to avert the extinction of the greater sage grouse (*Centrocercus urophasianus*), called a “species of greatest conservation need” in Wyoming’s State Wildlife Action Plan. In 2007, the advisory team offered its recommendations, which include developing and enforcing “conservation thresholds” for the grouse and possibly for other species as well. These thresholds could take the form of state-established species population targets or habitat acreage targets that would be high enough to protect a species and thus prevent its listing under the federal ESA as well as, in the case of the grouse, allow for continued recreational hunting.

Habitat banking could become a vital part of such preemptive strategies because bankers who secure suitable conservation land could sell credits to energy companies whose actions would harm or destroy crucial grouse habitat. This would create a clear incentive for bankers to conserve habitat, and a flexible way for companies to mitigate for projects negatively affecting the land. If other banking programs can channel conservation banking investments to areas identified as priorities in State Wildlife Action Plans, all the better.

Aside from its future potential, habitat banking also has a well-established past that can offer lessons to emerging habitat banking programs.

Wetland Mitigation Banking

Under the federal Clean Water Act (and under many state laws as well), the filling of wetlands is prohibited without a permit. To receive a permit, applicants must agree to compensate for the impacts of unavoidable, anticipated wetland loss.

Traditionally, compensatory mitigation involved the permittee’s restoring or creating other wetlands on or very near the development site. But in the mid-1980s, scientists began to raise concerns about the effectiveness of this project-by-project, do-it-yourself mitigation. Since that time, a variety of studies have found that much of the required compensatory mitigation was not carried out, and much of what was done

yielded many postage-stamp wetlands that were widely scattered and that frequently failed to achieve their purposes. In addition, regulators were often unable to hold anyone accountable for these failures.

Wetland mitigation banking emerged in the mid-1980s to improve the track record of compensatory mitigation by providing advanced planning and consolidated mitigation to offset the effects of numerous small development projects at a single site. Before selling any credits, bankers must develop a detailed miti-



When developers need to mitigate their impacts, they can go to a habitat banker to purchase the needed credits

gation plan, secure a site that supports “ecologically successful and sustainable compensatory mitigation projects,” and provide financial assurances to demonstrate that the resources are available to successfully complete the project. Then, as the banked site reaches specified ecological milestones, the banker can sell additional credits.

“The biggest thing that wetland mitigation banking does for habitat is it consolidates mitigation into larger areas that are then more accessible to wildlife,” says Dave Urban, director of operations at Land and Water Resources, Inc., in Illinois, which builds

and manages wetland mitigation banks. This consolidated approach also increases the likelihood that bankers will be held accountable for managing their sites over the long term.

Conservation Banking

This form of habitat banking arose in the mid-1990s and works in much the same way as wetland mitigation banking, except it focuses on protecting endangered species. The federal ESA as well as several parallel state laws prohibit “taking” of endangered species — either directly or through the indirect adverse effects that often result from land development — without a permit. To secure a federal permit under the ESA, a developer must prepare a plan to compensate for the impact a development will have on endangered species.

Thus, conservation banking offers an opportunity to offset the impacts of development with a single, more easily managed site. In practice, wetland and conservation banking have not always lived up to the ecological

and administrative expectations envisioned for them. Nonetheless, they've become an increasingly common and widespread means of meeting the requirements of both wetlands and endangered species laws. Following the release of federal interagency guidance on wetland mitigation banks in 1995, for example, the prevalence of these banks expanded dramatically. By 2005, the Environmental Law Institute found that 405 wetland mitigation banks had been approved around the country. This represented an 85 percent increase in approved banks in four years and a 780 percent increase in the number of banks in 14 years.

Endangered species conservation banking has a somewhat shorter history and has been used relatively infrequently, at least outside of California. A survey conducted in 2003 identified only 48 active conservation banks nationwide. But that same year, the government issued a new federal policy on the establishment and use of conservation banks, a move that may eventually have the same sort of stimulating effect as the 1995 wetland banking guidelines.

Location, Location, Location

Habitat that is banked in the wrong spot is likely to fail in its conservation goals. "This is almost like any other real estate transaction in that there's a focus on location," says Stephen Collins, CEO of The Wetlandbank Group, based in Deerfield Beach, Florida. "We look for proximity to other natural resources where you know that the contiguous uses in the long term are going to be compatible," he says. This would include locations near parks or parcels of land that create natural corridors between other habitats. Brian Monaghan, project director at Wildlands, Inc., a California conservation bank, says his company looks "not just at the sites that are for sale, but the sites that make the most sense from an ecological perspective." When it comes to locating conservation banks for specific endangered species, says Monaghan, "the primary consideration is: Does it dovetail with the recovery effort?"

Choosing a location is only the first step. Gaining approval and permits for those sites can be a complex and expensive task. Habitat bankers, also known as bank sponsors, must propose specific bank locations to federal and state regulatory agencies, which vary depending on the project.

The FWS has the authority to approve and issue permits for conservation bank sites, while the U.S. Army Corps of Engineers plays the lead role in overseeing wetland mitigation banks. In addition, bankers of wetland mitigation sites must meet certain measurable performance standards and adhere to complex rules regarding monitoring, credit sales, and funding set-asides to compensate for impacts in the event of the bank's failure.

State wildlife agencies can help ensure that new habitat banks are designed and managed to support the species and habitat types identified as priorities in their State Wildlife Action Plans. Those plans now have even more weight due to a shift in federal policy on how to choose locations for wetland mitigation banks. New regulations issued jointly in 2008 by the Environmental Protection Agency and the Corps require the Corps to make all compensatory mitigation decisions, including decisions about where to site banks, using a watershed approach. According to the regulations, the watershed approach must either be based on available and appropriate plans, or, in their absence, rely on a "structured consideration of watershed needs and how wetlands and other types of aquatic resources in specific locations will address those needs." This broad approach will need to utilize a wide range of data, including information on "current trends in habitat loss or conversion" and "the presence and needs of sensitive species." State Wildlife Action Plans can be a robust source for information on both fronts.

No Panacea

Despite its power, habitat banking also has its pitfalls. Dave Schad, director of the Minnesota Department of Natural Resources' Division of Fish and Wildlife, notes that public lands, for example, may be targeted by mitigation companies for restoration work, but in some cases those lands would have been restored anyway using public funds. The mitigation work therefore results in no net gain for habitat. Furthermore, habitat banks may prove costly to state resource agencies. "Long-term maintenance and management of mitigation sites are difficult to ensure," says Schad. The task can sometimes fall to agency workers, he adds, creating additional work for employees with already full plates.

Overall, unless states have their own independent regulatory requirements, they will have limited influence over the location and management of federally approved wetland and conservation banks. If priority habitats identified in the State Wildlife Action Plans are not wetlands or do not support federally listed species, or if there is no development pressure stimulating a demand for credits associated with a listed species that the priority habitats do support, there will be no opportunity to use federal habitat banks as a way of protecting those habitats.

Even when these conditions are met, private bankers can choose to establish banks elsewhere. No government agency can require that a privately initiated bank be located at a particular site. At most, state and federal officials can only hope to exert some influence over the banker's site selection. Still, collaboration and partnerships with private entities can help states gain some

power over bank location and management. And state agencies can also reach out to their federal counterparts to collaborate on the design of performance standards for sites involving wetland species and habitat types identified as priorities in State Wildlife Action Plans.

Power for the States

If the state itself becomes a banker, however, the story changes. States may be able to leverage funds from private development interests or state agencies, such as highway departments, to acquire and manage areas that are conservation priorities in their action plans. Utah's school land trust agency, the State and Institutional Trust Land Administration, for example, owns extensive lands that it is required to manage to generate income for state schools. SITLA's trust responsibilities preclude it from simply dedicating these lands for non-income-generating conservation purposes. But by working with the Utah Division of Wildlife, SITLA identified some of its lands in Wayne County that could be managed as a conservation bank for the Utah prairie dog (*Cynomys parvidens*). In return for encumbering those lands with a conservation easement in 2005, SITLA earned credits that it sold to private developers in rapidly growing Iron County. In this way, SITLA devoted the land to conservation while simultaneously fulfilling its legal duty to generate income from its land to benefit state schools. Other western states might look to their State Wildlife Action Plans to find similar opportunities.

States can also advance conservation banking by using it to fulfill state regulatory requirements. The state that has most aggressively used conservation banking, California, did so initially to comply with its own regulations imposed by the California Endangered Species Act and the California Environmental Quality Act. Although regulations vary from state to state, many state wetland, endangered species, or environmental impact assessment laws impose requirements that either already include or could be amended to include a duty to mitigate the impact of certain development activities. And since the state itself will design the rules for banking, officials can ensure that those rules further the conservation priorities of its State Wildlife Action Plans.

California's Environmental Quality Act, for example, requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate them. In 2005, the California legislature adopted a provision requiring mitigation for projects that result in the "conversion of oak woodlands that will have a significant effect on the environment." The new law allows for several mitigation alternatives, including preserving existing oak woodlands through

easements, planting an equivalent number of trees, or donating to the Oak Woodlands Conservation Fund, administered by the California Fish and Game Commission.

Banking on a Better Future

Implementing the ambitious objectives set out in State Wildlife Action Plans will require the creative use of every available conservation tool, including habitat banking. But while most action plans provide rather exhaustive lists of species and habitats of greatest concern, they typically offer considerably less detail about the strategies that will be employed to conserve them. Instead, the plans tend to identify and summarily describe general strategies and existing programs, without probing very far into the strategic use of either. Our review of the 50 State Wildlife Action Plans revealed that only 11 make any reference at all to habitat banking. Five of these relegate the only reference to the appendixes, while four others make only a single brief reference to banking. We recommend that future versions of the plans should more fully explore the role that banking can play in meeting states' conservation objectives.

In addition, for the State Wildlife Action Plans to effectively direct banking projects specifically for wetlands mitigation, they must identify lands with high restoration potential. Virtually all state plans identify wetlands as a key habitat type. In the plans' current iterations, however, most of the wetland acreage identified is already of high quality and retains much of its functional capacity. This is valuable information for wetland acquisition, but mitigation bankers are generally more interested in restoration projects, which federal policy favors over projects that simply preserve existing wetlands.

In the Corps of Engineers' Norfolk District in Virginia, for example, every 1.5 acres of restored scrub-shrub wetlands in a bank is assigned one credit, while it takes 15 acres of preserved scrub-shrub wetlands to earn one credit. And because restoration is actually "adding to the nation's open space," says Dave Urban of Land and Water Resources, it has an added benefit for wildlife. Updates to State Wildlife Action Plans can help emphasize the value of restoration by including information on potential wetland areas with high restoration potential.

The creation of State Wildlife Action Plans, and their potential to harness the power of habitat banking and other conservation tools, is clearly a boon to the environment. The next step — implementation — will reveal whether this unprecedented planning effort will make a meaningful difference in on-the-ground conservation and management. •