

MITIGATION

The Challenge of Implementing Market-Based Programs by Regulatory Agencies

Since the publishing of the original federal wetland mitigation banking guidance in 1995, wetland mitigation banks have proven to be successful ecologically and economically. However, the efficiency and effectiveness of these programs have been hindered by a regulatory process that neglects the financial realities of private investment and market dynamics. This article will explore some of the issues arising from the implementation of market programs by nonmarket entities—the regulatory agencies—and suggests some potential recommendations to improve performance of the mitigation banking program.

Ecological Successes. Wetland and species banks have resulted in larger, more sustainable mitigation sites. All of these bank projects are planned and permitted in advance of impacts. All projects have some level of biological performance standards, legal protections, and financial assurances consistent with the National Research Council's 2001 recommendations on improving the success of wetland mitigation.

Economic Successes, Including Credit Supply. Wetland mitigation banks have also overwhelmingly achieved the economic goals that were envisioned in the original federal guidance by:

- 1) providing incentives for landowners to protect and restore wetland and related species' habitats;
- 2) providing disincentives for impacting wetland and species habitat due to having to pay the true costs of habitat mitigation;
- 3) fostering regulatory efficiencies by decreasing the permit review and follow-up monitoring of multiple, individual mitigation sites versus one larger mitigation bank; and
- 4) investing substantial private resources and capital in habitat protection and restoration.

Even by some conservative measures, more than \$1 billion, yes, that's billion with a "B," of private investment has been invested in private-sector mitigation banks. The number of wetland mitigation banks in the United States has risen from 537 just one year prior to the draft mitigation rule (2006) to 1,083 in recent months, with 187 pending (Personal Communication with Robert Brumbaugh, Senior Policy Analyst, Institute for Water Resources (May 26, 2011)). However, a question remains largely unanswered: how will this new market, with its abundant supply of credits, perform?

For markets to operate efficiently, there must be sufficient information informing producers and consumers. As the agencies and mitigation markets adapt to the U.S. Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers (the Corps) 2008 Mitigation Rule, there are still gaps in the knowledge and performance of mitigation providers and the agencies that regulate them. To a large extent, investment decisions are still being made on entrepreneurial guesswork regarding compensation needs and sufficiency of demand. Additionally, regulatory decisions on issues, such as bank location, size, and service area, have been made with insufficient knowledge of, or attention to, the same factors—compensation needs and sufficiency of demand. The result of these uninformed decisions is a misalignment in supply and demand in the mitigation market.

Viability Factors. For a wetland mitigation bank to be successful on a business level, the bank needs to have:

- 1) demand for the credits generated (customers to buy the product);
- 2) consistency between the various mitigation alternatives available to permittees (stability in the marketplace); and

- 3) support from the project permitting staff for mitigation banks (support demand for the credits),

Private and public mitigation bankers have often complained about the implementation of the program by the regulatory parties, such as the Corps, EPA, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and some of the state fish and wildlife groups. Documented issues, such as delays in permitting (time cost of money), winnowing down or limiting service areas, and willingness to allow lesser standards to other forms of mitigation related to other governmental entities or nonprofit organizations, have resulted in a reduction in the market viability of banks. In addition, the bankers sometimes perceive reluctance by agency staff to enable a market-based approach to environmental programs, e.g., "making money on the environment" and "allowing payment for pollution." Some of these perceptions are supported by repeated examples of regulatory staff support for programs with documented lesser environmental standards, e.g., in-lieu fees and permittee-responsible mitigation. In part, this may result from the fact that the agency personnel processing permits—and potential supporting demand for credits—are not often the same personnel that have been trained to review and approve banks, creating the supply of credits. Given the cultural divide between the environmental regulatory agencies and the private sector, the question we ask is: Can market-based programs be effectively implemented by nonmarket entities?

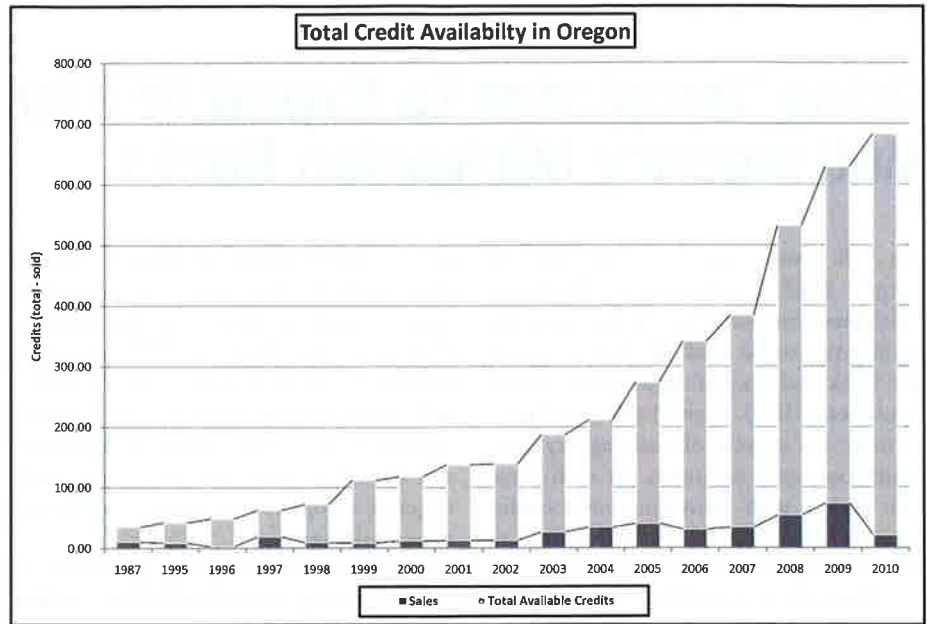
Low Demand. There are numerous examples today of banks having trouble finding buyers for their credits. The rapid development of new banks has coincided with a substantial decrease in economic activity and private-sector development. An example is seen in the state of Oregon. Figure 1 displays the growth in the supply

of credits in that state compared to actual credit sales. The gap between supply and demand (as reflected in credit sales) is so dramatic that the growth in supply appears almost exponential, while the growth in demand is low and linear. And this pattern is reflective of many markets throughout the nation. The result is that many bankers are experiencing declining revenues, lower than expected sales, and lower credit prices. It has been reported that many bankers are having to take in outside investors or are selling their credits on a wholesale basis to other entities.

Future years will show the form that the inevitable adjustment in the mitigation market will take. Two things are certain: (1) the large amount of capital currently invested will require a return; and (2) many people involved in banking, especially on the public side, do not understand how costly maintaining investment is and how quickly returns on that investment will need to occur for a sustainable program.

Need for Market Expertise. Most natural resource agency regulatory personnel are comprised of individuals with training in the natural sciences. Fields, such as ecology, hydrology, botany, and wetland and wildlife ecology, tend to make up the majority of the educational backgrounds of regulatory staff. While these degrees are necessary to analyze data and make decisions on biological and ecological issues, they often are not well-suited for the many market and business decisions related to ecosystem services. The ecological results of wetland mitigation banks are often directly related to the economic incentives built into wetland mitigation banks. Unfortunately, this concept may not be fully understood or appreciated by the regulatory staff. For example, reducing the size of a service area—ostensibly for ecological reasons—may result in smaller or no mitigation banks being established in a watershed, thus resulting in a return to the smaller, less ecologically viable on-site projects.

Misunderstandings. In addition, the role of the private sector in wetland compensation is still new and may even remain suspect in the eyes of many in the regulatory community. A lack of basic knowledge of this new business of banking by all involved often results in misunderstand-



Example of increased credit availability, based on the U.S. Army Corps of Engineers RIBITS website, which provides information on third-party mitigation banking (last visited May 2011). Chart and data courtesy of David Urban/Ecosystem Investment Partners.

ings between banker sponsors and regulators and inflated expectations by both parties. Concepts, such as: “Regulators wouldn’t permit my bank if there wasn’t a market for credits,” or “Bankers can just charge more to cover the costs of increased requirements on banks,” illustrate some of the misperceptions.

Recommendations. In order to improve the coordination and implementation of these market programs by regulatory agencies, the following actions may improve the implementation of the program:

- 1) provide training on the market forces required for banking, making sure that consistent market-based factors are incorporated into decisions on all banks and alternative mitigation measures;
- 2) staff banking programs with project managers that have some experience or knowledge of basic economics or business procedures;
- 3) ensure that the staff members writing project permits are aware of the banking program and the importance of having consistent application of the mitigation rule;
- 4) set measurable objectives and

goals to ensure that a level playing field for all forms of mitigation are being met, such that other forms of mitigation have all the same biological, financial, and legal assurances and standards as banks do; and

- 5) promote market mechanisms that stimulate demand for the use of banks, such as allowing out-of-watershed or service area sales with higher ratios or penalty factors, and require higher mitigation ratios for non-bank projects, e.g., 2:1 or 3:1, versus bank credit ratios that should be lower, e.g., 1:1 or 1.5:1.

Conclusion. Wetland mitigation has resulted in a number of ecological and economic benefits to wetland mitigation, from the earlier mitigation programs in the 1980s and early 1990s. However, the true benefits from these programs may never be realized until greater understanding and balance of the economic and business factors are incorporated into the implementation and management of these market-based programs. ■

-Craig Denisoff and Greg DeYoung