Understanding The Basics Of Mitigation Banking

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What is Mitigation Banking?

Mitigation banking is a system of credits and debits devised to ensure that ecological loss, especially to wetlands and streams resulting from various development works, is compensated for by the preservation and restoration of wetlands, natural habitats, streams, etc. in other areas so that there is no net loss to the environment. To mitigate means to reduce the severity of something, in this case, the damage caused to the environment.

According to NMBA (National Mitigation Banking Association), mitigation banking is defined as "the restoration, creation, enhancement, or preservation of a wetland, stream, or other habitat area undertaken expressly for the purpose of compensating for unavoidable resource losses in advance of development actions, when such compensation cannot be achieved at the development site or would not be as environmentally beneficial."

A mitigation bank is a site developed for such a purpose. The person or entity undertaking such restoration work is referred to as a mitigation banker. Just as a commercial bank has cash as an asset that it can loan to customers, a mitigation bank has mitigation credits as its assets that it can eventually sell to those who are trying to offset mitigation debits. Generally these purchasers of mitigation credits are individuals or entities undertaking commercial projects.

There are two types of mitigation banks:

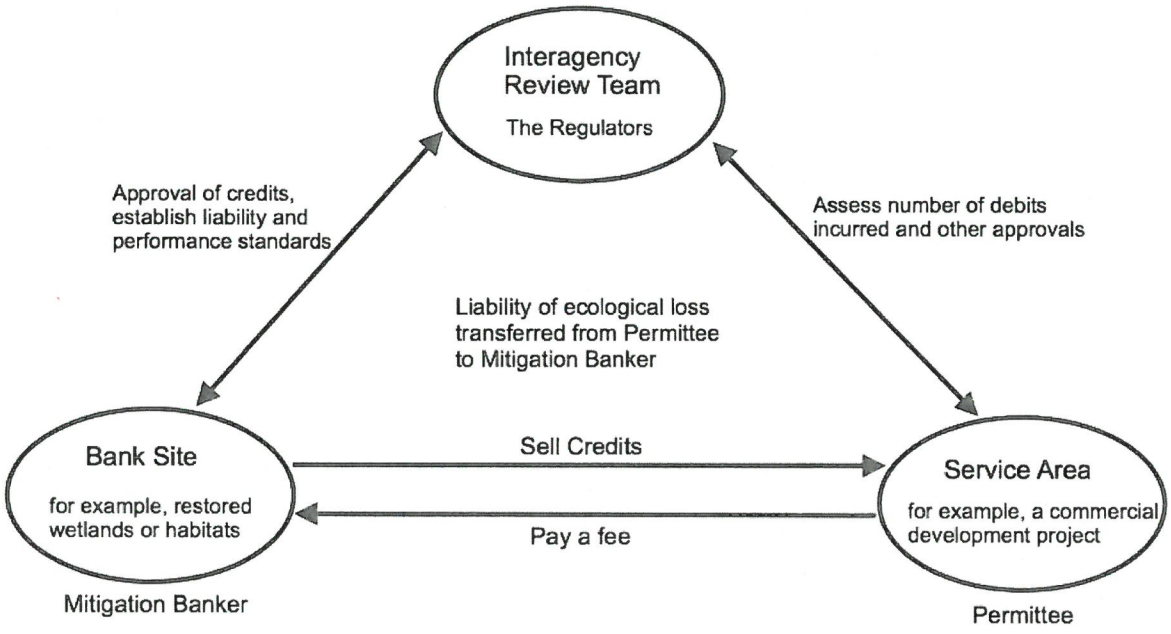
- **Wetland or stream banks**, which offer credits to offset ecological losses that occur in wetlands and streams. These are regulated and approved by the USACE (U.S. Army Corps of Engineers) and the USEPA (U.S. Environmental Protection Agency).
- **Conservation banks**, which offer credits to offset losses of endangered species and/or their habitats. These are regulated and approved by U.S. FWS (Fish and Wildlife Service) and NMFS (National Marine Fisheries Service).

How Does It Work?

The mitigation banker, after purchasing an environmentally damaged site that they wish to regenerate, works with regulatory agencies such as the MBRT (Mitigation Banking Review Team) and the CBRT (Conservation Banking Review Team) that approve plans for building, maintaining and monitoring the bank. These agencies also approve the number of mitigation credits that the bank may earn and sell with a particular restoration project. These mitigation credits may then be bought by anyone who plans to undertake commercial development on or near a wetland or stream that will in the process negatively impact the ecosystem of that region. The mitigation banker is responsible for not just the development, but also the future upkeep and maintenance of the mitigation bank.

The US EPA (United States Environmental Protection Agency) has defined four distinct components of a mitigation bank:

- **The bank site:** the physical acreage that is restored, established, enhanced, or preserved.
- **The bank instrument:** the formal agreement between the bank owners and regulators establishing liability, performance standards, management and monitoring requirements, and the terms of bank credit approval.
- **The Interagency Review Team (IRT):** the interagency team that provides regulatory review, approval, and oversight of the bank.
- **The service area:** the geographic area within which permitted impacts can be compensated for at a given bank.



History

- The Clean Water Act (CWA) was passed in 1972. Section 404 and two other provisions of the CWA made it compulsory to avoid and minimize the impact on designated water bodies and provide compensatory mitigation for unavoidable impacts.
- In 1977, a law requiring federal agencies to take steps to avoid the impact to wetlands was passed.
- In 1988, a national policy of 'No Net Loss' of wetland values and functions with concepts of 'Like kind replacement' and 'Functional as opposed to spatial replacement' emerged.
- The concept of mitigation banking started taking shape when the Clinton administration advocated the use of mitigation banks in federal wetlands programs in 1993.
- The guiding principles released by the U.S. Environmental Protection Agency (USEPA) and the U.S. Army Corps of Engineers (USACE) on the role of mitigation banks in the CWA 404 program were expanded in 1995, with guidelines on the establishment and the use of mitigation banks.

- In 1998, TEA-21 (the Transportation Equity Act for the 21st Century) was made into a law, specifying a preference for mitigation banking for transportation projects.
- In 2008, after four years of planning, a federal rule to establish standards for mitigation banks, in-lieu fee programs and individual mitigation (also called permittee-responsible mitigation) was implemented. These standards are consistent with those in the CWA 404.

Benefits of Mitigation Banking

(1) Protection and conservation of environment: Mitigation banking aids in protecting nature and its diversity. The impact of increasing industrialization and urbanization on natural habitats, streams and wetlands is inevitable. Mitigation banks provide an opportunity to at least partially offset this impact.

(2) More efficiency: A mitigation bank is more efficient in that it ensures that a vast consolidated piece of land is recovered or conserved to offset the adverse impact of developers on a lot of small sites. The economies of scale and technological expertise of a mitigation bank make it more efficient not just in terms of cost, but also in terms of the quality of restored acreage.

(3) Less time lag and regulatory ease: It is easier for developers to buy credits from an approved bank than to get regulatory approvals that might otherwise take months to procure. As mitigation banks have already restored units of affected acreage in the process of earning credits, there is little to no time lag between the environmental impact at a service area and its restoration at a bank site.

(4) Transfer of liability: The system of mitigation banking effectively transfers the liability of ecological loss from the developer (also called permittee) to the mitigation banker. Once the permittee buys the required credits as per regulations, it becomes the responsibility of the mitigation banker to develop, maintain and monitor the site on a long-term basis.

Current State

Currently, there are a number of mitigation banks approved in the United States. According to NMBA, as of January 2010, there were over 950 mitigation banks

approved by the USACE and USEPA, covering over 960,000 acres of restored wetlands, streams and habitats. As of January 2009, there were over 90 conservation banks approved by the FWS protecting over 90,000 acres of endangered wildlife habitats.

Challenges and Concerns

The foremost challenge to the success of mitigation banking is the difficulty encountered by regulatory agencies in correctly assessing ecological loss in economic or monetary terms. The credits offered to mitigation banks have to be appropriately priced and evaluated by regulators, but although these agencies make use of a number of environmental assessment techniques, it is not an easy task to fully capture the economic impact of such damage caused to natural resources.

It is also questionable whether the natural habitats and wetlands that took centuries to evolve can be artificially engineered in a span of just a few years. In some cases, the quality of such artificially developed wetlands in terms of floral and faunal diversity has been found to be sub-standard, compared to their natural counterparts.

It is also believed that mitigation banks, as opposed to individual mitigation where developers create their own mitigation sites in the vicinity of acreage destroyed, tend to be located far from the sites of impact, and hence cannot fully replicate the site impacted.

The Bottom Line

Mitigation banking is a system by means of which the liability of ecological damage is transferred from the permittee to the mitigation banker through a system of credits and debits under regulatory guidelines. A mitigation banker develops, restores, preserves and manages the acreage at a bank site and earns mitigation credits, which are then sold to a permittee or developer for a fee. This system, despite some of its limitations such as the lack of robust environmental assessment techniques and poor quality of natural diversity in some cases, still has a lot of advantages. With increasing private investment in the development of mitigation banks and research on ecosystems as well as easing regulatory controls, the future for mitigation banking is indeed bright both for investors and for nature.