

Chapter 4

The Pitfalls and Challenges

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The benefits of conservation banks have been detailed in the previous chapter, but banks also have their share of pitfalls and challenges. This chapter discusses the most prevalent pitfalls and challenges in conservation banking from the perspective of a range of professionals working on conservation banks, including federal and state regulators in California, ecological consultants and non-profit conservation organizations.

At the heart of the controversy is a suite of concerns around long-term management and accountability. Challenges include the potential for net-loss of habitat, limited agency resources to implement and monitor banks, inadequate endowment funds to support essential land maintenance activities, competition between banks and in-lieu fees, and placement within the broader landscape, among others. And underneath these socio-political issues lies an even more basic concern, how can we be sure that banks are providing the intended benefits to the endangered species?

Gail Presley, Conservation Planning Manager with the California Department of Fish and Game (CDFG) sums it up well when she explains, “I think banks have a lot of potential, but we also need to be cognizant of the potential for shortfalls.”

[a]NET-LOSS OF HABITAT

While some conservation banks incorporate restoration activities, the majority are focused on the acquisition and preservation of existing habitat. The concern among nearly all stakeholders is that this is resulting in a net-loss of habitat.

The conservation banking system is based on the working hypothesis that if you conserve large enough blocks of high quality habitat, connect it to other core preservation sites, and manage it to support the recovery of species, the species will persevere and thrive, despite the net-loss of habitat.

Carol Witham, a private consultant and former President of the California Native Plant Society, believes, “banks are fine for projects that have small, limited impacts, but when we are talking hundred of acres of land for endangered species, I think buying into banks ultimately results in more than a net-loss of habitat.”

Diana Lane, a scientist with Stratus Consulting and co-author of *A Nationwide Survey of Conservation Banks*, agrees, “when land [in the conservation bank] is not in immediate danger of development, the credits provided by the bank essentially result in a net loss of endangered species habitat (Lane & Mills, 2003).”

Tim Male with Environmental Defense makes the point that there is only a net loss, “if habitat is measured in the most simplistic (and least biologically relevant) way - acres. If you instead look at the quality of the habitat and the number of acres occupied ...the species are better off.” Indeed, banking may result in higher *quality* of habitat being conserved for an individual species. Some proponents of banks argue that even with a net loss of habitat, banks do a better job protecting gene flow, avoiding gene depression, increasing breeding populations, decreasing edge effects, and improving overall fitness. But the bottom line is that no scientific studies have been completed to support this conclusion.

[a]LACK OF RESOURCES TO ENFORCE AND MONITOR

The conservation banking policy opened the door for endangered species mitigation to become an industry involving buyers, sellers, business plans, market analysts, land managers, and ecologists. Unfortunately, agencies were not allocated additional staff or resources to ensure the successful implementation of this entirely new approach to mitigation. Reviewing and executing a banking agreement could easily involve an ecologist to visit the site and review the habitat management plan, an accountant to review the endowment fund estimates and maturity schedule, and a lawyer to write and

review the actual agreements. The expectation that agency staff trained in wildlife biology will have the expertise to review not only the biological elements of the banks, but also the legal and financial aspects, is unrealistic. Staff have been left to work through the detailed process without adequate support from the necessary experts. Further, there has been a dearth of actual staff hours. The combination of insufficient hours and inefficient application of skills has made it difficult for agencies to effectively implement banking.

While the lack of agency resources has led to protracted agreement processing times, the more serious ecological issue is the absence of monitoring to ensure implementation of management plans. Presley of CDFG explains, “The agencies just are not equipped, nor funded, for the workload. There is no way we can get to all the banking sites each year to monitor them firsthand. We need to rely on banks to fulfill their obligations.” This has led to a persistent concern with conservation banking: the lack of accountability and enforcement in the system. If the agencies are not monitoring the bank sites, there is no assurance that the properties are providing the intended habitat for the species. Meanwhile, credits are being sold and impacts are taking place.

[a] **ENDOWMENT FUND ISSUES**

Establishing an adequate endowment fund to support the bank property in perpetuity is critical for ensuring its long-term management. A key challenge for an endowment is to be able to incorporate all the potential needs of a property over its lifetime--you need to think about management in perpetuity. “One of the great difficulties in developing thorough management plans and endowments is trying to identify contingencies for anything that could happen—there are lots of educated guesses,” says Matt Gause, Senior Ecologist at Westervelt Ecological Services.

An article in *Environmental Law Review* details the potential risks of wetland mitigation banks and raises concerns over issues related to the vitality of financial assurances and

the ability of regulators to take enforcement actions against a mitigation banker (Gardner & Pulley Radwan, 2005). Many of the concerns in this article also apply to conservation banks. The article points to several banks where the long-term endowment accounts are currently under funded, raising concerns about whether the long-term stewardship needs of the sites can be met.

Oversight of endowments is also a tricky issue. Third-party mitigation landholders like the control and flexibility controlling an endowment provides, and bankers like the idea because typically third-party organizations can generate a higher rate of return, requiring a smaller upfront investment.

“The State (currently) only gets 1.7% return of investments because it has to go into the State Pooled Investment Fund and that doesn’t even match inflation,” explains private consultant Michael McCollum. “Plus,” he continues, “if a non-profit wants to manage the property it can take a year or more to get paid for maintenance. It just doesn’t work.” However, the case of The Environmental Trust (TET), a non-profit banker that went bankrupt, raises a series of concerns around adequate oversight of endowments. While some argue that a third party organization can manage and invest the endowment more effectively than a governmental agency, TET’s poor financial management practices raises the question of what accountability mechanisms must be in place to ensure an endowment is being properly managed.

Presley of CDFG explains her perspective: “TET dipped into the principle and spent it for operations. They were operating outside of any kind of agreement with the wildlife agencies. And 4,000 acres of land now has not enough money to cover it. The trust is gone and they are looking for people to take the land with very little management funding. It is a mess. It is our main reason for suggesting that the Department should continue to hold endowments even though we earn lower interest rates (the 30 year average has been 8%)...Because the money is completely protected, it will never be mismanaged or misspent.”

McCollum also expresses, “we all knew that TET was going to go sour because it was a fly by night operation, undercutting legitimate managers.” He expresses frustration that “banking detractors are using TET as the poster child bogeyman to make their case against banking. However, such failures have occurred in other types of conservation and mitigation where planning and management was inadequate.”

There clearly is a need to balance the desire of regulators to protect the principal over the long-term and bankers need for control over funds to adequately steward properties. And, while many are concerned about endowments being under funded, the flip side of the issue is the concern that the large, upfront financial requirements can make it difficult for small landowners and ranchers to get involved in a bank. For more on the issue of endowments see Chapter 8.

[a] COMPETITION WITH IN-LIEU FEES

Prior to conservation banking, project proponents could offset their impacts by implementing their own mitigation project, or paying an in-lieu fee to the agencies. In the case of in-lieu fees, the agency is tasked with the acquisition and management of habitat lands that offset the original impacts. Now with conservation banking as an option, project proponents can purchase bank credits as mitigation. When project proponents are reviewing their options, they consider the costs and benefits of their three primary mitigation strategies: implement their own offset project, pay an in-lieu fee, or buy credits from a conservation bank.

In California, some counties have developed a fee-based system that has not kept up with the rapid increase in land values. If land prices are rapidly rising, and fees are not large enough to meet acquisition and management goals, there is no way the agencies will be able to afford to buy enough land to offset impacts, resulting in a loss of habitat. Additionally there can be a substantial time delay between the time of habitat impact and habitat mitigation.

In regions where an in-lieu fee is below market rate, bankers will not create a bank because they cannot compete economically. Royal Gardner, Professor of Law and Director of the Institute for Biodiversity Law and Policy at Stetson University College of Law, recently wrote, “Mitigation bankers generally view in-lieu fees with suspicion: they are not held to the same standards as mitigation banks. Mitigation bankers must invest and meet performance standards before credits can be released for sale, but in-lieu fee credits can be sold before a mitigation site is even identified. Yet mitigation banks and in-lieu fees compete for the same mitigation dollars, and in-lieu fees may be a cheaper alternative for the permittee (in part because the credit price may not reflect the true costs of future mitigation). Thus, the presence of in-lieu fees in a market can undercut demand for mitigation credits from a bank.” (Gardner 2007). In-lieu fees must take into account true costs of land acquisition and restoration and be held to same standards as banks.

In November 2003, Congress ordered the U.S. Army Corps of Engineers (the Corps) to establish regulations that would require the various mitigation options to meet the same standards. The Corps and U.S. Environmental Protection Agency issued draft regulations for public comment in March 2006. The draft rule proposed to phase out in-lieu fees over a five year period, at the end of which the in-lieu fee projects would have to meet the same standards as mitigation banks. The final rule is still pending. It is important that fees are set at an appropriate market rate so they will in fact constitute legitimate mitigation and compete on a level playing field.

[a]PLACEMENT WITHIN THE LANDSCAPE AND ADAPTIVE MANAGEMENT

To ensure suitability and viability of habitat, a bank requires proper placement within a broader landscape that takes into account recovery goals, genetic diversity needs, species biology, distribution and connectivity requirements, and the expected development footprint over the next 25 to 50 years and beyond. In reality, banks are often located on

land that a banker already owns and without a larger conservation planning strategy. A property may ultimately be surrounded by urban development, creating a large, isolated island with limited connectivity and movement corridors. Presley of CDFG explains, “The trick to having banks that are scattered across the landscape in isolated places is whether eventually they will be connected to something else. Or will land practices occur on adjacent lands that over a long period of time will erode the benefits of the mitigation bank.”

Maintaining a bank within a changing surrounding ecosystem will require adaptive management. Over the long-term, we need a system that will allow managers to respond to changes as the ecosystem changes and the science is better understood. When asked about adaptive management in the field, McCollum responds, “there is some minimal language in the agreements that talks about adaptive management, but in practice, we find that it is often inadequate. The lack of focus on adaptive management sets up opportunities for conflicts between the manager and oversight agencies. If problems develop, there can be strong resistance to manage differently, depending on the agency staff person.” Making things even more difficult is the reality that most agencies don’t have the resources to enforce management plans, much less oversee an adaptive management system.

In response to the Endangered Species Act (ESA), and other species-specific regulations, conservation banks often focus on the habitat needs of a single species rather than the needs of the larger ecosystem. What might be good for one species might not be good for the ecosystem.

In the management plans she has seen, Witham, explains that “people are doing reactive and often single-species management without thinking about the impacts it might have on the ecosystem and without doing small studies in advance to determine the impact. Most of the management plans I have seen don’t focus individual actions into ecosystem integrity and function. If you manage for one species, you can get cascading disasters (where you react to one management mistake with another mistake).”

Another concern is management practices that force a banker to artificially arrest the natural succession of a habitat in order to maintain the ideal conditions for one particular species, despite the ecosystem's natural desire to mature and go through its normal successional stages.

Lane explains, "in general, you want your land to be in various kinds of mosaics. You want early, mid and late-successional habitats in different places because different species need each of them."

[a]**CHALLENGES WITH LONG-TERM PROTECTION**

This brings us to the "in perpetuity" question. On a legal level, in-perpetuity is forever. However, how this plays out in reality can have its challenges. As land changes ownership, ensuring that easement restrictions are understood and implemented by new owners can be a challenge. In addition, keeping track of all the banking agreements and enforcing the associated conservation easements is a large task that can overwhelm land management staff.

[a]**ECOLOGICAL UNCERTAINTY**

To date, there has been no comprehensive investigation into the success or failure of banking from the perspective of the endangered species. The intention of habitat banking is to help reduce the influence of habitat fragmentation and offset habitat loss (USFWS, 2003), but we don't know if the current implementation of banking is achieving this. Specific concerns include the possible net loss of habitat and the use of preserved land, the lack of adaptive management approaches, and the spatial location of bank properties within the landscape.

There is a clear lack of peer-reviewed science that looks at the ecological performance of conservation banks and their role in the recovery of endangered species. Nobody is able

to answer with certainty whether conservation banks offset endangered species impacts, or if banks will function ecologically over the long-term. The research to answer these questions is lacking and it is not clear whether banks are providing the intended mitigation, or whether they are doing so with more success than other mitigation options.

[a]CONCLUSION

Many of the issues discussed in this chapter are already being addressed. For example, the issue with in-lieu fees is awaiting a final rule from the Corps, concern over the protracted process to get banks approved is being addressed by the U.S. Fish and Wildlife Service (USFWS), and discussions over who holds the endowment funds are active. The uncertainty regarding the contribution of banking to species persistence needs attention. And there are indications that future resources will be dedicated to an assessment of the ecological effectiveness of conservation banking in relation to the protection of endangered species.

Despite the pitfalls and challenges across regulatory, business and ecological fronts, Ken Sanchez, Assistant Field Supervisor of USFWS summarizes it nicely, “with the current administration’s focus on incentives or market-based solutions, mitigation banks are clearly a bright light in the political process of administering the ESA”.

And the success of an individual conservation bank appears to be greatly dependent on the execution. If located within a landscape planning context, with a biologically sound and well-funded management plan, clear lines of accountability, and enforcement, a conservation bank will maximize its chances for success.

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