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How Private Capital Is Restoring U.S. Wetlands

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Wetlands are vibrant ecosystems that provide critical wildlife habitat, storm protection and water filtration. Between the mid-1950s and the mid-1970s, natural processes and human activities resulted in the net loss of more than [450,000 acres of wetlands annually](#).

But [by 2008](#), fewer than 18,000 acres per year were being lost, a 96 percent annual decrease. What happened?

In a phrase, increased compliance with the national “no net loss of wetlands” principle that grew out the 1972 Clean Water Act.

This landmark bill, and subsequent legislation, spurred the creation of “mitigation banks,” overseen by the Army Corp of Engineers, to finance wetlands restoration. By restoring wetlands, these banks create credits that developers, private and public, can buy to offset damage to wetlands caused by their projects. Because the system speeds the approval process — and time is money — developers are willing, if not happy, to buy mitigation credits. The developer payments in turn repay the private investors who front the money for banks’ restoration work.



photo courtesy of Old Florida Mitigation

In the decades since the first commercial mitigation bank application in 1991, more than [1,900 mitigation banks](#) have been established. By [2008, between \\$1.1 and \\$1.8 billion](#) was being spent to restore functioning wetlands annually, protecting approximately 24,000 acres per year.

Despite these gains, this approach is not a panacea; the loss of wetlands is still occurring at a significant rate. These losses are due to a number of different factors, including large-scale erosion and rising sea levels, [particularly along coastal areas](#).

However, the success of this model in wetlands restoration is a prime example of the role government policy can play in catalyzing private capital markets to meet environmental and social challenges. With government funding becoming more constrained, and limited philanthropic capital available, private capital is key to large-scale environmental protection and restoration.

Beyond wetlands, mitigation banks exist to protect other natural resources, like species habitat, known as “conservation banking.” In all, [105 banks](#) have been created, resulting in the protection of over 90,000 acres of habitat. Over the years, rules have been refined to better ensure ecological results.

“If you’re going to allow people to buy mitigation credits to offset their impact, you better be sure that the credit they’re buying is actually making up for the impact,” says Adam Davis, a partner at [Ecosystem Investment Partners](#), a private equity firm based in Baltimore that has raised more than \$200 million and is financing restoration of more than 43,000 acres of wetlands. “However, if it is actually making up for the impact, then it’s a great solution, because it allows predictability for developers and it also creates incentives for restoration and conservation professionals.”

Changing Perceptions

In 2012, EIP closed its second fund, raising \$181 million from pension funds, endowments, and high-net-worth family offices. Significantly, few were “impact” investors; instead, they were attracted to the consistent demand for mitigation credits from energy, infrastructure and other development

projects, including government agencies that are required to offset impacts from projects. EIP combines conservation with market rate returns.

Investors are overcoming their preconceptions about both conservation projects and deals that depend on government policy. “We need more success stories in the ecosystem markets space,” says Howard Kaplan, who advises institutional investors on real assets opportunities as president of Farmvest Inc. “EIP is a prime case of how a fund can raise \$181 million, demonstrate how it can be deployed, and also show how the types of risks and returns private investors are looking for are possible.”

The increasing flow of capital means more, and increasingly large-scale projects. EIP’s first four projects are restoring approximately 8,000 acres of wetlands. Its most recent four projects, in Minnesota, West Virginia, Louisiana and Kentucky, will restore over 35,000 acres and 100 miles of streams, including some of the largest private restoration projects in the country to date.

Wetlands and stream mitigation banking represents perhaps the most mature of the new ecosystem markets and holds lessons for how policy can be a tool to enlist private capital to drive broader conservation and restoration results. “Consistent application of government policies can help,” Davis says, “but this will require more effort to help regulators realize private capital can really flow to solve major environmental problems.”

In essence, policy has created a way to internalize what previously were considered economic “externalities.” Wetlands provide society with a wide range of critical ecosystem services, like water filtration; however, before the passage of the CWA, they were being degraded because there was no standard way to price them into the cost of development.

Beyond Wetlands

The lessons from wetland mitigation banking can be applied to other ecosystem markets; however, clear ecological success criteria, long-term outcomes, and appropriate financial backing are important requirements that may be tougher to meet in other contexts, such as habitat protection or nutrient trading. For instance, it is difficult to assess a farm’s reduction in “units” of nitrogen or phosphorous, which can cause algal blooms and other problems.

Even wetlands restoration, the most mature of the ecosystem markets, isn’t yet operating at scale. More investment options that meet the needs of [Wall Street](#) for quality management and deal size need to be developed. Still, EIP’s recent successful fundraise indicates that institutional investors can participate as regulatory predictability improves.

Experience and scale are critical to understanding the monetary value of a particular wetland mitigation project, which can be difficult for both entrepreneurs and their investors as they seek to perform assessments on individual projects. This means there are certain fixed costs involved in assessment and modeling for every deal.

In addition, wetland credits can only be bought and sold in specific local watersheds. These watersheds vary by size and often have different regulators acting under different rules. Therefore, credit prices cannot really be compared across these regions.

However, these markets have gotten considerably more transaction friendly

in their 20-year existence. Going forward, there is an opportunity to pilot more sophisticated methods of understanding, managing, and valuing risks.

If outsourced compliance can be shown to be as effective in other areas, more private investors can be attracted to nascent ecosystem markets.

“Policy makers must be engaged to internalize externalities,” Davis says, “and to allow a level playing field for investors that actually delivers the kinds of ecosystem conservation and restoration results society desires.”

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