



© Alvin Burrows/EyeEm/Getty Images

SUSTAINABILITY &amp; RESOURCE PRODUCTIVITY

# Taking conservation finance to scale

Environmental projects are woefully underfunded. Improving their risk-return profiles and structuring larger investment products could unlock private capital to narrow the gap.

Ryan Davies, Hauke Engel, Jürg Käppeli, and Todd Wintner

Environmental-conservation projects face a dramatic shortage of funds. Estimates indicate that \$300 billion to \$400 billion is needed each year to preserve and restore ecosystems but that conservation projects receive just \$52 billion, mostly from public and philanthropic sources.<sup>1</sup> Some asset managers and conservation experts have suggested that private investors could close more than half the gap by profitably funding enterprises or projects in areas such as sustainable food and fiber production, habitat protection, and water quality and conservation.<sup>2</sup>

This is an attractive prospect—except that conservation can be a slow and risky business. It can take decades to realize, verify, and capitalize on conservation benefits; only the most patient investors will wait that long. Some projects are derived from

compelling but unproven concepts that investors are understandably reluctant to back. Many more are based on proven concepts yet still operate in challenging circumstances and generate unreliable revenues. We routinely hear about conservation projects for which the investment risks and expected returns are misaligned: imagine an equity investment for which the level of risk is comparable to venture capital but the returns are closer to those of a stake in a successful, established company.

These conditions make it hard for project developers and fund managers to attract private capital. The good news, though, is that developers and fund managers have techniques at their disposal for creating projects with the size, stability, and potential that mainstream investors seek. Here we look at some problems that discourage private investment

in conservation and offer our ideas for how to overcome them.

### **Acknowledging the challenges in conservation**

Conservation finance faces certain problems that affect the wider impact-investing market, of which it is a segment. These problems include a lack of widely accepted standards for measuring impact, a shortage of financial-management experience among project developers, the high transaction costs of investing in small projects, and an abundance of early-stage project concepts that are too speculative to interest all but the most risk-tolerant investors.

Three big challenges have more to do with the specific traits of conservation. The first of these challenges is generating sizable cash flows shortly after a project begins. Some projects only start producing cash flows after years of investment. Others have benefits that are hard to monetize, such as the economic gains that come from preserving biodiversity or from mitigating the risk of future losses. Preserving and rebuilding coastal wetlands, barrier islands, and oyster reefs, for example, can reduce damage from storms. When many parties benefit from a restoration project, though, it can be hard to get some of them to fund the project up front or to pay for the services it provides.

The second challenge is the inherent complexity and unpredictability of natural systems. Even with sophisticated scientific knowledge, it can be difficult to predict the conservation outcomes from managing a natural system in a particular way. This matters because natural systems impose variability on business activities, such as food and fiber production, that depend on those systems. As a result, revenues from conservation projects can be uncertain, whether those revenues are linked to conservation outcomes or to sales of goods and services.

The third challenge is the multifaceted nature of many questions related to land use, particularly its objectives and its governance. Settling these questions requires relevant specialists—ecologists, project managers, lawyers, public-policy analysts, government officials—to agree on the conservation principles for a project. This can be difficult. Most conservation projects depend on certain uses of land or water, which are scarce resources that might be used in multiple ways. Pursuing optimal conservation outcomes can be politically unpopular, preclude other socially beneficial uses of the land, or generate less profit than other uses (for instance, agriculture, resource extraction, or real-estate development practiced with conservation as a low priority).

Many projects are subject to further risks because many stakeholders (government at multiple levels, local communities, and private-land owners, to name a few) impose constraints that can overlap or even conflict. In some countries, national, regional, and local authorities each have jurisdiction over different aspects of how a piece of land is used. And if a project depends on policy mechanisms such as carbon prices to generate income, the possibility that those policy mechanisms will change creates more risk.

### **How conservation can attract more private investment**

Project developers and fund managers can take the lead on several actions that will help attract private capital for conservation projects, first from impact-oriented investors and then, increasingly, from mainstream investors as well. Impact-oriented investors can also support the conservation-finance sector using their knowledge, relationships, and resources other than capital.

*Elevate the dialogue on project risk and return to be more open, objective, and structured.*

Because many risks can affect conservation projects, developers must start by identifying risks

comprehensively. This often requires consultation with a range of stakeholders. The Water Funder Initiative, for example, has collected ideas from policy makers, scientists, industry executives, conservationists, and others about the risks and opportunities associated with investing in water solutions.<sup>3</sup>

Developers should also approach investors with a realistic and well-structured assessment of risks and returns and how these translate to financial measures. We often see conservation projects that have commercially unattractive risk-return profiles because their risks are high relative to their expected cash flows. Sometimes such projects are pitched as market-rate investments, which diminishes their credibility. Fund managers and financial

intermediaries can help developers structure multiple options for investing in a project, including options that are more likely to interest investors who seek market-level returns in addition to conservation impact. Financial professionals can also help identify investors who are qualified to evaluate the risks and returns associated with complicated investments such as conservation projects.

*Mitigate risks and boost returns.* Project developers and fund managers can use various methods to improve a project's expected risk-adjusted returns (exhibit). Management and operational risks, for instance, can be mitigated by assembling a team with all the necessary skills in science, business, regulatory policy, cultural affairs, and other areas.

Exhibit

**Common risk-mitigation strategies can reduce the default rates and investment costs of conservation investment products.**

Risk-mitigation strategy		Key aspects
Operational assistance		Assistance with technical, legal, and financial matters can improve project quality and success rates Typically provided by development finance institutions (DFIs) or foundations
Staged risk tranches	Debt	Fungible, liquid collateral can mitigate credit risk Underlying problems (eg, uncertain land rights) can sometimes be addressed
	Equity	Demonstrating stable, predictable cash flows can mitigate risk Works especially well in established sectors such as forestry
Insurance/hedging	Private insurance	Insurance against catastrophic losses can be expensive for new projects or those without established risk models
	Futures/ forward trades	Can be used to hedge against volatile commodity prices in liquid markets Can be expensive or challenging if timing of cash flows is unclear
Guarantees		Can take the form of loss guarantees that assure investors they will receive a percentage of their principal in cases of default Can be provided by DFIs, foundations, or governments

Source: Credit Suisse; McKinsey analysis

One nascent but promising concept for improving risk-return profiles to suit private investors is blended finance. This involves carving out investment tranches with less favorable risk-return profiles so they can be funded by so-called concessional capital from public or philanthropic sources. Other tranches can then have risk-return profiles that fit private investors' expectations, making it possible to raise funding for projects whose overall risk-return profiles might otherwise hold little appeal.

Fund managers continue to explore old and new models for blended finance.<sup>4</sup> Examples include the following:

- *Early-stage grant making* by nongovernmental organizations can fund the development of conservation projects. This not only reduces the amount of capital needed from subsequent investors but also lowers the investment risk. Grants from NatureVest, for instance, were essential to the development of the Stormwater Retention Credit Trading Program in Washington, DC.
- *Donor-funded guarantees* are an established mechanism exemplified by the US Agency for International Development's commitment to guarantee 50 percent of the losses on up to \$133.8 million of loans by Althelia Ecosphere's Althelia Climate Fund.
- *Junior debt or equity* has a lower-priority claim to assets and earnings than other loans or securities. With this model, the Global Environment Facility used \$175 million to mobilize more than \$1 billion of private capital for climate- and environment-related projects.

*Structure lower-cost, large-scale investment products.* High financing and project costs cut into the returns from conservation enterprises, making them less attractive to private investors. But fund

managers and project developers can lower their costs in several ways. One is establishing routine processes. A good due-diligence checklist for evaluating projects can help fund managers remove impractical ones from their pipelines early on so they can devote more time and money to better ones. Project templates, such as Encourage Capital's blueprints for investing in sustainable fisheries or California's conservation-easement template, can accelerate the process of developing and structuring projects while helping investors avoid high-risk concepts.<sup>5</sup>

Structuring larger investment products could also help fund managers tap more private capital while spreading out the costs of creating, marketing, and distributing a fund. One approach is to bundle relatively small projects of a similar type into an ordinary investment vehicle, using a common deal template to bring down costs. The Forestland Group, for example, has set up several real-estate investment trusts for sustainably managed timberland. Fund managers might also aggregate different but related projects—such as forestry, agriculture, and ecotourism projects in the same national park—into a single diversified product.

Another scaling approach is to create investment products with familiar, widely used structures. For example, a private equity-style conservation fund could direct as much as \$200 million toward 10 to 20 projects in established markets such as sustainable agriculture, ecotourism, and sustainable forestry. Sovereign institutions could issue bonds covering a large ecosystem, use the proceeds to finance conservation there, and repay the debt with revenues from park-access fees and other sources.

*Incubate new conservation concepts.* As proven conservation models are being standardized and applied on a large scale, project developers also need to create new models that will generate investment opportunities in the future. Entrepreneurs

working on novel conservation approaches often need more than money to get projects up and running. Assistance with technical and operational matters can be at least as valuable. To support innovative work in conservation, foundations, non-governmental organizations, and investors could establish incubators to help start-ups get both the financing and the knowledge they need.

Incubators could perform a matchmaking role as well, connecting investors with projects that suit their appetites for risk and their expectations for financial returns and environmental impact. Such incubators could also serve as a proving ground for new financing ideas such as conservation-impact bonds, which are analogous to social-impact bonds, or insurance products that monetize the risk-mitigation benefits of conservation projects.



Factors such as low interest rates, falling returns on equity investments, and burgeoning demand for environmentally friendly goods and services favor an increase in conservation finance. Conservation experts and fund managers must now win the confidence of mainstream investors by enhancing their management and financing methods. Their success could catalyze significant growth in conservation finance, allowing investors to improve their returns and mobilizing more private capital to protect ecosystems around the world. ■

---

<sup>1</sup> Fabian Huwyler et al., *Conservation finance: Moving beyond donor funding toward an investor-driven approach*, a joint report from Credit Suisse, World Wildlife Fund, and McKinsey & Company, 2014.

<sup>2</sup> *Investing in conservation—A landscape assessment of an emerging market*, a joint report from EKO Asset Management Partners and NatureVest, November 2014, naturevestinc.org.

<sup>3</sup> *Toward water sustainability: A blueprint for philanthropy*, Water Funder Initiative, March 2016, waterfunder.org.

<sup>4</sup> *Blended finance vol. 1: A primer for development finance and philanthropic funders*, a joint report from the Organisation for Economic Co-operation and Development and World Economic Forum, September 2015, weforum.org; and *GEF innovations in blended finance: A summary*, Global Environment Facility, 2015, thegef.org.

<sup>5</sup> Alex Markham, Trip O'Shea, and Kelly Wachowicz, *Investing for sustainable global fisheries*, Encourage Capital, January 2016, investinibrantocceans.org.

This article is adapted from *Conservation finance—From niche to mainstream: The building of an institutional asset class*, published by Credit Suisse and the McKinsey Center for Business and Environment in January 2016.

**Ryan Davies** is a partner in McKinsey's New York office, **Hauke Engel** is a consultant in the Frankfurt office, **Jürg Käppeli** is an alumnus of the Zurich office, and **Todd Wintner** is a consultant in the Washington, DC, office.

The authors wish to thank Sam DeFabrizio and Fabian Huwyler for their contributions to this article.

Copyright © 2016 McKinsey & Company.  
All rights reserved.