**Conservation finance** is the practice of raising, managing, and deploying capital for conservation outcomes. Investments in conservation fall into two buckets: those that *do* and *do not* generate a financial return/profit. Current innovation in conservation finance is focused on the engagement of private capital in investment opportunities that generate financial returns through the alignment of environmental, social, and financial outcomes.

The checklist below provides an initial screen to help determine whether a FS project is ripe for conservation finance. If your project does not check all of the boxes below it may not be a good fit for conservation finance; alternately, it may indicate there is more work to be done before moving forward with an idea.

### Checklist for Conservation Finance Readiness

<table>
<thead>
<tr>
<th>Landscape/Project</th>
<th>Defined ecological/social challenge and need for action (i.e. declines in water quality, natural disturbances, increasing visitation, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NEPA decisions signed, projects planned and “shovel ready” (i.e. NEPA record of decision published and individual project plan complete)</td>
</tr>
<tr>
<td></td>
<td>&gt;$3M in funding required to address challenge (if &lt;$3M required, consider philanthropic sources instead)</td>
</tr>
<tr>
<td>Business Case</td>
<td>Market demand (i.e. regulatory drivers, municipal targets, costs incurred, sustainability commitments)</td>
</tr>
<tr>
<td></td>
<td>Potential for ecological/social AND financial outcomes (i.e. timber revenue, market credits, avoided costs, tourism spending, etc.)</td>
</tr>
<tr>
<td></td>
<td>Beneficiaries willing and able to pay (i.e. entities benefit from outcomes and can enter contracts)</td>
</tr>
<tr>
<td>Capacity</td>
<td>FS positioned to be a value added partner (i.e. staffing, plan revision timing, local leadership, regional support, etc.)</td>
</tr>
<tr>
<td></td>
<td>Local capacity to implement on-the-ground project (i.e. dedicated project managers, contractors available)</td>
</tr>
<tr>
<td></td>
<td>Collaborative capacity and socio-political support (i.e. partners, elected officials, community buy-in)</td>
</tr>
<tr>
<td>Data</td>
<td>Ability to predict and monitor project outcomes (i.e. baseline analysis complete, monitoring process/expertise available)</td>
</tr>
</tbody>
</table>
Conservation finance is the practice of raising, managing, and deploying capital for conservation outcomes. Investments in conservation fall into two buckets: those that do and do not generate a financial return/profit. Current innovation in conservation finance is focused on the engagement of private capital in investment opportunities that generate financial returns through the alignment of environmental, social, and financial outcomes.

The project development framework below lays out guidance for USFS staff interested in the process of vetting, developing, and implementing conservation finance projects. We developed this framework to be generally applicable to conservation finance, but the phases/steps laid out below may differ slightly depending on the financing tool in question.

**PHASE 1: SCOPING NEED AND OPPORTUNITY**

- Define ecological/social risks or resource impacts that require action.  
  *(e.g. recent disturbances, declines in water quality, rising populations, failing infrastructure, etc.)*
- Clarify the drivers of these risks.
- Identify initial stakeholders that are a) contributors to these drivers, b) impacted by opportunities/risks, c) care about the opportunities/risks, d) could benefit from activities that address risks.
- Assess whether socio-political and ecological conditions will allow for effective collaboration.  
  *(e.g. existing natural resource collaboratives in place, favorable political landscape, etc.)*

**PHASE 2: IDENTIFYING PROJECT ACTIVITIES**

- Identify project activities that address risks/needs and determine cost of planning/implementing.  
  *Note: If total project cost is <$3M it’s best to use traditional funding (e.g. appropriations or philanthropy), as high project development costs only make these projects cost effective at >$3M scale.*
- Identify social, ecological, and economic outcomes these activities deliver.  
  *(Outcomes are ideally measurable, predictable, and attributable to activities; sometimes proxies work best)*
- Identify specific stakeholders that benefit from project outcomes, and how/how much they benefit.
- Determine whether project activities are scalable across similar geographies within Unit/region.
- Determine whether implementation of activities requires further planning, and likely timelines for projects to be “shovel ready.”  
  *Note: If timeline for initiating work exceeds 2 years, the opportunity for conservation finance is not yet ripe.*
- Identify whether there are financial flows (i.e. enhanced revenues or avoided costs) associated with the outcomes, and who benefits from those flows.
PHASE 3: EVALUATING POTENTIAL FOR CONSERVATION FINANCE

- Analyze the business case (e.g. avoided costs, increased revenues) for all potential project activities by conducting a cost benefit analysis, economic analysis, and/or feasibility study. *Note: The Total cost of activities should be less than the financial flows from project outcomes.*
- Understand potential beneficiaries’ willingness/ability to dedicate resources to project over time.
- Decide whether to employ a funding or financing approach based on criteria in green box to the right. *(i.e) investment without a financial return (funding) vs. investment with a return (financing)*
- If the project does not meet criteria for financing (see green box to right), pursue an alternative funding approach instead. *(i.e philanthropy, CSR, public appropriations)*

Criteria for financing approach:
- Require >$3 million to plan/implement project activities
- Adequate funding not available through traditional sources
- Funding is barrier to timely project completion (not planning, policy, capacity, etc.)
- NEPA decision complete, project planned and ‘shovel ready’
- Potential for social/envir. outcomes and financial flows
- Multiple beneficiaries willing/able to pay
- Capacity for scaled/accelerated implementation exists
- Collaborative capacity/socio-political support exists
- Ability to predict/monitor project outcomes

PHASE 4: ESTABLISHING THE PARTNERSHIP

Phase 4 activities will depend on the specific project and partners engaged. In most cases the Unit will take part in the following activities, but will not be responsible for leading them. Units can work with project developers like Blue Forest Conservation or Quantified Ventures, or receive support from the USFS National Partnership Office or National Forest Foundation.

- Decide on/articulate a joint vision and goals with partners.
- Conduct due diligence on potential funding/financing tool(s) and select best options.
- Assess potential for philanthropic/public funding to cover project development costs.
- Create plan for project administration, staffing, and governance.
- Develop implementation plan that verifies collaborative capacity for up-front activities.
- Develop plan for monitoring outcomes/success.
- If applicable, project developer negotiates contracts with payors, investors, and implementers.

PHASE 5: IMPLEMENTING THE PROJECT

- Implement project guided by administration and implementation plans.
- Monitor project outcomes and document success/lessons learned.
- Adapt project management and implementation based on results of monitoring.
- Convene regularly with partners to discuss challenges/opportunities and next steps.
- Share successes/lessons learned with other units, ROs, WO, and the public.
- Leverage communications and marketing to mobilize additional beneficiaries scale up.
The **Forest Resilience Bond** (FRB), an investment vehicle developed by Forest Service partner Blue Forest Conservation, deploys private capital to fund forest restoration activities that mitigate wildfire risk and protect water resources. The FRB raises the upfront private capital necessary to fund forest health treatments, and uses a collaborative framework that brings together stakeholders that benefit from restoration to share the cost of reimbursing investors over time.

### North Yuba River Watershed Case Study Overview

Forest Service partner **Blue Forest Conservation** (BFC), in collaboration with the **World Resources Institute**, launched the inaugural FRB pilot in **Tahoe National Forest’s** North Yuba River watershed in November 2018. The FRB provides **$4 million** in upfront private capital from four investors to fund ecological restoration treatments that reduce wildfire risk across **15,000 acres** of National Forest System land. Three beneficiaries – the **US Forest Service**, **Yuba Water Agency**, and the **State of California** – provide in-kind support and funding at contracted rates to reimburse investors as restoration work is completed. The following restoration activities will be carried out by the **National Forest Foundation**, the project’s primary implementation partner, between 2018 and 2022.

<table>
<thead>
<tr>
<th>Yuba Restoration Treatments</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspen Work</td>
<td>404</td>
</tr>
<tr>
<td>Invasive Plant Treatments</td>
<td>89</td>
</tr>
<tr>
<td>Meadow Restoration</td>
<td>345</td>
</tr>
<tr>
<td>Powerline Hazard Tree/Veg Removal</td>
<td>323</td>
</tr>
<tr>
<td>Prescribed Burn</td>
<td>4,104</td>
</tr>
<tr>
<td>Thinning</td>
<td>1,848</td>
</tr>
<tr>
<td><strong>TOTAL TREATMENT</strong></td>
<td><strong>7,114</strong></td>
</tr>
</tbody>
</table>
Project Impacts

- Wildfire risk reduction
- Increased water quantity
- Protected water quality
- Avoided sedimentation
- Protected habitat
- Rural job creation

Project Stakeholders

**Beneficiaries/Payors.** Three beneficiaries motivated by a variety of outcomes provide in-kind support and funding at contracted rates to reimburse investors as restoration work is completed.

- **US Forest Service** – benefit from reduced wildfire severity, protected wildlife habitat, recreation areas, and ecosystems
- **Yuba Water Agency** – benefit from increased water quantity and hydro generation, improved water quality, protected infrastructure, ratepayer savings
- **CA State Government** – benefit from job creation (restoration, biomass, tourism), clean air and water, protected lives and property

**Investors.** Four investors each provided $1 million in funding for the Yuba project. The two mission-focused foundations invested to boost public and forest health. Calvert, an impact investing firm, focused on the joint promise of impact and a competitive return. AAA Insurance saw investment as a way to diversify its portfolio while supporting communities it serves.

**Program Related Invest.** lenders – 1% return

- The Rockefeller Foundation
- Gordon and Betty Moore Foundation

**Market rate** investors – 4% return

- Calvert Impact Capital
- AAA Insurance

Lessons Learned

- Be open to new ideas and outside-the-box thinking about how to put ideas into practice
- Find champions early on to support this work at many levels (WO, RO, NFS units)
- Success hinges on relationships – start slow, build trust, communicate frequently
- Draw on the strength of local collaboratives and partnerships
- Provide many opportunities for stakeholders to understand/gain familiarity with FRB model
- Lay out compelling, targeted business cases for all potential beneficiaries
- Find a right-sized project (i.e. big enough to be investable, small enough to be manageable)

Learn more about the FRB and BFC’s work by visiting [www.blueforestconservation.com](http://www.blueforestconservation.com).