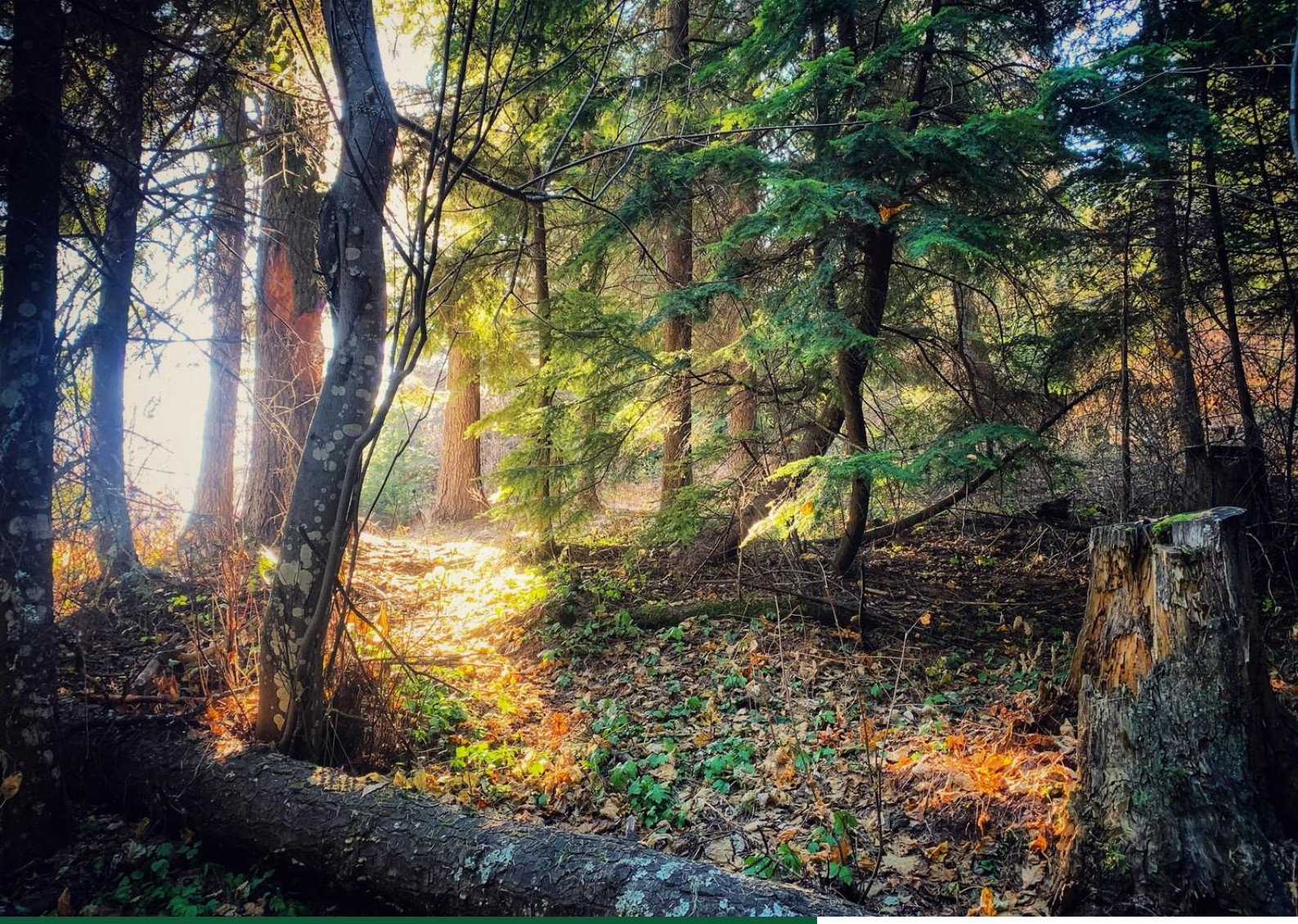

U.S. Department of Agriculture Forest Service Conservation Finance Toolkit

A compilation of definitions, guidelines, and case studies.

2022

National Forest Foundation

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Introduction to Conservation Finance

What is Conservation Finance?

Conservation finance is the practice of raising, managing, and deploying capital for conservation outcomes. This capital falls into two buckets.

Investments **with no** direct financial return/profit

Investments **with** a financial return/profit alongside social and ecological outcomes

While work in the field of conservation finance includes both of the buckets above, current innovation 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 Case for Conservation Finance

An estimated **$300 - $400 billion** is needed each year to restore and conserve ecosystems worldwide. And yet, conservation projects only receive an estimated **$52 billion** globally, primarily from public and philanthropic sources.[1] Conservation finance addresses the question of how to close this **$250 - $350 billion** annual gap by increasing and unlocking financing for ecosystem restoration and management, with a focus on private capital.

The State of the Conservation Finance Field

The field of conservation finance is growing and evolving quickly; innovators are developing, piloting, and replicating new financing models, and investors are committing increasing amounts of capital to the sector. Between 2009 and 2015 investors committed at least **$8.2 billion** to conservation worldwide, with average annual amounts committed doubling in the two most recent years. However, **$3.1 billion** of this amount remained un-deployed at the end of 2015, indicating that investors are struggling to find investable opportunities.[2] Through work with partners that are developing financing models that engage private capital the Forest Service can package our work to support healthy forests and forest-dependent communities as opportunities for investment, thereby increasing and unlocking funding for our priorities.

[1] McKinsey & Company. Nov 2016. *Taking Conservation Finance to Scale*
[2] Hamrick, K. Jan 2017. *State of Private Investment in Conservation 2016*

Traditional Funding for Conservation

Conservation has historically been supported by public and philanthropic funds. These investments do not generate direct financial returns/profits.

Public Funding

- Federal funds (e.g., LWCF, CFLRP, Joint Chiefs', WIFIA)
- State and municipal funds (e.g., SRFs, state/local grant programs)
- Ballot measures
- Water utility payments
- Taxes/tax incentives

Private/ Philanthropic Funding

- Individual giving
- Foundation grant-making
- Corporate social responsibility

Frontier Financing for Conservation

The practice of developing, piloting, and replicating models that unlock new financing for conservation is evolving rapidly. These models, which augment traditional funding sources, fall into two broad categories – consumer-based solutions and return-driven investments.

Consumer-based

- Voluntary surcharges
- Certification/labeling

Return-driven Investments

- Impact investing
- Impact bonds/Pay for Success financing
- Environmental markets (e.g., carbon trading, mitigation banking)
- Loans for conservation
- Payments for ecosystem services

Conservation Finance Partners

Partnerships with the following groups are a core component of conservation finance at the FS.

Investors. Provide capital for projects (individuals, foundations, pension funds, endowments, etc.).

Fund Managers. Manage investment portfolios for individual and institutional clients.

Foundations. Provide philanthropic capital to support development and piloting of new models.

Conservation NGOs. Undertake science, planning, stakeholder engagement, and implementation.

Researchers. Gather and analyze data linking land management actions to environmental outcomes.

Public sector. Federal, state, and municipal entities act as funders, implementers, and policy makers.

Conservation Finance at the Forest Service

Conservation finance is the practice of raising, managing, and deploying capital for conservation outcomes. At the Forest Service, conservation finance efforts focus on positioning the agency to leverage sources of capital other than appropriations, including private investment, non-USFS public funding and financing, corporate sustainability dollars, and philanthropy. Through creative public-private partnership models the agency is working with partners to bring external capital to bear on land management needs across the National Forest System. Current innovation is especially focused on finance models that leverage private investment by generating financial returns, and on blended finance models that engage a range of capital sources to achieve environmental and social outcomes.

How Does Conservation Finance Help the Forest Service?

Securing funds to protect and steward National Forest System (NFS) lands has always been an important part of the Forest Service's (FS) work. Long before the term 'conservation finance' was coined, FS staff across the agency were pioneering creative ways to enlist private-sector investment through the facilitation of environmental markets and development of public-private partnerships. Continuation of this work, and exploration of new financing models, can support agency priorities in the following ways.

- ***Accelerate pace and scale of priority work.*** Conservation finance helps the agency to achieve goals around forest restoration and other targets by increasing and unlocking new funding. By raising capital to cover project costs upfront it also accelerates the pace of completion.
- ***Leverage resources at multiple levels.*** Conservation finance models leverage appropriated dollars to engage public, philanthropic, and private-sector capital, expanding funding to achieve the agency's mission and sharing the cost of work to steward NFS lands between stakeholders.
- ***Promote shared stewardship and cost sharing.*** Conservation finance models engage many stakeholders, including investors, beneficiaries, researchers, and implementation partners. In addition, conservation finance models distribute land management costs across a range of stakeholders and seed collaboration that transcends specific projects.
- ***Advance outcomes-based decision making.*** Conservation finance models rely on measurement of ecological and economic data to 1) make the business case for stakeholder involvement and 2) measure linkages between financial investment and environmental outcomes. This engenders a culture of data-driven decision-making and provides data to inform outcomes-based investment strategies.

Introduction to the USDA Forest Service Conservation Finance Program

The US Forest Service (USFS) Conservation Finance (CF) Program leads the way in positioning the agency to leverage capital other than USFS appropriations for priority projects. Housed in the National Partnership Office, we bring innovative funding and financing approaches to bear on the agency's biggest challenges, including wildfire risk, watershed health, and recreation infrastructure. Our vision is to spark a new way of doing business at USFS, one in which we work with partners to routinely leverage external capital at a scale that matches agency challenges and opportunities. To advance conservation finance we work to:

I. Develop a pipeline of projects that demonstrate proof of concept for leveraging external capital.

We support units/programs and partners developing innovative finance models and projects with:

- **Technical assistance** and **best practices** for scoping, developing, and implementing CF projects
- Support **articulation** of economic, social, and ecological benefits derived from USFS projects
- Strategic **match-making** between USFS units/programs and CF partners

II. Build capacity and expertise of USFS personnel to develop projects that leverage external capital.

We raise awareness and build expertise around CF across all levels of USFS through:

- **Trainings** that expose personnel to CF content and provide workshopping opportunities for project ideas
- **Static resources** that overview CF models, case studies, authorities, and best practices
- **Communities of practice** that build knowledge and relationships across CF practitioners

III. Create an operating space that positions personnel and partners to leverage external capital at a scale commensurate with USFS challenges.

We identify agency-wide barriers and pursue opportunities to address those barriers through:

- Changes and clarifications to **agency-level policy and guidance** (e.g., USFS Handbook and Manual)
- Assist Congress with **legislative requests** related to CF

Innovative Finance for National Forests (IFNF) Grant Program

The IFNF program provides financial support and technical assistance to USFS partners developing and implementing finance models that leverage capital other than USFS appropriations to support the resilience of the National Forest System. Since 2020 IFNF has provided **$4M** in grant funding to **16 projects**, piloting approaches to financing wildfire resilience and recovery, sustainable recreation, and watershed health. The IFNF Program is run in partnership with the US Endowment for Forestry & Communities.

Want to Learn More? *USFS personnel and partners interested in being added to the USFS CF listserv or setting up a conversation to learn more can email Carmen Young, Conservation Finance Partnership Coordinator (carmen.young@usda.gov).*

Authorities for Conservation Finance

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. 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.

At the FS, conservation finance models increase and unlock new funds by engaging a range of partners in cross-boundary stewardship efforts that advance the agency's mission to steward our nation's forests for present and future generations. Growing the financial resources available for FS priorities through models that engage private capital requires us to use the full flexibility of the authorities documented below. These authorities enable: 1) work with for-profit entities and 2) the exchange of resources for common work priorities.

Congressional and Departmental Engagement

Congress and the Secretary of USDA are increasingly pushing forward policy, guidance, and programs that advance thinking and implementation focused on public-private partnership, innovative finance, market-based approaches, and engagement of private capital. For instance:

- In 2018 Congress passed the **Social Impact Partnership to Pay for Results Act**, which provides funding for social service projects that meet predetermined outcomes;
- The **2019 Senate Interior Appropriations Bill** includes report language on "innovative finance for restoration projects;"
- The **2018 Farm Bill** authorizes $10M a year for a Water Source Protection Program that encourages the FS to work in partnership with end water users such as utilities, corporations, and municipalities on collaborative source water protection;
- USDA established an **Office of Environmental Markets** in 2008 to help working agriculture and forestry landowners participate in environmental markets;
- **USDA Rural Development** provides grants and directs loans, loan guarantees, technical assistance and training for business development, energy efficiency, community facilities and clean water in rural areas; and
- NRCS administers the **Conservation Innovation Grants program**, which pursues 'market-based' approaches that help food and forestry producers enhance sustainable operations.

Agreement Authorities

Agreements are instruments the FS uses when there is a mutual interest and mutual benefit to for the FS and a cooperator through a jointly conducted project. The following authorities allow for an exchange of resources between the FS and cooperators.

Cooperative Funds Act, 1914 *(16 U.S.C. 498)*. Allows for *collections agreements* through which non-federal funds are accepted and pooled in a trust fund and used to fund work on/near NFS lands. The Act does not specify any groups that cannot participate in collections agreements.

Granger Thye Act, 1950 *(16 U.S.C. 572)*. Also allows for *collections agreements* through which non-federal funds are pooled in a trust fund and used to fund work on/near NFS lands, and specifies inclusion of private entities.

Cooperative Funds and Deposits Act, 1975 *(P.L. 94-148)*. Allows for *participating agreements* with various entities, including private, to achieve pollution abatement, job training and development, environmental education, and forest protection outcomes on NFS lands.

Watershed Restoration and Enhancement Act, 1997, Wyden Amendment *(P.L. 105-277)*. Amendment permanently allows for *watershed restoration and enhancement agreements* (which fall under the umbrella of *participating agreements*) to protect, restore, and enhance habitat, and to reduce risk of natural disaster on state, private, and tribal lands in watersheds of NFS ownership. Act specifies that private entities are valid partners.

Interior and Related Appropriations Act, 1992 *(P.L. 102-154)*. Allows *challenge cost-share agreements* that enable cooperation in which both the FS and a partner contribute funds or in-kind work. These agreements are typically used for collaborative work between partners with joint-priorities, and a cost-share or in-kind contribution is required.

Contract Authorities

Contract authorities allow the FS to work with awardees, non-profit or for-profit, to accomplish objectives.

Agricultural Act (Farm Bill), 2014 *(P.L. 113-79)*. Permanently allows *stewardship contracts* and *stewardship agreements* that enable federal agencies to enter into 10-year contracts/agreements with public or private entities/persons that exchange goods for services (e.g., timber for services) to meet goals for NFS lands and local communities. This Act also notes the value of public-private partnership and collaborative stewardship.

Land Management and Special Uses Authorities

Land and special uses authorities inform what activities can be conducted on NFS lands, and how land can be acquired and/or dispersed.

Weeks Act, 1911 *(36 U.S.C. 961)*. Allows for the acquisition of land by a variety of means – donation, purchase, and exchange – provided that land be essential for the preservation of a watershed or water supply. Also allows for cooperation with states around watershed protection from wildfire.

Multiple Use Sustainable Yield Act, 1960 *(16 U.S.C. 528)*. Allows FS to manage NFS lands and resources for social, ecological, and economic benefits to the public. Enables NFS lands to be "working landscapes."

Federal Land Policy and Management Act, 1976 *(16 U.S.C. 552)*. Allows for the acquisition, sale, withdrawal, conveyance, and disposal of land when in line with the unit's management plan and establishes the Working Capital Fund to fund supplies/equipment that support programs.

Forest Roads and Trails Act, 1964 *(16 U.S.C. 532-538)*. Allows FS to grant and acquire rights of way over, upon, or through NFS lands for transport of water/ liquid/ gas, transmission lines, roads, trails, etc.

Gift Acceptance Act, Office of Procurement Gift Acceptance Policy, 2003 *(5 C.F.R. 2635.202)*. Allows FS to accept donations and gifts of real property, money, or other resources.

National Environmental Policy Act, 1969 *(42 U.S.C. 4321)*. FS must follow the mitigation hierarchy for impacts from any activities on NFS lands. FS must provide opportunity for public comment on decisions.

Fish & Wildlife Service Endangered Species Act, 1973, Army Corps of Engineers Regulation *(33 CFR 332.8)*. FS can host, conduct, and require compensation for impacts from land disturbing activities on regulated wetland, stream, and habitat resources on NFS lands, or through the purchase/donation of conservation lands.

Recreation Authorities

Permits granted through the following authorities help to facilitate public access and maintain recreation sites on NFS lands. Private entities are eligible permittees.

Granger Thye Act, 1950 *(16 U.S.C. 572)*. Allows special use permits for private entities to operate government-owned recreation infrastructure. Permittees must provide a percentage of their growth revenue back to the FS through fee offsets. Funds are used to conduct maintenance on or near the recreation sites managed by permittees.

National Forest Trail Stewardship Act. Authorizes a fee offset program for outfitter and guide permit-holders. If permittees conduct a certain amount of maintenance on NFS trails they can offset a portion or all of their annual fees.

Interagency Authorities

Agricultural Act (Farm Bill), 2014, Good Neighbor Authority *(16 U.S.C. 2113a)*. Permanently authorized Good Neighbor Authority in all 50 states and Puerto Rico. Allows the FS to enter into contracts or agreements with state forestry agencies to perform authorized watershed restoration and forest management services on NFS lands.

Consolidated Appropriations Act, 2012, Service First Authority *(P.L. 113-76, Sec. 430)*. Allows the Secretaries of Interior and Agriculture to combine, coordinate, and collaborate on projects and programs for common objectives.

Economy Act, 1932 *(31 U.S.C. 1535)*. Authorizes the FS to use inter-agency agreements to share materials, supplies, equipment, work, and services with other agencies.

Other Authorities

Cooperative Forestry Assistance Act, 1978 *(P.L. 95-313)*. States the necessity of FS support on non-federal forest lands, and authorizes federal support for forest health, utilization of forest products/timber, and urban forestry. Financial support through grants (opposed to contracts or agreements that contractually lay out an exchange of resources and/or services) can be used to fulfill the mission of this Act. Private sector groups are a major feature of this Act.

Conservation Finance Project Development Phases

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 CONS. 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 a 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 returns
- 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 external project developer partners or receive support from the USFS National Partnership Office.

- 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.

Readiness Criteria for Conservation Finance

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 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	
	Landscape/ Project	Defined ecological/social challenge and need for action (i.e., declines in water quality, natural disturbances, increasing visitation, etc.)
		NEPA decisions signed, projects planned and "shovel ready" (i.e., NEPA record of decision published and individual project plan complete)
		>$3M in funding required to address challenge (if <$3M required, consider philanthropic sources instead)
	Business Case	Market demand (i.e., regulatory drivers, municipal targets, costs incurred, sustainability commitments)
		Potential for ecological/social AND financial outcomes (i.e., timber revenue, market credits, avoided costs, tourism spending, etc.)
		Beneficiaries willing and able to pay (i.e., entities benefit from outcomes and can enter contracts)
	Capacity	FS positioned to be a value added partner (i.e., staffing, plan revision timing, local leadership, regional support, etc.)
		Local capacity to implement on-the-ground project (i.e., dedicated project managers, contractors available)
		Collaborative capacity and socio-political support (i.e., partners, elected officials, community buy-in)
	Data	Ability to predict and monitor project outcomes (i.e., baseline analysis complete, monitoring process/expertise available)

Ballot Measures

What is a Ballot Measure?

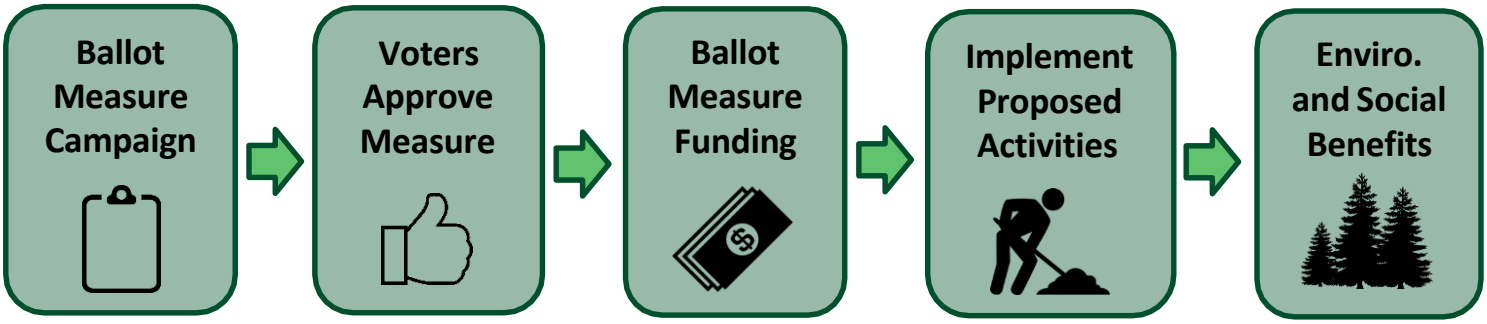
Ballot measures – also called ballot referenda, initiatives, propositions, or questions – are bills that are directly approved or rejected by voters when they go to the polls. This instrument of direct democracy is employed at both local and state levels and can raise large-scale, reliable public funding for land protection and management. Voters are asked to vote 'yes/no' on bills that direct funds from a specific financing mechanism – such as lottery revenue income, sales tax funding, water charge, a general obligation bond, corporate business tax, or real estate transfer tax and fees – to conservation work on public and/or private lands.

How do Ballot Measures Get Passed?

Getting a ballot measure drafted and approved takes time, funding, and the expertise and support of many partners. As a federal agency, the FS cannot run a campaign to raise support for ballot referenda. However, the FS can be a value-added partner in identifying priority landscapes in need of protection/restoration, sharing best practices related to environmental interventions, bringing together public and private partners, and undertaking land management activities. Nonprofit partners (e.g., Trust for Public Land and The Nature Conservancy) typically spearhead the work of running ballot measure campaigns by raising and deploying philanthropic resources to undertake the following steps.

1. **Research laws** governing ballot referenda to understand state or local-specific processes.
2. With the help of local groups, identify **environmental challenges** in need of funding.
3. Identify a public **financing source** (i.e., municipal/state bond, tax, fees) that could be used to address identified needs.
4. Build a diverse **coalition of partners** to champion the measure's approval, including NGOs, government agencies, local businesses, and elected officials.
5. Conduct **public-opinion research** to test support and messaging strategies.
6. **Draft bills** based on environmental needs, interests of coalition, political feasibility, and legal counsel on crafting a law to withstand legal challenges.
7. Perfect the **ballot measure language** that voters read on election day to ensure it is clear, simple, and conveys the measure's benefits.
8. Launch a **campaign** based on poll-tested messages to generate broad public support. Campaigns typically include TV, direct mail, and online outreach.
9. Conduct **ongoing advocacy** to defend new sources of funding and ensure that funds are spent according to terms of legislation passed by voters.

How Do Ballot Measures Work?



How Do Ballot Measures Help the Forest Service?

- Bring large-scale reliable and consistent municipal/state funding to projects on NFS land
- Committed ballot measure funding helps leverage additional investment from the public, philanthropic, and private sectors for forest health efforts
- Build diverse coalitions of support for forest and watershed health
- Foster relationships between entities with shared stakes in forest health
- Demonstrate broad public support for natural resource conservation and management
- Bring high public visibility to the importance of NFS lands

What are the Enabling Conditions for Ballot Measure Success?

Criteria for Success	
Landscape	Identified need (e.g., forest restoration) and projects that can address need
	Anchor landowner (if the FS NEPA decision signed and notice published)
	Plans for implementation complete and project is "shovel ready"
Community	Support of elected leadership and diverse on-the-ground coalition (NGOs, businesses, government)
	Population size sufficient to support a ballot and generate funding
Partners	Partner(s) with ballot measure campaign experience
	Clear business case for projects to be funded for all stakeholders
Timing	Window of opportunity to pass measure (natural disaster, scientific research highlights inaction risk, existing bond retiring, interest of elected officials)
	Polling indicates voter support for fund collection and potential projects
	The business case for the projects to be funded is clear for all stakeholders
Capacity	Project implementer(s) with capacity and expertise to undertake restoration
	Issuer is credit worthy, has authority to bond or tax, and can manage funds

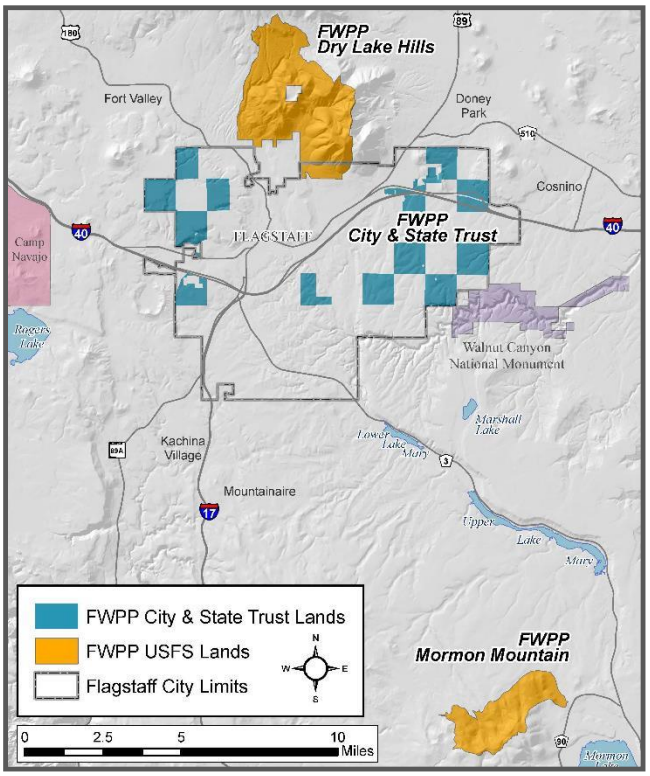
For a summary of conservation ballot measures since 1988 visit TPL's Land Vote database at www.landvote.org.

Ballot Measure Case Study: Flagstaff Watershed Protection Project

Ballot measures – also called ballot referenda, initiatives, propositions, or questions – are pieces of legislation that are directly approved or rejected by voters when they go to the polls. This instrument of direct democracy, which is employed at both local and state levels, can be used to raise large-scale, reliable public funding for land protection and management. Voters are asked to vote 'yes/no' on legislation that directs funds from a specific financing mechanism – such as lottery revenue income, sales tax funding, a general obligation bond, corporate business tax, or real estate transfer tax and fees – to conservation work on public and/or private lands.

Flagstaff Watershed Protection Project Case Study Overview

The 2010 Schultz Fire, which caused severe flooding and tens of millions of dollars of damage to infrastructure and private property in and around Flagstaff AZ, demonstrated the vulnerability of Flagstaff's water supply to wildfire and subsequent erosion. Two years later, in 2012, Flagstaff voters passed a **$10 million municipal bond** with **74% approval** to conduct forest health treatments on **10,500 acres** of the Rio de Flag and Lake Mary Watersheds with the goal of reducing wildfire risk and post-fire flooding. The bond, which funds ecological restoration treatments on the **Coconino National Forest** as well as state and city lands through a secondary property tax, is *the first example of a municipal bond being used to fund forest health efforts*. In addition to raising $10 million from the bond, the measure has leveraged an additional **$5.2 million** for restoration work – including thinning and prescribed fire – from the FS and other partners. The City of Flagstaff decided to use a ballot measure instead of other options to finance restoration with the goal of raising public awareness about forest health and environmental stewardship.



Project Impacts

- Wildfire risk reduction
- Reduced risk of post-fire flooding
- Protected water quality
- Protected recreation opportunities
- Protected wildlife habitat
- Increased public awareness of forest health

Project Stakeholders

Forest Service. The FS is responsible for the environmental planning process and all management decisions and implementation on the Coconino National Forest.

City of Flagstaff. The City holds the authority to make fiscal decisions regarding use of bond funds and is responsible for all management activities and implementation on city-owned land.

AZ Department of Forestry and Fire Management. The State is responsible for all management activities and implementation on state-owned lands.

Greater Flagstaff Forests Partnership. This local forest collaborative, which is made up of nonprofit, government, academic, and private partners, supports the project in public engagement, monitoring, project management, and financial leverage capacities.

Project Management

To effectively undertake work funded by the bond, project stakeholders increased internal capacity and set up collaborative bodies to facilitate information sharing and decision making.

- The FS and City each created 'project manager' positions to oversee project development and implementation and act as point of contacts (FS role at District level)
- Partners established the following inter-entity teams: 1) Executive (District Forester from State, Forest leadership from FS, and County/City officials), 2) Inter-Disciplinary Team (staff with expertise in analysis and evaluation), 3) Communication, and 4) Monitoring

Lessons Learned

- Capitalize on windows of opportunity to build support (e.g., 2010 Schultz Fire)
- Build on existing public awareness of forest health (prior planning efforts, etc.)
- Manage expectations regarding NEPA requirements and timelines
- Ensure regular and transparent communication within the FS and between partners
- Keep management structure simple
- Be prepared to show immediate on-the-ground success by prioritizing early wins
- Discuss the project as an investment in the future, not as a cost

Learn more about the Flagstaff Water Protection Program at www.flagstaffwaterprotection.org.

U.S. Carbon Markets

U.S. forests currently serve as a carbon 'sink', offsetting 10 to 20 percent of US emissions each year. As the largest forestland owner in the country, USFS plays a big role in carbon management. This study guide provides an overview of how carbon markets work in the US, USFS experience with these markets, and opportunities for future involvement.

Carbon Markets 101

There are two types of carbon markets that function in the US today – "Voluntary Markets" and "Compliance/Regulatory Markets." These markets are based on the purchase and sale of carbon credits, or offsets, that represent a polluter's right to emit one ton of carbon dioxide.

Compliance/Regulatory Market

National or sub-national policies require businesses to offset carbon emissions that exceed legal limits by purchasing credits.

Voluntary Market

This global market allows businesses, NGOs, and individuals to voluntarily offset their emissions by purchasing offsets.

Regulatory Market

The California market is the most active regulatory market for carbon credits in the US. State law requires entities to reduce greenhouse gas (GHG) emissions by either a) changing operational management to reduce carbon emissions, b) paying a fee to the state to purchase an emissions allowance, or c) purchasing an offset.

- In 2015 approximately 6.5 metric tons of forestry and land-use offsets were sold on the CA market. Offsets were sold at an average price of $9.70 per ton, totaling $63.2 million.
- **Federal lands are not currently eligible to host regulatory offset projects for CA market**
- Emission allowance revenues ($1-2 billion/ yr) are distributed to state agencies to spend on carbon positive projects through the California Climate Investments (CCI) Program. **USFS and partners are eligible for CCI grant funding for work on NFS lands.**

Voluntary Market

Companies and industries purchase voluntary carbon credits to offset emissions, gain competitive advantage, meet consumer demand for environmental stewardship, and prepare for regulation.

- By 2016 1.1 billion tons of carbon had been traded globally on the voluntary market.
- In 2016 63.4 million tons were sold globally for $191.3 million at an average $3/ ton.
-

The Case for Carbon: FS Restoration and Reforestation Needs

In 2018 USFS completed just 13% of its total reforestation and planting needs. The agency's annual restoration budget covered only 5% of estimated restoration need in 2016 and 2017, with CA alone facing a 30-45 year restoration backlog. Approximately 1.3 million acres need reforestation nationwide, more than 700,000 acres of which require planting. Meeting USFS needs around reforestation and restoration requires us to explore innovative approaches, including leveraging voluntary carbon markets. Below we explore opportunities and barriers to allowing project developers to generate saleable credits in the voluntary market on NFS lands.

Voluntary Carbon Market Opportunities

- **New methodologies** could increase the quantity of future project types where voluntary carbon funding is viable on NFS lands.
- Industry-wide self-regulation is **growing demand for voluntary credits** (e.g., airline and cruise line industry regulation and goals could drive reforestation/restoration).
- Voluntary carbon credits could **increase and diversify stakeholders willing to pay** for the outcomes of proactive management, helping USFS access and treat high priority acres.

Voluntary Carbon Market Barriers

- **Clarity on legality.** It is unclear whether project developers can sell rights to credits of carbon sequestered as a result of reforestation/restoration work conducted on NFS lands.
- **Mechanisms to structure projects.** USFS must meet market requirements for permanence after permit expiration in a way that works within agency authorities.
- **Long term liability.** Responsibility for long-term maintenance and monitoring of stored carbon must be clear and appropriately funded between USFS and project developers.

Criteria for Success (Example Voluntary Carbon Reforestation Project)	
Regulatory	Meets registry requirements and agency's desired conditions
Investment	Credit sale revenue > upfront establishment/implementation cost
	Proximity to city or major corporation with carbon targets
Landscape	Forest growth rates higher than average
	Recently impacted by fire
	Project > 5,000 acres (does not need to be contiguous)
Project	Project is NEPA approved, "shovel ready," and unfunded

Compensatory Mitigation

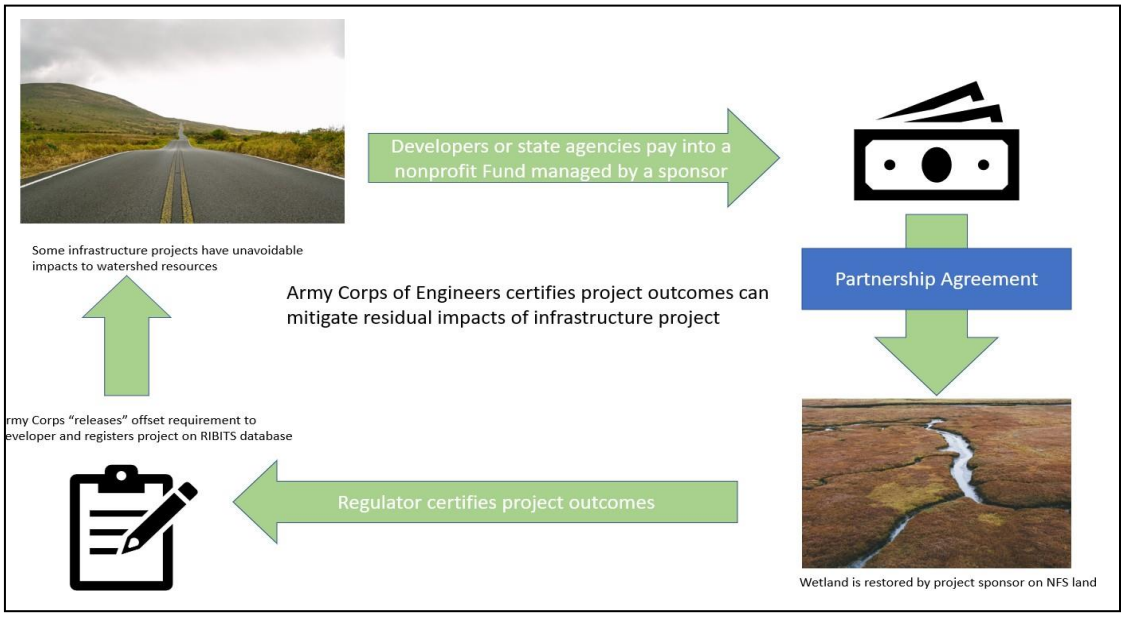
What is Compensatory Mitigation?

Local, state, and federal laws require that developers, or permittees, compensate for the residual impacts of development projects on regulated resources like wetlands, streams, and species, with the overarching goal of 'no net loss' of the regulated resource. Residual impacts are damages that remain after permittees take measures to reduce impact in order of the mitigation hierarchy – to first avoid, then minimize, then restore impacts onsite. Compensation activities can include restoring, enhancing, or preserving existing resources, as well as establishing new ecological resources. There are three ways in which permittees can meet compensation requirements.

1. **Permittee Responsible Mitigation (PRM).** Permittees conduct mitigation projects on their own, often using consultants. USFS has multiple PRM projects on NFS lands.
2. **In Lieu Fee Program (ILF).** Permittees pay fees into a non-profit fund that supports mitigation projects to offset permitted impacts within three years of the impact. USFS has several ILF projects on NFS lands.
3. **Mitigation Banking.** In advance of permitted impacts, a project developer implements mitigation projects across a site/suite of sites called a bank from which they generate saleable 'credits' for permittees to offset impacts.

How Can Compensatory Mitigation Work?

This diagram illustrates how In-Lieu Fee compensatory mitigation can work on NFS lands.



How Does Compensatory Mitigation Help the Forest Service?

Compensatory mitigation is a tool that can help USFS to:

- Restore or enhance resources located on suitable lands comprising NFS lands
- Restore, enhance, or protect adjacent private / other government lands, promoting resilience
- Contribute suitable lands for addition to NFS ownership, where appropriate
- Reduce maintenance costs by removing legacy infrastructure
- Reduce project costs by distributing costs across stakeholders
- Contribute to climate mitigation (carbon specifically)

What is the Scale of Opportunity?

Analysis of Watershed Condition Framework (2020) indicates:

- 288 NFS Priority Watersheds in need of restoration to improve watershed condition
- An estimated $79M- $96M worth of financial in NEPA-ready Essential Projects or $675M in non-NEPA-ready Essential Projects already prescribed through Watershed Restoration Action Plans

Who are the Key Stakeholders?

Army Corps Permittees. Legally required to compensate for residual impacts on regulated resources.
Mitigation Project Developer. Develops the PRM, ILF, or mitigation bank to achieve no net loss for permittees as approved by regulators (could be public, non-profit, or for-profit entity).
Regulator. Approves the impact/mitigation proposals to verify no net loss of regulated resource. Primary federal regulatory agency approving mitigation programs is U.S. Army Corps of Engineers.
Landowner. Landowners host mitigation projects (could be private or public landowners).
Implementer. Manages on-the-ground execution, and long-term management and monitoring.

What are Enabling Conditions for Compensatory Mitigation Success?

Criteria for Success	
Landscape	Large scale or significant impact to regulated resources creates demand
	Identified need for restoration within the service area of demand
	Unfunded NEPA-signed projects and/or parcels at risk of development have restorable resources
	Plans for implementation complete and project is “shovel ready”
Leadership	Strong USFS leadership, with interest in innovation at multiple levels
	Strong partner leadership and commitment
Capacity	Mitigation project developer exists to apply regulator for instrument
	Contractors available to implement on-the-ground work
	USFS, partners, contractors able to measure/monitor outcomes
Project Structure	USFS management meets regulator durability requirements
	Agreements and/or permits cover terms of reversal and long-term liability

Compensatory Mitigation Case Study: Daniel Boone NF

Local, state, and federal laws require that developers, or permittees, compensate for the residual impacts of development projects on regulated resources like wetlands, streams, and species, with the overarching goal of 'no net loss' of the regulated resource. Residual impacts are damages that remain after permittees take measures to reduce impact in order of the mitigation hierarchy – to first avoid, then minimize, then restore impacts onsite. Compensation activities can include restoring, enhancing, or preserving existing resources, as well as establishing new ecological resources. There are three ways in which permittees can meet compensation requirements: permittee responsible mitigation (PRM), in lieu fee (ILF), and mitigation banking.

Daniel Boone National Forest Case Study Overview

On the Daniel Boone National Forest, three projects seek to reconnect aquatic ecosystems and improve watershed ability to pass sediment through the removal of dams and the enhancement of natural stream complexity. The Kentucky Division of Fish & Wildlife (DFWR) is the ILF project sponsor for projects on the Forest.

The Basics

- **Location:** Licking River and Upper Kentucky River Basin service areas spanning three counties in eastern Kentucky
- **Partners Involved:**
  - (USDA Forest Service) Daniel Boone National Forest (DBNF)
  - Kentucky Division of Fish & Wildlife Resources (DRWR)
  - U.S. Army Corps of Engineers – Louisville District
  - Riverine Solutions
  - Collaborative stream restoration interagency working group
- **Mitigation Authority Used:** 33 CFR 332 authorizes compensatory mitigation on public lands; Section 404 of Clean Water Act requiring compensation of unavoidable impacts to aquatic resources as designated under Waters of the United States and/or state priorities
- **Mechanism Employed:** Project-level Challenge-Cost Share Agreements signed between USFS and Kentucky DFWR; DBNF granted DFWR access for restoration site design, construction & monitoring via Right of Entry; sites are also ensured protection through DBNF Forest Plan; development of a Forest-wide Conservation Land Use Agreement with Army Corps of Engineers is underway
- **Resource Impacted & Why:** These watersheds could be heavily impacted by intensive land use practices typical of the central Appalachian region, including oil & gas extraction and road-building. These activities could create unavoidable impacts to streams in the form of sediment pulses and other aquatic impediments.

Project Impacts

- 5.3mi < feet of stream channel restored through three phases of Stonecoal / Slab Camp project
- 4,700 of stream channel reconstructed on Elisha Creek to reconnect floodplain and raise groundwater table
- East Fork-Indian Creek project within WCF Priority Watershed has restored 4,500 ft of stream since 2015

Site Protection

Long-term site protection and administration is a key feature of maintaining restoration projects on DBNF land. It is ensured through:

Forest Management Plan – Project sites are located within watersheds owned, protected, and managed by USFS where Management Area Desired Conditions are compatible with stream restoration activities

Project-Level Grants & Agreements – Partnership Agreements (Challenge Cost-Share) are used to document the mutual interest-mutual benefits of collaboration between the DBNF and DFWR as the project sponsor. It allows for federal and state dollars to be commingled for activities within five years

In Progress – Forest-Wide Conservation Land Use Agreement (CLUA) – An overarching, binding document between DBNF and Army Corps is being explored to recognize USFS as project host, establish the Forest Management Plan as sovereign, and establish roles & responsibilities in the event of an incompatible use

Case Study Roles

Project Sponsor. DFWR developed the project and ILF program to achieve no net loss for permittees as approved by regulators.
Regulator. The US Army Corps of Engineers approves the impact and the mitigation proposals to verify no net loss of regulated resources under Section 404 of Clean Water Act.
Landowner. DBNF hosts the compensatory mitigation activities necessary to offset impacts occurring within watershed service areas on or off NFS land.

Lessons Learned

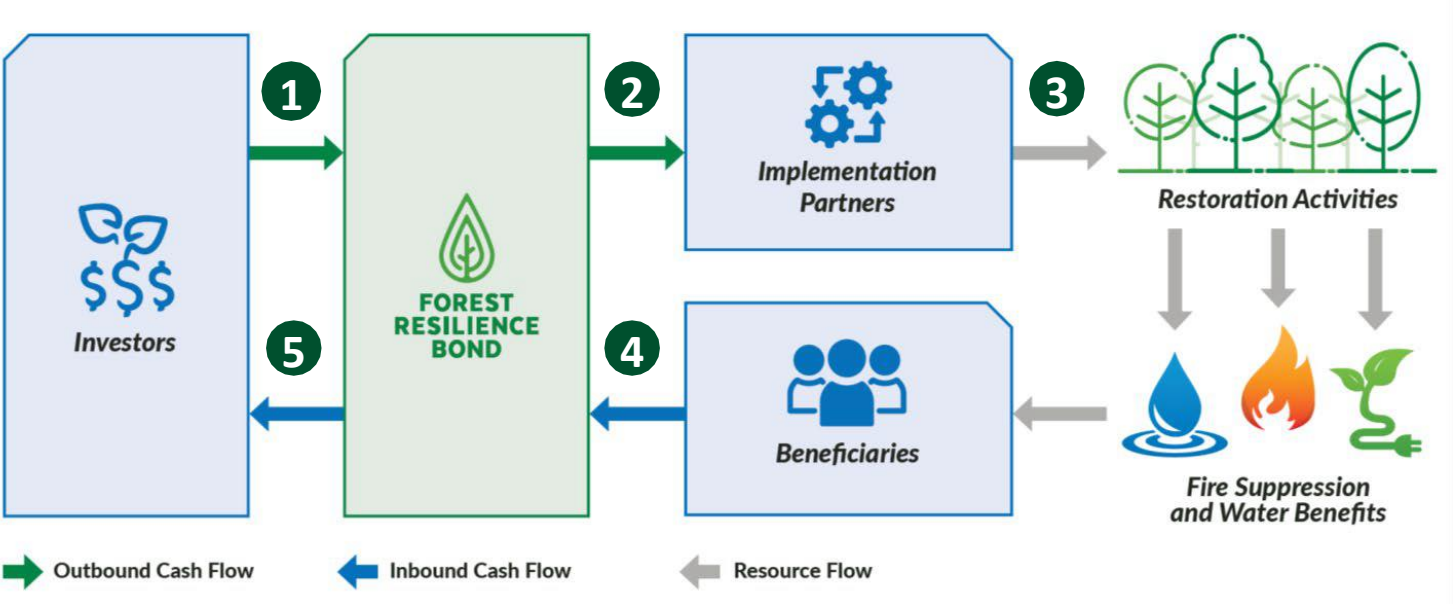
- **A new way of doing business:** Umbrella agreements allows partners to think creatively about how to work across boundaries to meet restoration objectives amenable to both land manager (USFS), regulator (U.S. Army Corps), and project sponsor
- **What's the value of a forest?** To promote advanced mitigation project planning, outcome- based protocols are needed to quantify the restoration value of lands and resources
- **Roles & responsibilities:** Because compensatory mitigation is administered by a third party, the USFS becomes a landowner hosting area for work to be accomplished. Proper sideboards and a management framework is essential for ensuring that projects can meet their intended outcomes over time without unnecessarily encumbering public land management
- **Proactive prioritization of projects:** Adjacency of restoration sites within and next to a Forest can create a synergy for expanded mitigation investments

Forest Resilience Bond

What is the Forest Resilience Bond?

The Forest Resilience Bond (FRB) is an investment vehicle developed by agency partner **Blue Forest** with the **World Resources Institute.** The FRB deploys private capital to fund forest restoration activities that mitigate wildfire risk to forest ecosystems and surrounding communities 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 and the cost of reimbursing investors over time. By engaging private capital to cover the upfront costs of projects, the FRB increases the pace and scale at which the FS can address backlogs of work to improve forest health.

How Does the FRB Work?



1. **Investors** provide capital to **FRB** to cover full cost of restoration
2. **FRB** pays **implementation partner** to cover restoration costs
3. **Implementation partner** pays **restoration crews** as work is completed
4. **Beneficiaries** make annual contracted payments to **FRB** as environmental and social benefits are realized
5. **FRB** repays **investors** principal plus a return

How Does the FRB Help the Forest Service (FS)?

- Accelerates pace and scale at which forest restoration can be undertaken
- Reduces cost of restoration projects for FS by sharing costs between multiple beneficiaries
- Establishes platform through which to collect data/quantify impacts of ecosystem services
- Fosters relationships between public and private entities with shared stakes in forest health
- Creates opportunities to establish and grow markets for biomass/small diameter wood
- Guarantees cash flow for implementers (often dependent on reimbursable grants)

What are the Enabling Conditions for FRB Success?

Criteria for Success	
Landscape	Identified need for forest restoration (high fuel load, wildfire risk, etc.)
	National Environmental Policy Act (NEPA) decision signed and notice published
	Plans for implementation complete and project is "shovel ready"
Leadership	Strong FS leadership, with interest in innovation at multiple levels
	Strong partner leadership and commitment
Collaboration	Compelling business case for involvement of multiple beneficiaries
	Locally-based natural resource collaborative(s) with history of success
	Strong cross-boundary relationships
Capacity	NFS unit with capacity to prioritize partnership-building activities
	Project implementer(s) with capacity and expertise to undertake restoration
Data	Baseline ecological and economic data in place
	Ability to quantify future ecological and economic outcomes

FRB Partner Blue Forest Conservation

Blue Forest (BF) is a mission-driven non-profit dedicated to leveraging financial innovation to develop sustainable solutions to pressing environmental challenges. BF partners with the FS to develop and implement FRB projects. As the project developer, BF recruits investors, identifies and builds relationships with beneficiaries, works with research partners to quantify ecological and economic outcomes, and develops contracting mechanisms and financial structuring to enable private investment. In 2017, the Forest Service and Blue Forest signed a memorandum of understanding (MOU) to develop and implement the FRB, and in 2018, launched Yuba I, the first FRB pilot project to fund forest restoration across 15,000 acres of the Tahoe National Forest (NF) in California. Yuba II, the second FRB on the Tahoe NF, launched in 2022.

Learn more about the FRB and Blue Forest's work by visiting Blue Forest's website at www.blueforest.org.

Forest Resilience Bond Case Study: North Yuba River Watershed, Tahoe NF

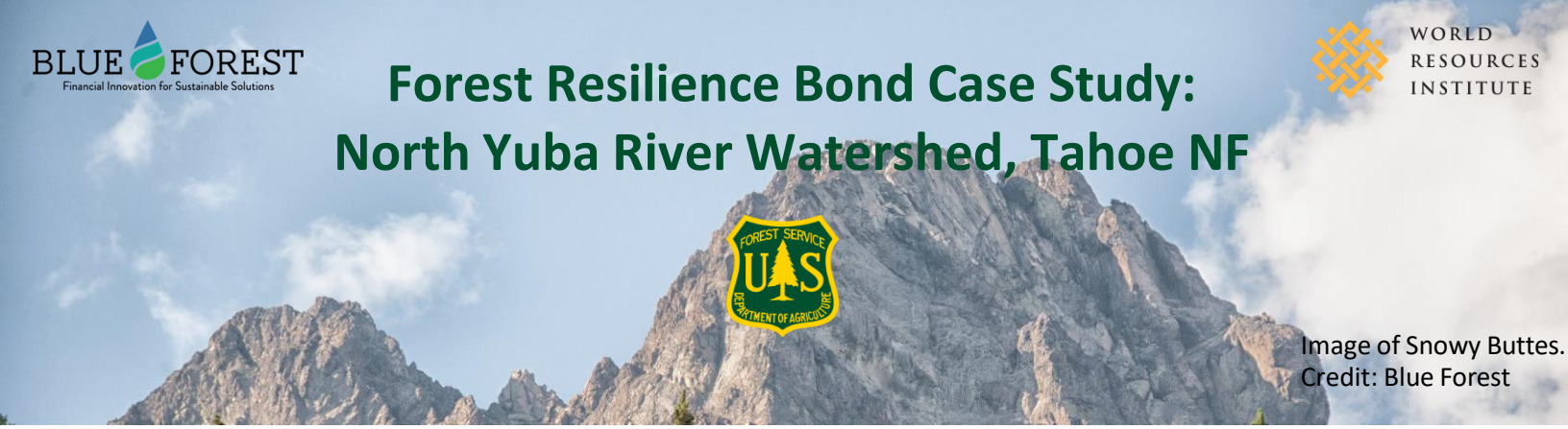


Image of Snowy Buttes. Credit: Blue Forest

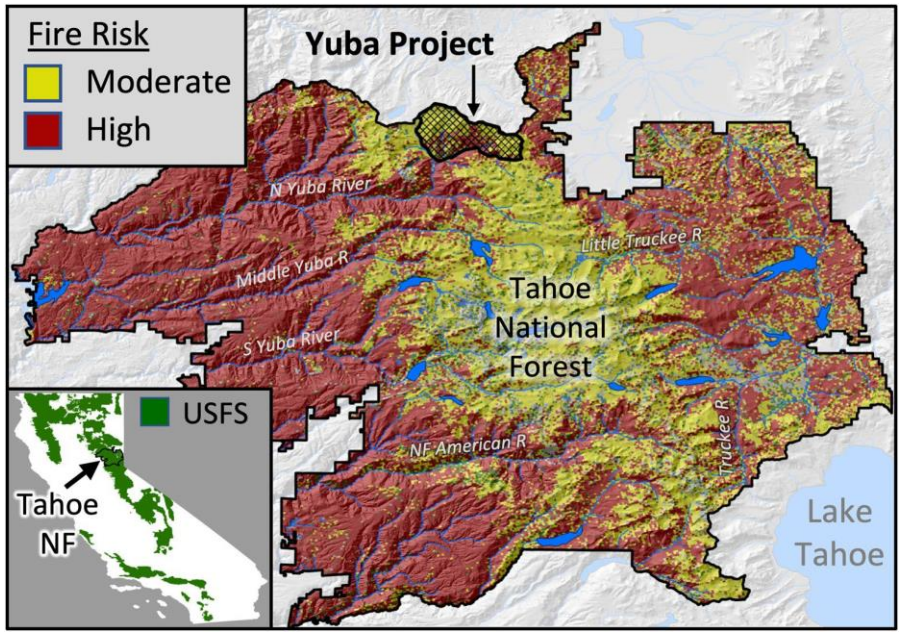
The **Forest Resilience Bond** (FRB), an investment vehicle developed by Forest Service partner Blue Forest, deploys private capital to fund restoration activities that mitigate wildfire risk and protect water resources. The FRB raises the upfront private capital necessary to fund forest treatments and 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,** in collaboration with **World Resources Institute**, launched the inaugural FRB pilot in **Tahoe National Forest's** North Yuba River watershed in November 2018. This first FRB, known as Yuba I, provided **$4 million** in upfront private capital from four investors to fund ecological restoration treatments to 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** – provided in-kind support and funding at contracted rates to reimburse investors as restoration work is completed. Restoration activities were carried out by the **National Forest Foundation**, the project's primary implementation partner, and its contractors from 2018, planned to complete in fall 2022. Work from the second FRB Yuba II is underway! Yuba II will bring $25M in upfront capital to continue restoration work on an additional 48,000 acres in this watershed. National Forest Foundation remains the head implementation partner for Yuba II.

Yuba I Restoration Treatments*	Acres Planned
Aspen Work	225
Invasive Plant Treatments	89
Meadow Restoration	395
Powerline Hazard Tree/ Veg Removal	323
Fuels Treatments	1,630
TOTAL TREATMENT	**2,662**

**Not included in table: as of June 2022, thousands of additional acres of lands are prepped to burn.*



Updated June 2022

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 and their own organization-based values, 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 hydropower 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

Danone – benefit from forest resilience, water quality, water quantity, and plant-based food systems essential to its business, community health, and planet. This beneficiary became involved during Yuba II.

Yuba I Investors. Four investors each provided upfront capital for the Yuba I project: Rockefeller Foundation, Gordon & Betty Moore Foundation (GBMF), Calvert Impact Capital, and CSAA Insurance. The foundations invested to boost public and forest health. Calvert, an impact investing firm, focused on the joint promise of impact and a competitive return. CSAA Insurance Group saw investment as a way to diversify its portfolio while supporting communities it serves.

Yuba II Investors. The four market rate investors are Hall Capital, ImpactAssets, RSF Social Finance, and CSAA Insurance Group (repeat investor from Yuba I). Lead investors contributing mission-aligned investments include GBMF (repeat investor from Yuba I), and the Inherent Foundation.

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
- Project size is critical (i.e., big enough to be investable, small enough to be manageable)

Learn more about the FRB by visiting Blue Forest's website.

State Revolving Funds

What is a State Revolving Fund?

State revolving funds (SRFs) are state-managed funds focused on investment in water management and protection projects. An SRF is initially funded by federal grants and state contributions, which emits bonds guaranteed by the initial capital. The funding is revolved through the payment of the principal and interest on outstanding loans.

The **Clean Water State Revolving Fund** (CWSRF) and **Drinking Water State Revolving Fund** (DWSRF) are U.S. Environmental Protection Agency (EPA)-state partnerships that provide communities with an independent source of low-cost financing for a wide range of water quality and drinking water infrastructure projects. Since their inception, EPA's SRFs have provided more than $189 billion in financial assistance to nearly 43,000 water quality infrastructure projects and 16,500 drinking water projects across the country.

CWSRF vs. DWSRF Approach to Financing Green Infrastructure

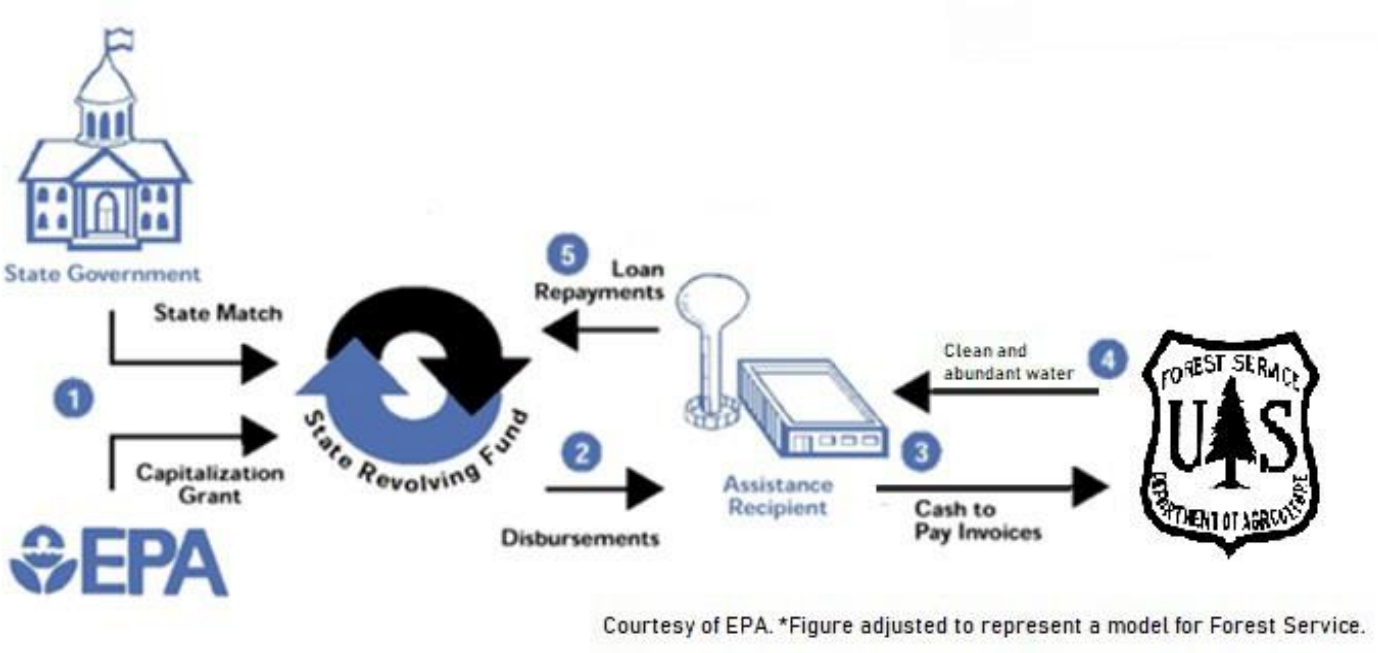
CWSRF provides large low interest loans for green infrastructure (no maximum amount, past loans have ranged from $2M to $18M). The American Recovery Act of 2009 (ARRA) requires all state CWSRF programs to use a portion of their federal capitalization grant for projects that address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities. For example, for FY21 no less than 10% of each state's capitalization grant must be used for such projects.

DWSRF provides small low interest loans and grants ($30-100 thousand) for green infrastructure projects. All DWSRF programs can keep approximately 31% of their state capitalization grant for 'set-asides,' i.e., money to assist with non-infrastructure activities such as fund's operations, training, and technical assistance. DWSRFs can fund green infrastructure projects, such as source water protection activities, only with set asides.

How Does a State Revolving Fund Work?

Clean Water State Revolving Fund (CWSRF) and **Drinking Water State Revolving Fund** (DWSRF) funding is annually appropriated by Congress to the EPA, then EPA awards capitalization grants to the 50 states and Puerto Rico (in FY20, $7.5 billion for CWSRF and $3.6 billion for DWSRF). States must provide a 20% funding match. Eligible entities, such as municipalities, special districts, county improvement districts, sanitary districts, Tribes, privately- owned community water systems, and others, can apply and receive SRF low interest loans to implement water infrastructure projects. Loan repayment mechanisms such as user and rental fees, general obligation bonds, water use rates, or voluntary surcharges, are identified and developed by loan recipients. Repayment amounts are returned to the SRF, which allows for the future issuance of more loans – hence the program name: 'revolving fund.'

How Does a State Revolving Fund Work? (Cont.)



Courtesy of EPA. *Figure adjusted to represent a model for Forest Service.

1) **State Match.** EPA awards annual capitalization grants to states. Each state provides 20% match.
2) **Disbursements.** SRFs issue low-interest loans to eligible applicants; SRFs may provide additional subsidies in the form of principal forgiveness, grants, or negative interest loans.
3) **Cash to Pay Invoices.** Loan recipient agrees to repay loan and demonstrates ability to do so. For CWSRF, since loan amounts are larger, finding a source of repayment can be challenging. States offer the following financing mechanisms and subsidies to assist:
    a) Aggregate repayment from multiple beneficiaries: Responsibility for project implementation and loan repayment is passed through to a third party via a pass-through agreement.
    b) Sponsorship lending: Two independent projects—a traditional publicly owned treatment works project and a nonpoint source pollution (NPS) project— are paired, allowing the borrower to receive a loan with a reduced interest rate as compensation for sponsoring the NPS project.
    c) Additional subsidies: In the form of direct grants and principal forgiveness ($384 million provided in FY20) for disadvantaged communities.
4) **Clean and abundant water.** Loan recipient implements projects, including on NFS lands. Projects implemented on NFS lands result in water quality benefits to water users.
5) **Loan repayments.** Loan recipient repays principal/interest to SRF. USFS not responsible for repayment.

SRF Loan Terms

- Below market interest rates, reflecting a cheaper rate of borrowing than most municipal bonds.
- Up to 30-year repayment period, which cannot be longer than the useful life of the project(s).
- Project(s) complete within 3 years of the start of the implementation.
- Subsidies (principal forgiveness, grants, reduced interest rates) for projects targeting disadvantaged communities, stormwater, energy/water efficiency, sustainability.

What are the Enabling Conditions for a Successful State Revolving Fund?

Criteria for Success	
Landscape	Need for forest restoration and protection (prescribed fire, thinning) IDed
	NEPA decision is signed, a notice is published, and project is "shovel ready"
Project Activities	Project activities promise to deliver water benefits to multiple stakeholders
Partners	Eligible SRF loan recipient(s) IDed (USFS not an eligible loan recipient)
	Potential beneficiaries, who can assist with the loan repayment, IDed
	Partner(s) IDed loan repayment mechanism and committed to repayment
Capacity	Project implementer(s) have capacity and expertise to undertake restoration activity
	Loan recipient has capacity to manage funds
	NFS unit(s) have capacity to build and maintain partnerships
Collaboration	Strong cross-boundary relationships are present or cultivated
	Early USFS engagement with SRF managers (to ensure projects listed in SRF Intended Use Plan), EPA regional Source Water Protection coordinators

How can SRFs help the US Forest Service?

Providing abundant clean water is a strategic objective of USFS. In the wake of devastating fires and flooding there is an urgent need to accelerate the pace and scale of watershed restoration. USFS aims to work with partners to mobilize resources for restoration, and SRF loans provide a partnership-based approach to doing so through work with loan recipients and project implementers.

Possible SRF Benefits to the US Forest Service	
SRF	**Benefit**
CWSRF	Accelerate pace and scale of restoration and protection projects
	Cover upfront costs associated with implementation of NFS water-related projects
	Unlock access to additional non-USFS funds, e.g., match for EPA Section 319 grants
DWSRF	Cover smaller expenses associated with project preparation
CWSRF & DWSRF	Create incentives to develop and implement restoration and protection activities
	Foster collaboration among stakeholders that care about water and activate awareness around connection between healthy watersheds and drinking water
	Provide on-demand consultations on loan structuring to loan applicant
	Provide opportunities to implement projects in disadvantaged communities

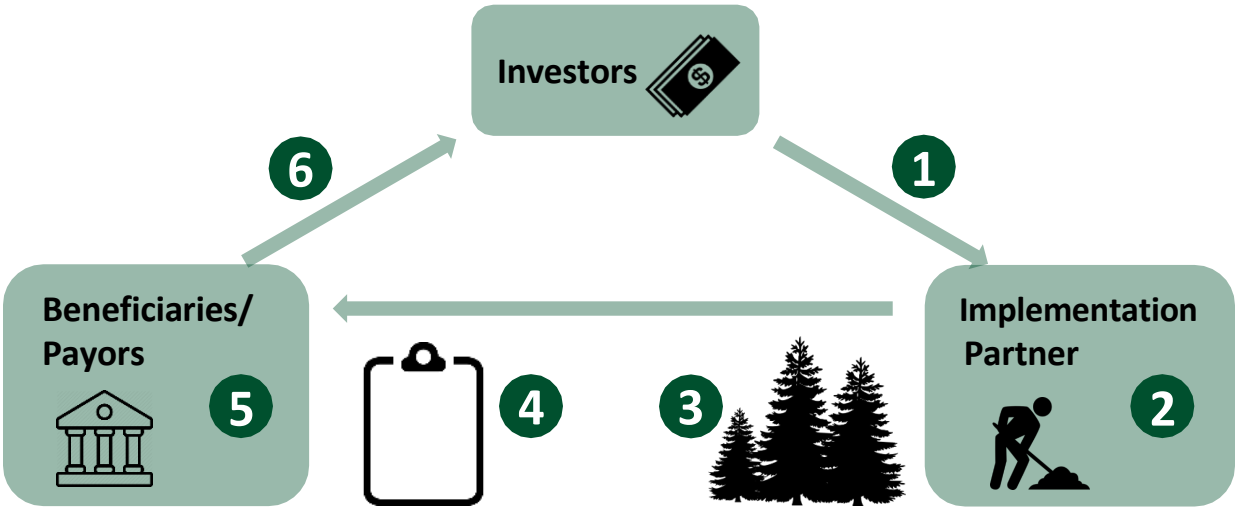
To learn more about SRFs visit EPA's websites for the CWSRF [https://www.epa.gov/cwsrf/clean-water-state-revolving-fund-cwsrf-nontraditional-financing] and DWSR [https://www.epa.gov/dwcapacity/use-drinking-water-state-revolving-fund-dwsrf-set-asides] programs.

Outcomes-Based Financing

What is Outcomes-Based Financing?

Outcomes-Based Financing (OBF) is a financing approach that enables private **investors** to cover the upfront cost of on-the-ground projects. A group of stakeholders that benefit from project activities – **beneficiaries** or **payors** – agree to pay this investment back over time at rates of return dependent on the outcomes delivered. An **implementation partner** then uses investor capital to conduct on-the-ground work. By engaging private capital to fund the upfront cost of projects, OBF accelerates the pace and scale of work and shifts financial risk from implementation partners to investors. The model also promotes accountability and efficiency by allowing stakeholders to pay for outcomes as they are delivered. OBF can be used to scale activities with proven results, or to determine whether untested activities deliver outcomes as predicted. To develop and implement OBF projects the FS partners with **project developers** such as Quantified Ventures (see pg. 2) to assess feasibility and manage projects.

How Does Outcomes-Based Financing Work?



1. **Investors** provide the upfront capital to cover project costs
2. **Implementation partner** conducts project activities
3. Project delivers environmental, social, and financial outcomes
4. Independent **evaluator** measures outcomes using agreed-upon metrics
5. **Beneficiaries/payors** make payments to investors as outcomes delivered
6. Outcome payments made at rates contingent on project performance allow **investors** to recover principal and a return

How does Outcomes-Based Financing help the Forest Service?

- Provides capital for priority projects
- Accelerates the pace and scale of project implementation
- Identifies and quantifies outcomes, helping the FS discuss the value of work on NFS lands
- Increases effectiveness of activities by linking payments to delivery of benefits
- Increases flexibility of funding for projects on and off NFS lands
- Fosters relationships between public and private entities with shared interests
- Generates lessons learned from measurement and evaluation to re-design FS programs
- Builds energy among FS and partners to drive and sustain collaboration

What makes Outcomes-Based Financing a viable tool?

Criteria for Success	
Landscape	Identified risk/need, and project activities to address risk/need
	If FS project – NEPA decisions signed, and projects "shovel ready"
Project Activities	Project activities priced out and estimated at $\leq$ $3M
	Project activities either proven to deliver outcomes and OBF helps to scale; or outcomes predicted and OBF helps to test
Data	Baseline environmental, social, and/or economic data available
	Environmental, social, and financial outcomes from project activities can be measured, quantified, and attributed to project
Partners	Business case for payors and investors is clear and compelling
	Payors willing and able to pay
Collaboration and Capacity	Strong FS and partner leadership/commitment
	FS unit with capacity to undertake work and designate a point of contact for project
	Implementation partners with capacity/expertise to undertake project
	Implementation, outcome delivery, and payments can be completed in a reasonable investment term

OBF Partner Highlight: Quantified Ventures

Quantified Ventures works with pioneering organizations to design, capitalize, and scale investible solutions that improve the wellbeing of people and the planet. As a project developer, QV partners with the FS to develop and implement OBF projects that support work on NFS lands. QV works with the FS to define challenges and interventions, assess the feasibility of outcomes-based financing, structure transactions, design models for evaluation, and manage projects. Learn more about OBF and Quantified Ventures at http://www.quantifiedventures.com/.

Quantified Ventures

CASE STUDY: BAILEYS TRAIL SYSTEM IN APPALACHIAN OHIO

Outdoor Recreation Catalyzes Rural Economic Growth

The Baileys: A Differentiated Approach

For centuries, the wealth of natural resources in Southeast Ohio created jobs and industries, including timbering, brick mining, and coal mining. As the market demand for extractive resources continues to decline, economic forces have left Athens County one of the poorest counties in Ohio.

The Wayne National Forest in Athens County has miles of abandoned coal mines. More than 20 years ago, the community started to see these mines not as "scars" but as an underutilized asset. Together, the community and the Wayne National Forest re-envisioned this terrain as a world class trail system that could drive visitors to Southeast Ohio. They had a plan but did not have local capacity or access to capital.

Quantified Ventures worked with local partners and the US Forest Service to move from idea to implementation. We kick-started the development of the Baileys Trail System, a premier mountain biking trail system on the Wayne National Forest, by:

- Producing a feasibility assessment that quantified the trail's regional benefits and informed political decisions
- Creating a local Council of Governments and a non-profit partner to manage the trail as a social enterprise
- Securing $10+ million from public and private sources to finance the 88-mile trail system
- Providing technical assistance for business strategy, planning, and local capacity building

The Baileys Trail System is a sustainable model of shared stewardship in outdoor recreation, providing a recreation and tourism asset that contributes to the ecological, social, and economic growth and sustainability of Southeast Ohio.

Quantified Ventures' outdoor recreation outcomes-based financing approach allows communities to solve problems together, attract public and private capital, and retain local asset ownership that generates revenues far into the future.

Revitalizing Communities in Appalachian Ohio

As the pillar of the region, the Baileys Trail System is a conduit that supports and fosters new business, grows the region's economy, and decreases the intergenerational poverty that has plagued Appalachia.

The 88-mile Bailey's Trail System is projected to generate multiple regional benefits during the next 10 years*, including:

ECONOMIC

- $40 million in increased spending
- $10 million in higher wages
- $2 million in project revenues
- $1 million in increased tax revenue

HEALTH

- Greater access to outdoor recreation improves residents' physical and mental health
- $500k in local healthcare costs avoided

ENVIRONMENTAL

- Remediate abandoned mine land while introducing a new generation of conservationists to the beauty and biodiversity of Ohio's only National Forest
- $2 million for mine land restoration

SOCIAL

- Asset-based recreation tourism brings Southeast Ohio revenue to maintain critical infrastructure and improve quality of life
- Increased local connectivity, with 5 miles of trails connecting 3 villages
- 78 new jobs and 150 jobs retained in Athens County

** Figures from Quantified Ventures report coupling market research with RIMS II input/output multipliers*

Photo at top by: Joel Prince, Athens County Convention and Visitors Bureau

"It was easy for me to envision what 88 miles of mountain bike trail could do for Southeast Ohio in terms of driving tourism, opportunities for entrepreneurs, and economic development. The challenge was always going to be where the money would come from to develop the trail. ***Quantified Ventures was instrumental in educating us about the pay for success model, helping us pursue opportunities for investment and funding, and ultimately unlocking public and private capital to accelerate the Baileys Trail System.****"*

— **Mayor Steve Patterson**, Athens, OH

"This is just one trail system, but its catalytic nature presents an opportunity to rewrite the narrative of Appalachian Ohio, by using public land resources to showcase how recreation contributes to quality of life in the region. ***Quantified Ventures provided high-quality reports, strategy, and counsel that advanced the project and elevated the conversations with public and private stakeholders about the opportunity outdoor recreation provides to diversify our local economy.****"*

—**Jessie Powers**, Executive Director, Outdoor Recreation Council of Appalachia

Asset-Based Economic Development and Placemaking Through Outdoor Recreation

As the pandemic has shown, access to nature is crucial to mental and physical health. Now is the time to ensure that rural gateway communities develop the infrastructure and tools to benefit from and conserve their natural assets.

Quantified Ventures has developed an Outdoor Recreation Playbook built on three core principles:

Joint Management – in this case, the US Forest Service, Athens Wayne Outdoor Asset Development Corporation, and the Outdoor Recreation Council of Appalachia

Blended Financing – through federal, state, and local public funds, as well as private investors, private donors, and local businesses

Sustainability – multiple diversified revenue sources that stay local enable expansion and create sustainability

This holistic approach enables sustainable economic development and catalytic project financing.

The Quantified Ventures' playbook moves outdoor recreation projects beyond the creation of a trail or campground to develop community infrastructure, build local capacity, and enhance the local sense of place.

Replication Opportunities

Quantified Ventures applies proven economic development and infrastructure tools, processes, and financing mechanisms to the fragmented and underfunded outdoor recreation asset development sector. Our approach has worked effectively to both develop new outdoor recreation infrastructure and expand existing assets.

We are replicating this playbook across the country including projects in California, Pennsylvania, Vermont, and Washington. Our approach addresses the need for local initiatives to:

- Capture and retain project revenues locally
- Monetize project outcomes
- Unify and empower stakeholders through sustainable governance structures that control flexible capital
- Leverage experienced and mission-aligned technical assistance

We are currently seeking additional mission-oriented partners to continue the expansion and enable more communities to realize the economic, social, environmental, and health benefits provided by access to outdoor recreation. To learn more, contact Seth Brown at brown@quantifiedventures.com.

Quantified Ventures®

Certified B Corporation — This company meets the highest standards of social and environmental impact

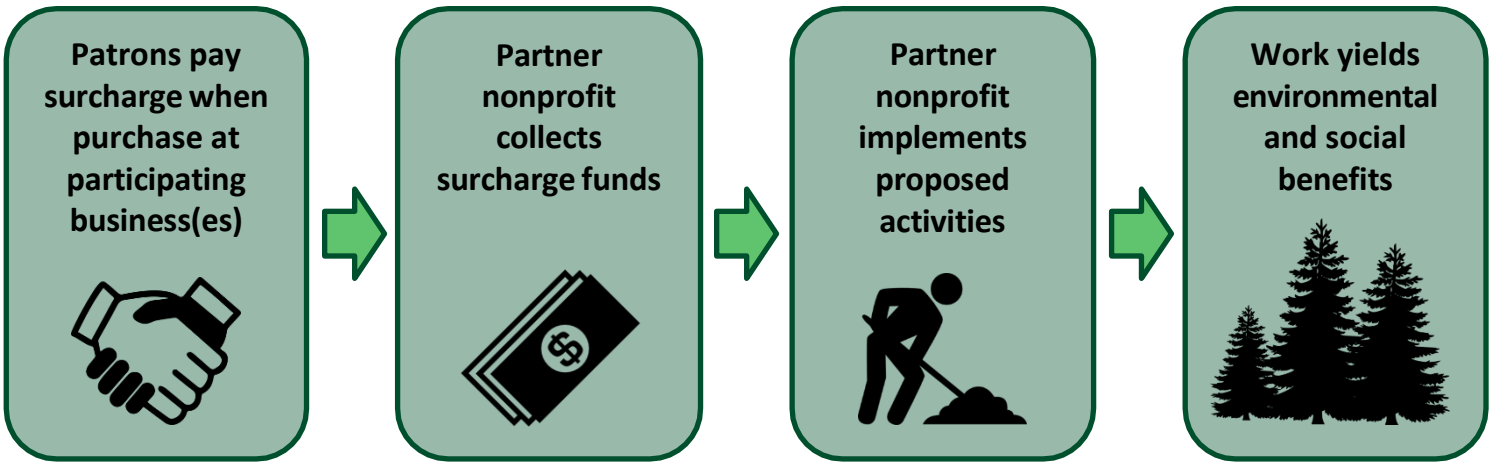
Voluntary Surcharge

What is a Voluntary Surcharge?

A **voluntary surcharge** is a micro-donation that is added to a customer's retail, hospitality, lodging, or recreation activity bill to raise funds for a specific cause. Surcharges are often collected to fund work located in the same geographies as participating businesses, meaning that the surcharge payer is likely a direct beneficiary of the funded work. Partnerships between environmental groups and local businesses around voluntary surcharge programs can take many forms depending on the issue being addressed, the local context, and participating businesses' interests.

- Surcharges can be set up so that customers either opt in or opt out of making a donation.
- Surcharge programs may involve just one business or a network of businesses (e.g., all breweries in a specified geography, or all businesses on a certain street).
- Surcharges may be determined as a percent of the total charge or as a flat fee.
- Programs may be long-term, short-term, or single day in duration.
- Programs may target local or visitor/ tourist consumers.
- Programs can fund a competitive grant program or set projects.
- Funded projects can include on-the-ground work, maintenance, or general capacity building.

How Does a Voluntary Surcharge Program Work?



How Do Voluntary Surcharge Programs Help the Forest Service?

- Raise additional capital to fund FS and partner priorities, accelerating the pace and scale at which work on FS priorities can be undertaken
- Build relationships with local nonprofits and businesses that have shared stakes in forest health and/or recreation economies
- Raise public awareness of forest health and recreation needs on NFS lands
- Raise public awareness of FS nonprofit partners
- Help consumers understand the role of national forests in their communities

What are the Criteria for Success for Voluntary Surcharge Programs?

Criteria for Success	
Landscape	Identified need (forest restoration, recreation infrastructure, etc.) and projects that can address the need
	NEPA decisions signed, and notice published
	Plans for implementation complete and project is “shovel ready”
Community	Nature/outdoor rec tourism is an economic driver (less burden on locals)
	Local or out of town visitors will provide a broad participation base
Partners	Partner nonprofit to market/administer surcharge collection and implement funded work
	Anchor business to help establish the fund and encourage others to join
	Business(es) willing to host surcharge
Capacity	Participating businesses have technology to intake surcharge funds
Scale	Generate at least $25,000 in annual revenue to be viable

Voluntary Surcharge Partner Highlight: National Forest Foundation

As a federal agency the FS cannot set up voluntary surcharge programs on its own, it must collaborate with partner nonprofits, such as the National Forest Foundation (NFF), to do so. To establish a successful program NFF works with the FS to understand local needs and gaps in funding. NFF then conducts outreach to local businesses to raise awareness of FS needs and invite participation in the surcharge program. Outreach to businesses typically focuses on how the specific to-be-funded-work benefits the business, as well as the larger reputational benefits of participation. Once participants are confirmed, NFF works with businesses to create joint-marketing for the surcharge campaign, and trains participating staff in the logistics of implementing the surcharge. In addition to tracking and collecting surcharge payments over time, NFF maintains relationships with business owners to steward the relationship and sustain or increase the commitment.

Voluntary Surcharge Case Study: NFF Ski Conservation Fund

A **voluntary surcharge** is a micro-donation that is added to a customer's retail, hospitality, lodging, or recreation activity bill to raise funds for a specific cause, in this case nonprofit partners' work to promote forest health or recreation opportunities on National Forest System (NFS) lands. Surcharges are often collected to fund work located in the same geographies as participating businesses, meaning that surcharge payers are direct beneficiaries of the funded work. Surcharge programs can take many forms – programs can involve just one business or many, be opt in or opt out, charge consumers a percent of the total bill or a flat fee, target local or visiting consumers, fund on-the-ground work or capacity building, and be short, long, or one-time in duration.

NFF Ski Conservation Fund Case Study Overview

The National Forest Foundation (NFF) created the **Ski Conservation Fund** to raise funds for on-the-ground conservation and restoration projects that improve forest health and outdoor experiences on National Forests that house ski mountains. Ski-related businesses collect voluntary surcharges – in the form of opt-out donations attached to lift tickets, hotel stays, dining, and guiding services – from guests. Donations are then collected by NFF and awarded on a rolling basis to local groups (nonprofits, non-federal agencies, tribes) to implement on-the-ground projects on NFS lands via competitive and noncompetitive grant processes. Surcharge donations fund work such as trail repair, habitat improvement, riparian restoration, and tree planting, on the specific national forests visited by guests.

All grants awarded through the Ski Conservation Fund include two sources of funding: guests' surcharge contributions and a $0.50 match from NFF for every dollar collected. NFF often requests that grantees provide a 50% non-federal match.

NFF runs another similar voluntary surcharge program, the **Forest Stewardship Fund**, which raises funds from guests at non-ski-related lodges to fund work on nearby National Forests and Grasslands.

Project Impacts

- Improved forest health and recreation infrastructure
- Increased public awareness of NFs among local or visiting consumers
- Enhanced outdoor experiences on NFs
- Increased technological and marketing capacity of local businesses
- Heightened pride of place and social capital

Project Stakeholders

Forest Service. The FS hosts all work funded through the Ski Conservation Fund on NFS lands and is therefore responsible for all environmental planning processes and management decisions that impact funded work.

National Forest Foundation (program administrator). The FS's congressionally chartered nonprofit foundation, NFF, administers the Ski Conservation Fund. NFF recruits local businesses as participants, sets up and manages voluntary surcharge programs, and disperses funds through a grant program.

Local businesses. Seventeen ski mountains located on NFS lands participate in NFF's Ski Conservation Fund surcharge program. At these resorts visitors make small donations when they purchase lodging, lift tickets, and guiding services, unless they choose to opt out. Participating mountains include Arapahoe Basin, Beaver Run, Copper, Crested Butte, Keystone, Monarch, Purgatory, Telluride, Vail, and Winter Park in CO; Ski Apache in NM; Timberline in OR; Snowbird in UT; Stevens Pass in WA; Snowshoe in WV; and Jackson Hole and Snow King in WY.

Local Implementation Partners. Local nonprofits, non-federal governmental entities, and tribes working on or adjacent to NFS lands are eligible to apply for grant funding from the Ski Conservation Fund. These groups implement on-the-ground conservation work that enhances forest health and/or outdoor experiences on NFS lands.

Lessons Learned

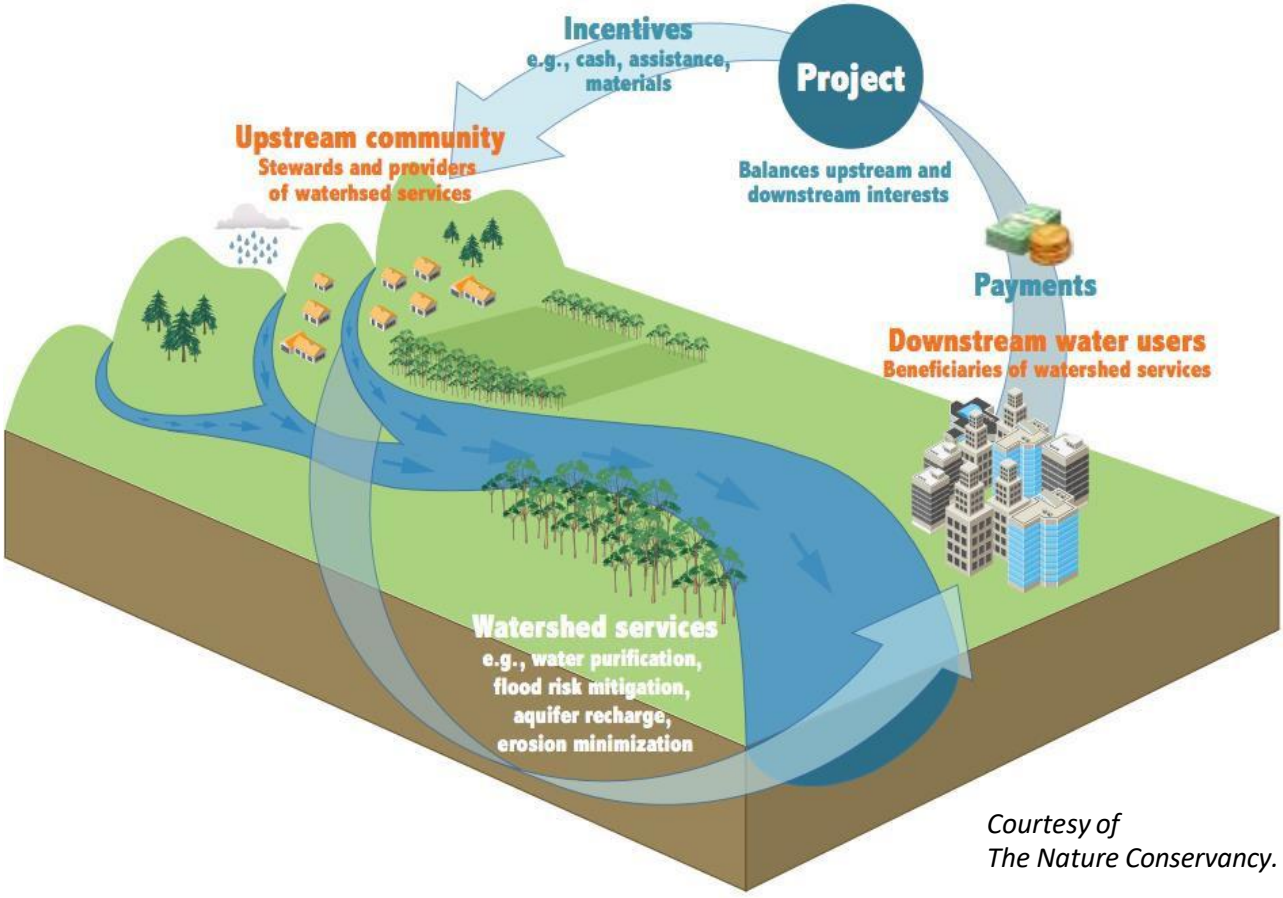
- Engage local businesses with in-person outreach focused on the direct value of conservation projects to the business as well as overall reputational benefits
- Establish an opt-out (opposed to opt-in) surcharge program to raise maximum funds
- Keep the surcharge small (never exceed five dollars)
- Do not tie surcharge to a time-sensitive point of sale transaction
- Educate staff at participating businesses about the program's overall purpose and what it's funding on local National Forests so they are prepared to answer consumers' questions
- Acknowledge participating businesses' support often and continue cultivating relationships on an ongoing basis

Learn more about NFF's Ski Conservation Fund by visiting https://www.nationalforests.org/grant-programs/stewardship-funds.

Water Funds

What is a Water Fund?

Water Funds are institutionalized collective-action platforms that connect upstream and downstream water users through integrated financing, governance, and management with the goal of improving water security through watershed protection/restoration projects.



Courtesy of The Nature Conservancy.

While water funds can take a variety of forms, they share the following characteristics: a funding vehicle, a multi-stakeholder governance structure, science-based planning and analysis, implementation capacity, and coordinated communications.

How Does a Water Fund Work?

Downstream users (e.g., cities, businesses, utilities, private citizens) provide funding and/or in- kind contributions to support watershed protection and management strategies that are implemented by **upstream land managers** (e.g., USFS). Projects funded through water funds are collaboratively developed by upstream and downstream users, and benefit all parties.

How Do You Create a Water Fund?

The Nature Conservancy's Water Fund Toolkit lays out a 5-phase water fund development process.

1) **Feasibility.** Confirm through research/analysis and conversations with potential partners that there are 1) regional water security challenges that could 2) be address through a water fund.
2) **Design.** Develop a plan articulating how the water fund will improve water security and use it to engage upstream/downstream stakeholders and donors/investors to fund development.
3) **Creation.** Formally establish and publicly launch the water fund.
4) **Operation.** Develop and implement a work plan that guides 1) implementation of project activities, 2) measurement/evaluation, 3) communication around successes/lessons learned.
5) **Maturity.** Secure long-term financing in a policy/legal framework to ensure sustainability of the water fund.

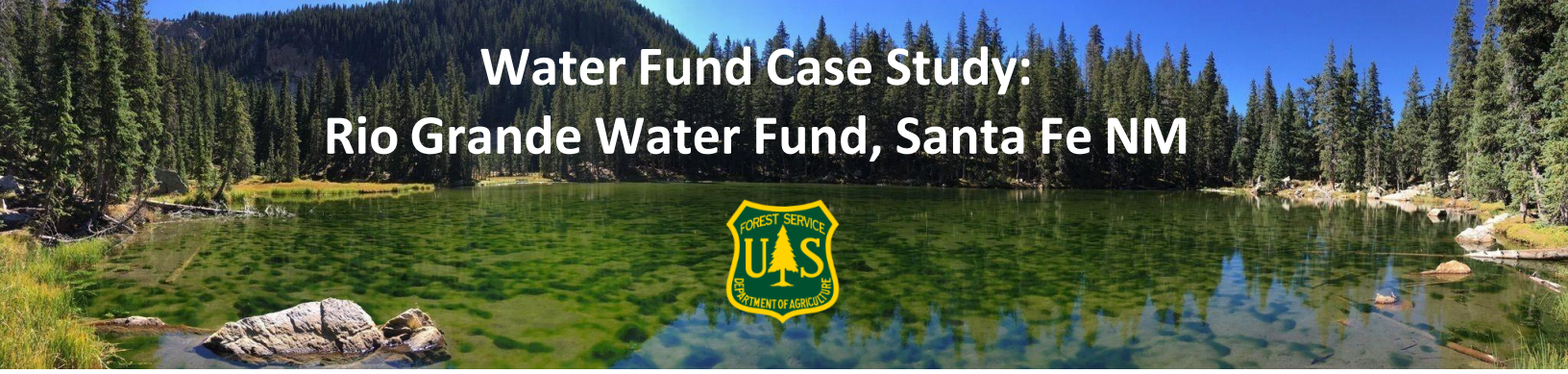
How Do Water Funds Help the Forest Service?

- Reduces cost of watershed management for FS by sharing costs between downstream and upstream water users
- Fosters relationships between upstream and downstream water users
- Provides sustainable long-term funding source to support long-term planning efforts
- Establishes platform through which to collect data/quantify impacts of ecosystem services
- Achieves FS mission to meet public needs by ensuring water quality and quantity

What are the Enabling Conditions for a Successful Water Fund?

Criteria for Success	
Landscape	Identified ecological challenge that puts water security at risk
	Anchor land ownership (e.g., National Forest)
	NEPA approved/in the works
Leadership	Strong FS leadership, with interest in innovation at multiple levels
	Strong partner leadership and commitment
Collaboration	Compelling business case for involvement of downstream users
	Strong cross-boundary/cross-sector relationships
Capacity	NFS unit with capacity to prioritize partnership-building activities
	Project implementer(s) with capacity and expertise to undertake projects
Data	Baseline ecological and economic data in place
	Ability to quantify future ecological and economic outcomes

To learn more about water funds visit TNC's Water Funds Toolbox at www.waterfundstoolbox.org.

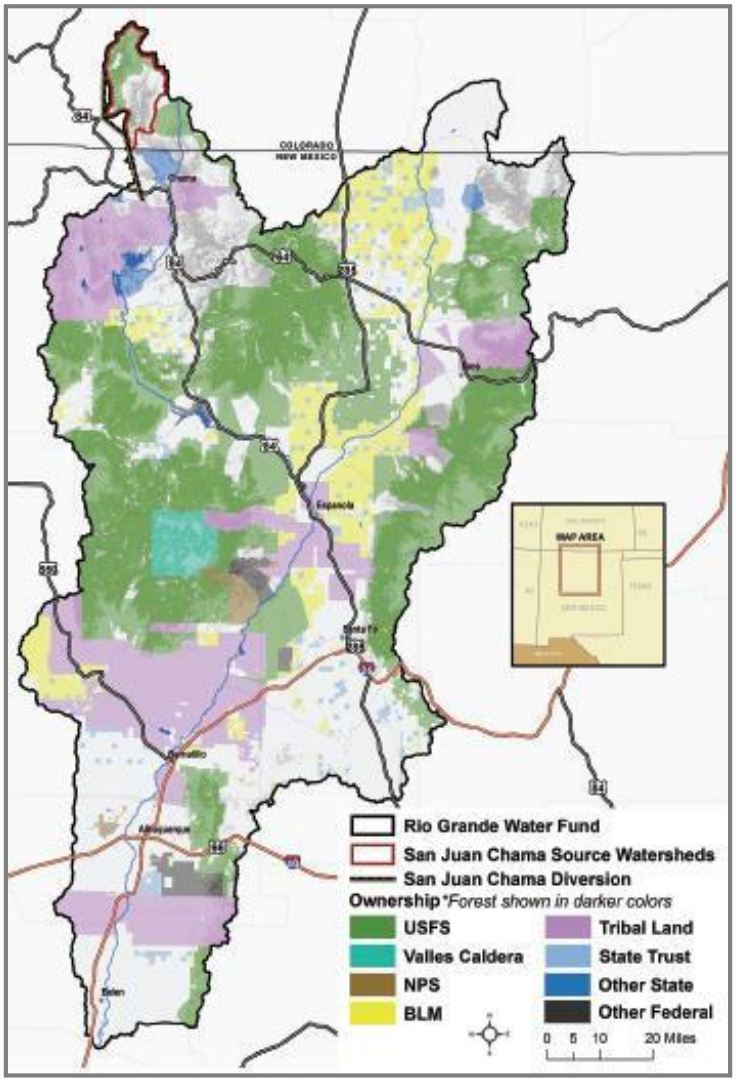


Water Fund Case Study: Rio Grande Water Fund, Santa Fe NM

Water Funds are institutionalized collective-action platforms that connect upstream and downstream water users through integrated financing, governance, and management with the goal of improving water security through watershed protection/restoration projects. While water funds can take a variety of forms, they share the following characteristics: a funding vehicle, a multi-stakeholder governance structure, science-based planning and analysis, implementation capacity, and coordinated communications.

Rio Grande Water Fund Case Study Overview

After the Las Conchas fire burned 156,592 acres and caused an estimated $246M in damages in 2011, FS partner **The Nature Conservancy** (TNC) conducted a feasibility analysis to determine how best to scale up proactive restoration in the **Rio Grande Watershed**. The Rio Grande Water Fund (RGWF) launched in 2014. Through the RGWF, TNC directs funds to restoration projects through a competitive grant process that disperses funding across 4 geographic priority areas identified through scientific analysis. This area covers **1.7 million acres**, with implementation occurring on forests, agricultural lands, and communities from south of Albuquerque to the CO border. Between 2014 and 2018 the RGWF generated **$45 million** from public and private sources to support restoration, and supported forest thinning and controlled burns across **108,000 acres**. 2018 marked an 1,000% increase in acres restored compared to before RGWF's launch (33,000 acres treated vs. 3,000). Studies estimate that implementation of the comprehensive plan could avoid up to $870 million in damage costs from wildfire. RGWF supports projects on the **Cibola**, **Santa Fe**, **Carson**, and **San Juan National Forests**. On-the-ground work is conducted through a participating agreement, using the Wyden authority to satisfy cross-boundary connections.



Courtesy of The Nature Conservancy.

Project Activities

- Research
- Planning
- Forest Treatments (thinning, prescribed burning, stream restoration, flood mitigation, post-fire rehab)

Project Impacts

- Job creation
- Access to firewood
- Student engagement
- Tourism
- Forest products market development
- Acres treated

Project Stakeholders

The Nature Conservancy. TNC manages the RGWF, including establishment of a governance structure and watershed restoration plan, convening of the advisory board, fund collection, etc.

Advisory Board and Members. 80 watershed stakeholders serve as charter signatories. Contributing members include nonprofits, water utilities, foundations, and government agencies.

Funders. TNC aggregates individual, corporate, foundation, and government donations into one fund for centralized dispersal. In 2017 the fund collected $3.6M, including $1M from a utility.

Forest Service. FS expertise contributed to setting priority areas, structuring site selection, and fund management for cross-boundary implementation.

Lessons Learned

- Sustain public engagement throughout the collaboration. Partners can be a bridge.
- Personal relationships are the backbone of successful partnerships, and they take time.
- Develop shared understanding of each partner's operating space.
- Engage Grants & Agreements staff early in cross-boundary work with cross-sector partners.
- Start with small successes and establish proof of concept before going big.
- Connect partners at multiple levels in a non-legally binding document and shared vision.
- Invite elected officials and water utilities into source water protection process early.
- Use monitoring to build the case for sustained investment and adaptive management.
- Use research to generate buy-in and develop plans.
- Collaborate and plan first, the money will follow.
- An avoided costs analysis or cost benefit analysis can build donor support.
- Utilities underestimate the willingness of ratepayers to contribute to watershed health

Watershed Investment Partnerships

What is a Watershed Investment Partnership?

A Watershed Investment Partnership (WIP) is a collaboration focused on shared investment in watershed-scale protection or management. It provides a means for diverse stakeholders to develop and support work that accomplishes joint goals at the watershed level.

How to Develop a Watershed Investment Partnership?

The USFS National Partnership Office (NPO) Conservation Finance Program and Watershed, Fish, Wildlife, Air and Rare Plant (WRWARP) staff developed the following five-phase guidance to direct WIP development and implementation.

Phase 1: Scoping Need and Opportunity

1. Identify water-related challenges and drivers. Reference existing research and planning materials developed before filling in gaps in understanding with new analysis. Identify root causes/drivers of challenges (e.g., population growth, increased tourism).

2. Assess socio-political landscape. Gauge the quantity and quality of relationships between players in your watershed. Understand priorities of elected officials. Frame the context for WIP collaboration.

3. Conduct baseline ecological analysis. Develop a baseline understanding of ecological health, the drivers of current conditions, and future risks to watershed health upfront.

4. Assess opportunities for funding. Gauge the feasibility, scale, and duration of potential funding and financing opportunities, including opportunities to engage public, philanthropic, and private capital.

5. Cultivate relationships with potential partners. Start forging relationships with potential partners and stakeholders early. Make sure to engage both upstream and downstream water users.

Phase 2: Determining Land Management Activities

1. Determine geographic boundaries of activities. Define clear geographic boundaries early on in order to focus analysis of potential forest-based interventions, funding/financing opportunities, etc.

2. Analyze activity options. Pick around five interventions that address watershed challenges in your chosen geography and analyze the financial and human resources required to implement each.

3. Identify outcomes from activities. Analyze the outcomes of possible interventions to determine which will yield maximum benefit.

4. Identify financial flows. Determine whether there are financial flows associated with proposed interventions such as 1) avoided costs/reduced risk, 2) sale of environmental market credits, 3) increased revenues, and/or 4) enhanced benefits.

5. Develop the business case for project activities. Create targeted return on investment/cost-benefit analysis for WIP involvement. Cases should be based on analysis showing that the financial flows associated with forest-based interventions exceed the upfront costs of these interventions.

Phase 3: Deciding Whether to Move Forward

After completing work in Phase 1 and 2, this checklist will help to gauge whether the appropriate conditions exist to launch a WIP in your landscape. If your case does not check all of the boxes below it may mean that a WIP is not the right tool to employ in your landscape at this time. Alternately, it may indicate a need to revisit work in Phase 1 and/or 2 before moving forward.

Watershed Investment Partnership Checklist

- ☐ Defined watershed management challenges exist (e.g., flooding risk, wildfire risk, threats to forest health, etc.)
- ☐ Demands on water-related services and benefits are increasing (ex: increasing populations, expanding tourism or industry)
- ☐ Socio-political and ecological conditions provide a foundation for effective collaboration
- ☐ Funding to cover start-up and ongoing WIP costs exists and is realistically accessible
- ☐ Proven land management activities exist to address management challenges
- ☐ Capacity exists to implement land management activities
- ☐ Outcomes of land management activities deliver benefits to multiple stakeholders
- ☐ Long-term benefits of for land management activities are measurable and quantifiable against baseline scenarios and exceed estimated treatment costs
- ☐ Stakeholders (utilities, municipalities, water-dependent companies, etc.) understand the business case for involvement and are willing and able to support partnership efforts

Phase 4: Establishing the Partnership

1. Develop a plan for administration. Determine what roles and responsibilities different partners should take on for WIP development and implementation, and how much staff time is required.

2. Staff the partnership. Identify dedicated staff to oversee WIP development/implementation.

3. Evaluate funding and financing options. Determine what public and philanthropic funding sources, and private financing tools, will provide start-up and ongoing funds for the WIP. See full report for a comprehensive list of funding and financing options.

4. Develop a watershed plan. Create a plan for WIP implementation that includes partners' shared vision and goals, and lays out a governance structure, schedule of activities, and communications plan.

Phase 5: Implementing the Partnership

1. Implement watershed plan. Move forward with implementation. Regularly revisit your plan and adapt work based on changing operating conditions, ongoing results, and lessons learned.

2. Monitor project outcomes and document success. Define success, identify metrics by which to gauge progress, and adapt WIP management based on measured outcomes.

Types of WIP Funding

Funding for WIPs takes a variety of forms, including but not limited to the following examples:

Direct Cost-Share Partnership (ex: Denver, Colorado). Denver Water and the FS partner to accelerate forest restoration on public/private forest lands that sustain water quality and flow originating from the Front Range. From 2010 to 2016, Denver Water matched the FS commitment of $16.5 million through standard water rate structure increases to municipal users. In 2017, the partners signed another 5 year agreement to include treatments on private lands and engage the Colorado State Forest Service and the Natural Resource Conservation Service.

Municipal Funding (ex: Flagstaff, AZ). In November 2012 Flagstaff, AZ passed a bond measure with 74% approval committing $10 million for forest thinning to reduce severe wildfire and subsequent flooding risk. The project funds 14,000+ acres of thinning/harvesting, and prescribed burning/biomass removal across the Coconino National Forest, Navajo Nation lands, AZ State Trust Lands and City parcels.[1]

Collaborative Funding (ex: Santa Fe, NM). Santa Fe, NM worked with the FS to develop a Municipal Watershed Management Plan to protect source water through cross-boundary forest management. The Nature Conservancy teamed up with the City Council to create a water fund that helps the FS and partners pay for the planning, implementation, communication, and monitoring of cross-boundary restoration.[2]

Voluntary Incentive (ex: Eugene, Oregon). The Willamette National Forest, Eugene Water and Electric Board (EWEB) and other partners are working together as the McKenzie Collaborative to protect Eugene's drinking water supply by incentivizing private forestland owners to restore riparian buffers. The FS utilizes the Wyden Amendment to direct unit funds to high priority private lands. EWEB and the FS monitor water quality outcomes.

Corporate Partnership (ex: Coca Cola). Coca Cola contributed $1.1 million for watershed restoration on NFS land through the National Forest Foundation. A new $700,000 grant from the Coca Cola Foundation supports projects by youth crews in the Angeles National Forest.

Business/ Consumer-Funded Partnership (ex: NFF Ski Conservation Fund). The National Forest Foundation's Ski Conservation Fund supports projects that improve forest health and outdoor experience by awarding funds from voluntary surcharges at ski areas/lodges adjacent to FS lands.[3]

Federal Partnership (ex: UWFP): Launched in 2011, the Urban Waters Federal Partnership (UWFP) directs federal resources to support community-driven initiatives, with a focus on investing in underserved communities. UFWP supports 19 project locations. FS is the USDA lead.

[1]Reference the USFS Conservation Finance Toolkit overview and case study on ballot measure funding for more information.
[2]Reference the USFS Conservation Finance Toolkit overview and case study on water funds for more information.
[3]Reference the USFS Conservation Finance Toolkit overview and case study on voluntary surcharge programs for more information.

Public and Philanthropic Funding Sources

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.

Public and philanthropic funding remain critical for FS work, and important points of leverage to engage private capital. Public and philanthropic funding provide critical support for innovation and start-up costs, as well as ongoing project funding. The following federal, state/municipal, and philanthropic sources complement the mechanisms for engaging private capital reviewed throughout the rest of this toolkit.

Federal Funding Sources (USDA)

Collaborative Forest Landscape Restoration Program. This FS program provides funds for the collaborative, science-based restoration of priority forest landscapes. Projects must encourage sustainability, reduce wildfire risk, demonstrate ecological restoration techniques, and promote utilization of restoration by-products. The program can fund up to 10 projects per year, up to 50% of the costs of implementing/monitoring treatments on NFS lands, and up to $4 million/project annually.

Joint Chiefs' Landscape Restoration Partnership. This jointly-administered FS and NRCS program, which focuses on improving the health of forests where public forests or grasslands abut private or tribal lands, funds restoration activities that reduce wildfire threats and protect water quality. Each year, the FS and NRCS select new three-year projects to fund.

Landscape Scale Restoration Program. This FS program funds state forestry agencies' implementation of restoration activities on non-federal priority landscapes identified in State Forest Action plans.

Land and Water Conservation Fund. This Fund, a portion of which is administered by the FS, uses revenues from offshore drilling and gas to assist federal, state, and local governments in conserving land and water through the purchase of property or conservation easements. The Fund is capped at $900 million annually, although funding levels have only twice met that level.

Federal Funding Sources (USDA) Cont.

Forest Legacy Program. Administered by the FS in partnership with state agencies, this program supports the protection of privately owned forest lands through conservation easements and land purchases. Up to three projects with a total cost of up to $10 million can receive funding in each state annually.

Forest Stewardship Program. This FS program supports partnerships between the FS and state forestry agencies and conservation districts focused on management of privately owned forests and woodlands.

Urban and Community Forestry Program. This FS program supports forest and community resilience, with focus on job creation and the growth of regional wood economies, through grants to local governments, nonprofits, universities, and tribes.

Conservation Innovation Grants. Administered by NRCS, this program supports public and private sector innovation in resource conservation to governmental and nongovernmental organizations, tribes, and individuals. The program focuses on development of market-based solutions to resource challenges on working lands.

Regional Conservation Partnership Program. This NRCS program supports partnerships between local and national partners, including federal and state agencies, nonprofits, tribes, private industry, universities, and others, around private lands conservation.

Water Quality Incentives Program. This USDA program helps agricultural producers invest in the planning/implementation of agricultural solutions that conserve natural resources.

Rural Development Water and Environmental Program. Through this USDA program rural communities can obtain support for activities related to drinking water and waste.

Federal Funding Sources (beyond USDA)

Water Infrastructure Finance and Innovation Act (WIFIA) Loans. This EPA program provides long-term, low-cost credit assistance (loans) to help fund water infrastructure. Local, state, tribal, and federal governmental entities are eligible, as are corporations, partnerships, trusts, and state revolving fund programs. Funds can support watershed restoration as long as total federal assistance does not exceed 80% of project cost. The program targets projects >$20M.

Other Federal Grant Opportunities:

- HUD Community Development Block Grants
- Department of Commerce Economic Development Administration
- Department of Defense Readiness and Environmental Protection Integration Program

Tax Credit Opportunities:

- New Market Tax Credits
- Opportunity Zones

State and Local Funding Sources

State Revolving Funds. EPA's Clean Water State Revolving Funds and Drinking Water State Revolving Funds provide low-interest loans and leveraging opportunities for water protection projects in all 50 states. They are increasingly setting aside funds in loan portfolios for green infrastructure solutions to clean water delivery.

Bonds. City and state entities issue bonds to investors, either directly or through the public market, to raise upfront capital for land management activities. Bond issuers (public entities) repay bond holders (investors) the principal, with interest, over time.

Tax Incentives. State and local governments can use many forms of tax relief to increase the flow of capital to projects or transactions that yield environmental and/or social benefits.

Municipal Taxes. City taxes can be put towards funding land management activities.

Water User Fees. Utilities can charge users additional fees to help fund watershed protection.

Trust Funds. Some states have environmental trust funds that provide support for ecosystem management and restoration. These Funds are typically funded through environmental damage fees incurred by land developers.

Development Impact Fees. One-time charges for new development infrastructure or projects enacted by local, state, or tribal governments can sometimes be put towards conservation.

Earmarked Proceeds. Voters/legislators can set aside funding from state or municipal activities. Examples include earmarked funds from license plate sales, hunting permit fees, and state income tax donations.

Private/Philanthropic Funding Sources

Corporate Social Responsibility. Corporate partners interested in generating positive press and/or associating their brands with conservation provide financial/in-kind contributions to advance conservation work or undertake work to green their supply chains and operations.

Individual and Foundation Giving. Foundation grant-making and individual donor giving provide seed money or other funding support for land management activities. These funds can be used to leverage private capital.

Glossary of Key Terms

Unfortunately, jargon abounds in the conservation finance field. At USFS we attempt to steer clear of unnecessary jargon that makes conservation finance concepts less accessible to diverse audiences, while recognizing that it is important to understand the language of the field. We also strive to use consistent language that makes sense to internal and external stakeholders. The USFS Conservation Finance Team believes the following key terms are important for anyone working on conservation finance projects at USFS to familiarize themselves with. At the end of this glossary, we've also listed some common terms that we avoid using because we believe they are confusing, inaccessible, or over-used.

Glossary of Conservation Finance Terms

Additionality Requirement. The requirement that environmental market projects deliver on-the-ground benefits beyond what would have occurred if the project was not undertaken.

Beneficiary. A stakeholder that benefits from project outcomes.

Benefits. The positive social, environmental, and economic/financial results of project activities.

Bond Issuer. A public or private entity that brings a bond to market to raise funds to conduct work.

Capacity. Social, human, and financial resources available to implement a project.

Compensatory Mitigation. The restoration, establishment, enhancement, or preservation, of regulated resources (wetland, stream, habitat, or other) for the purpose of offsetting regulatory-approved unavoidable adverse environmental impacts.

Conservation Finance. The practice of raising, managing, and deploying capital for conservation outcomes.

Conservation Finance Model. A conceptual approach to bringing new funding and financial investment to agency priorities.

Conservation Finance Tool. A defined and proven conservation finance model (see definition above) that can be replicated and scaled across landscapes.

Consumer-Driven Approach. A conservation finance model that leverages the purchase power of end users (i.e., consumers) to fund activities that deliver outcomes.

Corporate Social Responsibility. Voluntary activities conducted by corporations to achieve public good and mitigate negative impact.

Easement. A legal agreement that defines, sanctions, and/or restricts rights for land use/access.

Financing. Financial resources dedicated to project activities *with an expectation* of financial returns (that may also have an expectation of environmental/social outcomes). Certain conservation finance tools are specific to leveraging resources through financing strategies.

Funding. Financial resources dedicated to project activities *with no expectation* of financial returns (although there may be expectation of environmental/social outcomes). Certain conservation finance tools are specific to leveraging resources through funding strategies. Tools that leverage funding strategies can be used as a return and layered into financing tools.

Impact investments. Investments that promise to deliver financial returns in addition to social/environmental benefits.

Implementation partner. A partner that uses project funding to execute on-the-ground work.

Market-rate returns. Financial returns from an investment that are at or above standard interest rates. (See definition of "returns" below.)

Outcomes. The social, environmental, and economic/financial results of project activities.

Outcomes-based financing. A tool that allows investors to cover upfront project costs, and the beneficiaries of project activities pay the investment back over time based on measured project outcomes.

Payor. A beneficiary that agrees to pay back the upfront cost of a project based on agreed-upon terms. (See definition of "beneficiary" above).

Philanthropy. Funding for project activities with no expectation of a financial return.

Project developer. An entity that leads the process of developing a conservation finance project by structuring financial terms with investors/payors and facilitating contracts with implementation partners.

Resilience. Ability to recover from or withstand a disturbance.

Returns. Financial profit on an investment, including even a small profit like .001%.

Sustainability. Capacity for a resource to exist or a practice to continue in its current state indefinitely into the future.

Conservation Finance Jargon to Avoid (and What to Use Instead!)

Intervention. Use "activity."

Investment Vehicle. Use "model" or "tool." (See definitions above).

Mechanism. Use "model" or "tool." (See definitions above).

Pay for Performance or Pay for Success. Use "outcomes-based financing" (see definition above).

Payment for Ecosystem Services. Use "model" or "tool" and describe the payment. (i.e., "carbon financing").

Public Private Partnership. Use "partnership" or "model" and describe the specific partnership. (i.e. "watershed investment partnership").

Service Provider. Use "implementation partner." (See definition above.)

Third-party Restoration. Use "compensatory mitigation." (See definition above.)

Triple Bottom-line Returns. Use "social, environmental, and economic outcomes."

Frequently Asked Questions

I. THE BASICS OF PRIVATE CAPITAL

1) How do investors earn a financial return from investments in conservation?

Investors make a return by capturing a percentage of money made or money saved by stakeholders that benefit from the outcomes of funded activities.

Examples of money made include the following:

- Activities that support healthy forests also improve business operations.
  (e.g., Water replenishment from forest health improvements increases the sustainability of Coca Cola's supply chain, and therefore their bottom line.)
- Sale of environmental market credits.
  (e.g., Companies purchase carbon credits in the voluntary carbon market to meet internal emissions targets. These credits can come from forests where management activities are verified as sequestering carbon.)
- Diverse revenue streams from working lands increase economic viability of keeping forests forested.
  (e.g., A conservation easement, timber sale, or hunting lease, among other revenue streams, can make management of working forests a compelling alternative to land use change.)
- Public benefits from conservation outcomes.
  (e.g., Open space protection improves residents' quality of life, which in turn drives up property values and municipal tax revenues.)

Examples of money saved include the following:

- Reduce the risk of projected natural disturbances occurring.
  (e.g., The state of Louisiana is investing in coastal land protection to reduce the likelihood of downstream flooding and associated costs in future.)
- Reduce the impacts of projected natural disturbances when they do occur.
  (e.g., Water utilities in Louisiana are funding forest restoration so that when flooding occurs there is less damage to infrastructure, meaning existing infrastructure lasts longer and maintenance costs decrease.)

2) Why do investors care about environmental and social outcomes?

Investors care about environmental and social outcomes for a variety of reasons. Some investors care because these outcomes help them to save money now or in the future (see question above). Others care because of external pressures and opportunities including, but not limited to, the following:

- Concern over climate change and other environmental challenges
- Concern over shortcomings of public/philanthropic funding for the environment
- Wealth transfer to millennials interested in social change (~$30 trillion, largest in history)

- Consumer pressure on corporations to run socially/environmentally responsible businesses
- Shifts in consumer behavior towards purchasing sustainable products (e.g., organic, fair trade, etc.)

Some investors don't care about social/environmental outcomes at all, but invest their money in conservation because these investments perform well in the market.

3) Why are investors interested in investing in forests?

Healthy forests provide social, ecological, and financial outcomes to a diversity of stakeholders. While by no means comprehensive, some of these benefits are as follows:

- Clean and plentiful drinking water. *(66 million Americans in more than 3,000 communities – including Los Angeles, Denver, and Atlanta – rely on National Forest System lands to filter their drinking water.)*
- Clean air. *(Forests improve public health by filtering the air we breathe.)*
- Wildlife habitat. *(60% of America's at-risk wildlife live in forests. Regulations to protect these species create market opportunities.)*
- Rural jobs. *(Private forests support 2.4 million jobs and $87 billion in payroll across the country.)*
- Rural economic development. *(Forest-based outdoor recreation, logging, wood products manufacturing, biomass energy, among other industries, all promote rural economic vitality.)*
- Health benefits. *(Exposure to forests boosts the immune system, lowers blood pressure and reduces stress.)*
- Carbon sequestration. *(Trees are ~50% carbon. When they burn, they release carbon into the atmosphere.)*
- Opportunities for recreation. *(Forests provide opportunities for hiking, camping, cycling, hunting, kayaking, and other activities.)*

Beyond this array of ecological, social, and economic benefits, land-based investments also attract investors from a diversification and positive-yield perspective as these assets tend to function independently from macroeconomic trends like inflation.

4) How big is the market for impact and conservation investing?

Socially responsible investing (SRI) or investing that considers an investment's financial return as well as its social/environmental impact, continues to expand in the United States. Total US-domiciled assets under management using SRI strategies grew from $8.7 trillion at the start of 2016 to $12.0 trillion at the start of 2018, a 38 percent increase. This represents 26 percent—or 1 in 4 dollars—of total US assets under professional management.

The green bond market, a segment of the bond market that funds environmental projects, reached a highpoint of $167 billion in 2018, up from $37 billion just four years before in 2014. Since the first green bond was issued in 2007 bonds have been issued by multi-lateral institutions like the World Bank, corporations, states/provinces, and municipalities worldwide.

The market for conservation investing specifically is also growing. A Forest Trends report tracked a total of $8.2 billion in committed capital going to conservation between 2004 and 2015; and found that the annual amount committed doubled in the last two years of the study. While the amount of committed capital is growing, investors are struggling to find investment-ready conservation projects. Forest Trends found that of the total capital committed, $3.1 billion is unspent.

Growth across the impact investing sector, and investor demand for ready-to-go investable projects, signals an opportunity for USFS to find new models that enable us to connect un-deployed investment capital with priority work on NFS lands.

II. FS AND PRIVATE CAPITAL

Why does the Forest Service have a role in this market?

Using conservation finance tools to connect impact investing capital with ready-to-go projects on NFS lands helps USFS to achieve its priorities and provides investors with opportunities to generate financial returns as well as environmental/social outcomes. USFS is uniquely situated to provide investors with compelling investment opportunities for the following reasons:

- Our National Forest System is 193 million acres of forests and grasslands nationwide, meaning that we have the potential to generate investable projects at a scale that other partners do not
- Research & Development can provide data on baseline ecological conditions, developing replicable frameworks for measuring/monitoring project outcomes, and using mapping and analysis to identify areas that are most at risk as well as ripe for private investment
- State & Private Forestry's connections to states, tribes, NGOs, and private landowners can help mobilize large-scale cross-boundary public-private partnerships around conservation finance
- For impact investors interested in systems-level change, working with USFS provides an opportunity to be part of shifting the way a large federal agency thinks about funding its priorities

What authorities allow FS to implement conservation finance projects?

Language in the 2019 Interior appropriations bill directed the Forest Service to, "evaluate the feasibility of innovative financing mechanisms that could leverage non-Federal investments in forest health restoration."

Authorities such as the Wyden Amendment, Stewardship Authority, and Good Neighbor Authority give us the authority to work with for-profit partners on projects that generate non-timber values on public and private lands. We can use private money on public land through the Cooperative Funds Act, and secure private investment through permitted activities on public land through the Special Use Authority. We can also work with for-profits that meet the mutual interest mutual benefit criteria through challenge cost share agreements on projects that support NFS lands.

Reference the USFS Conservation Finance Toolkit: Authorities for Conservation Finance overview for further information.

What are some challenges associated with private investment on public land?

The main challenge we face is not being able to leverage private investment on public land at the pace and scale needed to address the challenges we face. This is a challenge for the following reasons:

- USFS agreement and contract durations are much shorter than typical investor timelines, as well as the timelines required for project activities to deliver measurable social, ecological, and financial outcomes. This limits the applicability of private capital to USFS projects.
- Investors are interested in projects ~$25 million and above, and in working with stakeholders that can make clear and dependable financial commitments over the duration of the project. Total agency cash contributions towards conservation finance projects must be available in year one, which limits the size and scale of these projects. USFS's inability to make long-term commitments limits our ability to participate in these projects.

- The scale at which USFS undertakes planning, and thereby the size of USFS projects, does not typically meet investor demand for projects ~$25 million and above.
- A lack of clarity in the USFS Handbook around working with for-profit primary cooperators that meet the mutual interest mutual benefit criteria, and concerns about endorsement and liability, have discouraged this work in the past. Soon-to-be published revisions to Chapter 70 of the USFS Handbook clarify the ways in which USFS can enter into agreements with for-profit entities.

To move forward with projects funded through conservation finance models USFS often works with non-profit intermediaries to avoid many of the challenges above.

Is FS liable to investors in these projects?

No! USFS does not repay investors and does not enter into contracts with investors. Conservation finance projects are structured so that USFS is not involved in the financial flows. Instead, we show up in other ways. USFS focuses on project planning and permitting, implementation, relationship building and network facilitation, and monitoring and evaluation, among other activities that are critical to moving priority work forward.

How do we ensure that private capital isn't guiding our decision-making?

USFS projects funded through conservation finance models are fully planned and permitted *before* project developers reach out to investors to secure the private capital required to fund project activities. Investors have no interaction with stakeholders during project development, and therefore no opportunity to influence decision-making.

What about augmentation of appropriations?

Augmentation is when a federal agency spends more than Congress appropriated for a specified purpose by either 1) collecting and retaining receipts without authority to do so, or 2) using one appropriation to pay for costs associated with an appropriation specified for another purpose. Leveraging public and private dollars to fulfill our mission to serve the American public does neither of these things. As such, augmentation is not a concern.

III. USFS AND CONSERVATION FINANCE

Is conservation finance new to the agency?

We define conservation finance broadly, as the practice of raising, managing, and deploying capital for conservation outcomes. This includes the piloting of new models that engage private capital, as well as the use of traditional public and philanthropic funding sources. Staff across the agency have been finding creative ways to fund USFS priorities since its founding, so conservation finance is not new for the agency. What is new for us is the testing, replication, and scaling of new finance models that enable us to leverage *private capital* to get work done on the ground. Models that leverage private capital open a new scale of opportunity for financial investment in the landscapes we steward.

What lessons has USFS learned from our experience with conservation finance?

USFS experience with conservation finance has generated the following take-aways.

- NEPA needs to be out of the way. Conservation finance models address financial challenges but cannot do so until planning and permitting challenges are taken care of.
- Models that engage private capital should only be considered when > $3 million in funding is required; otherwise consider philanthropic sources.
- It is important to have leaders at USFS and partners organizations who champion new ideas.
- USFS must be able to devote ample staff and other resources to be a value-added partner.
- If you set the model up well the first time it will be easier to replicate and scale over time.
- Local capacity and expertise must exist to execute projects reliably and in a timely manner.
- It is critical to integrate Grants & Agreements staff early and often in project development.
- It is easier to move forward if baseline data on ecological conditions already exists.
- Local universities can add value as the partners that measure and evaluate project performance.

For mechanism-specific lessons learned please reference the USFS Conservation Finance Toolkit on Box.

How does conservation finance fit within agency priorities?

Conservation finance contributes to our Chief's priorities in the following ways.

- *Shared Stewardship.* Conservation finance models engage many stakeholders, including investors, beneficiaries, researchers, and implementation partners. This work seeds collaboration beyond specific projects, promoting shared stewardship of NFS lands.
- *Increase Pace and Scale of Restoration.* Conservation finance helps the agency to achieve goals around forest restoration and other targets by increasing and unlocking new funding. By raising capital to cover project costs upfront it also accelerates the pace of completion.
- *Improve Recreation, Sustainable Infrastructure and Access.* Conservation finance models can fund construction and maintenance of recreation infrastructure, improving recreational experiences for National Forest visitors across the country.
- *Improve Customer Service.* Informed conservation finance partners can contribute to enhancing public benefits from healthy forest ecosystems with expertise and resources.
- *Empower Employees.* Conservation finance is another tool in the toolbox that empowers district to WO-level staff in finding new collaborative approaches to achieve our mission.

What are some examples of conservation finance at USFS?

The Conservation Finance Team has been busy! Please reference the USFS Conservation Finance Toolkit to learn more about specific finance tools and projects.

Who implements conservation finance project?

It depends. USFS, a non-profit partner, a state or federal partner, or contractors can do the work. USFS can manage the contracts, or they can be managed by a partner. The direction of the fund sharing, nature of the work, benefits of the work, and operational management responsibilities will guide what type of legal or partnership tool can best support the collaboration.

Does conservation finance work everywhere?

Unfortunately, no. Conservation finance is not a silver bullet solution that can address all problems across geographies. Instead, conservation finance models add to our toolbox of solutions, providing

additional options for us to consider as we work to address challenges facing the agency.

Different conservation finance tools have different conditions for readiness and are therefore better fits for different contexts. In addition, different tools require different levels of effort to implement. How much capacity your unit or program has to put towards conservation finance will influence what kind of approach you're able to move forward with.

Please reference the USFS Conservation Finance Toolkit overviews of specific conservation finance tools for information on tool-specific readiness criteria.

I want to do conservation finance in my region/program/forest, where do I start?

We recommend you start by educating yourself on conservation finance. First, review the USFS Conservation Finance Toolkit to educate yourself on different models, authorities, criteria for readiness, and other topics. Next, evaluate whether there are USFS projects that meet the readiness criteria for conservation finance in your area. If promising opportunities surface, you can pursue them yourself or get in touch with your regional Conservation Finance point of contact or a member of the National Partnership Office's Conservation Finance Team to ask for guidance.

How can I engage with conservation finance at USFS?

There are a number of ways you can get involved in conservation finance work at USFS!

- Join the conservation finance community to keep up to date on conservation finance at USFS and beyond, and to join bi-monthly webinars on conservation finance (to be added to the pdl, please email carmen.young@usda.gov).
- To expand your knowledge, browse the USFS Conservation Finance Toolkit (including 2-page overviews of CF, CF at USFS, CF Authorities, CF readiness, and eight CF models and adjoining case studies, among other materials).
- The Conservation Finance Team offered an inaugural CF Training in Fall 2019. These trainings aim to be held annually. Be on the lookout for future training opportunities in your region and beyond.
- Get in touch with the National Partnership Office CF Team about detailing with us.
- Start thinking about projects that might be a good fit for conservation finance and having conversations with potential partners.