



American Rivers
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ISSUE BRIEF: FINDING A FINANCE PATHWAY

A Collaborative Finance Roadmap for Watershed Projects

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ROADMAP

Collaborative finance¹ tools, such as environmental impact bonds or revolving loan funds, are increasingly being employed in the environmental conservation sector to increase the funding available for project implementation. There are examples in the stormwater management and green infrastructure sector, with environmental impact bonds issued in Atlanta, Washington, DC, Buffalo, Memphis, and New Orleans. In the forestry and watershed management world, the Forest Resilience Bond in Northern California and the Southwest Wildfire Impact Fund provide promising examples of impact investing to address funding issues related to infrastructure and natural resource management. The growth and sophistication in the impact investing field continue to increase exponentially. A recent survey of investors that manage \$404 billion in impact investment assets showed that 90% of the respondents believe that the impact market is growing steadily (69%) or about to take off (21%) (Hand et al., 2020).

Despite this interest, coupled with the availability of private capital and the need for more funds to complement public grants and loans, the adoption of impact investment strategies has been slow across the water sector. Beyond a few pilot and demonstration projects, we have not seen widespread movement to implement this approach to project finance. This slow pace of adoption could be due to several reasons: high starting costs, lack of local capacity, disconnect between project developers and investors, lack of payors, and difficulty quantifying outcomes. Clear guidance and lessons from existing projects are still emerging, and there is little publicly available guidance to assist interested parties in deploying collaborative finance tools.

Inspired by the nature-based solutions finance roadmap outlined by Altamirano et al. (2020), we set out to create an adapted version from our experiences promoting these approaches in Northern California. The resulting collaborative finance roadmap outlines a series of steps leading from an initial analysis of existing conditions and creating a strategy to developing a governance structure, securing funding, and then implementing the project. Finally, the roadmap emphasizes careful reflection and learning at each stage (Figure 1). “Finding the pathway” is a helpful metaphor for the collaborative finance process of discovering the right roadmap for each network. The following sections describe details of each stage of the collaborative finance journey.

STAGE 1

Developing a collaborative finance strategy begins with analyzing existing conditions by considering relevant natural, social, and financial systems. We highly recommend developing a theory of change or conceptual model that uses a box-and-arrow diagram approach to visually depict how the system works and potential interventions and approaches for improving it, including reducing the barriers to diversifying project finance.² The model will provide the foundation for developing a theory of change, solution scope, setting shared goals, and measures. It can also



photo: Yuba Water Agency

¹ Collaborative finance is an approach to developing financial instruments which involves cooperative interaction between individual project developers, stakeholders and finance providers. This process may or may not include traditional financial institutions (collaborativefinance.org). We broaden the term to include finance developed by fair and equitable participation of stakeholders in a region, landscape, or watershed to address natural resource and infrastructure management needs, utilizing multiple forms of funding from public grants to private investment. Finance approaches may include outcomes-based finance models such as environmental impact bonds. For a deeper discussion of collaborative finance approaches to financing water infrastructure in California see American Rivers’ [Because It’s Worth It](#) white paper.

² See the [Open Standards for the Practice of Conservation](#) manual for approaches to creating a conceptual model and associated best practices (CMP, 2020).

inform an analysis of the strengths of each organization involved in the collaborative and their roles in developing the chosen collaborative finance model.

A critical next step is to develop an economic feasibility analysis that evaluates metrics, payment terms, and cost-benefit analyses. Barriers to collaborative finance are many, and addressing key finance barriers, such as identifying payors and quantifying the outcome metrics, are vital components of a feasibility plan. Co-creation of the strategy and economic feasibility documents are essential steps for solidifying collaboration (Enduring Arches, 2021).

STAGE 2

Establishing a governance structure is vital for creating a functioning, collaborative. One could argue that governance and rules for engagement may need to be undertaken in Stage 1 while initially forming the collaborative. As a result, we show governance straddling Stages 1 and 2 (Figure 1). In some cases, a single agency may lead a project without collaboration. This approach may be less frequent considering the broad landscape scale and jurisdictional complexities required for many infrastructure and restoration projects. Nevertheless, impact bonds in Atlanta and Buffalo have single jurisdiction payors. Further development of financial details includes revenue streams, market sounding, securing the investors and payors, and risk profile during Stage 2.

STAGE 3

Although securing investors and payors is recommended for Stage 2, some participants may not fully commit until fully executed contracts with government agencies exist. Commitment by private entities may be cautious with government grants, given the time lag between awarded grants and contract execution with agencies. Securing payors is possibly the most critical barrier to overcome for collaborative finance. As a result, this work needs high priority from the collaborative and may need initiation during Stage 1. Arriving at contract signing for all parties before implementation can significantly delay shovels going into the ground, particularly with projects dependent on statutory funding. Federal and state funders can be slow to issue and sign contracts following grant awards. Following contracting, implementation depends on setting performance indicators and a clear implementation plan that outlines the timeline for project execution and management and project evaluation, success monitoring, verification of outcomes, and return payments.

Monitoring and learning from the process, including analyzing assumptions from the theory of change and outcomes, are an often ignored but crucially important part of project success and future implementation. In other words, finding the pathway during the roadmap process is just the beginning of a longer journey towards financial success and scaling efforts to a broader landscape. What kind of process have you followed for collaborative finance? We welcome feedback and examples from the field.

COLLABORATIVE FINANCE SERIES

This paper is part one of a series of issue briefs on collaborative finance. In [part two of the series](#), we provide a primer on alternative approaches to project finance. A third paper explores [barriers facing collaborative finance](#) and strategies to leverage public grants and loans to secure private investment.

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Collaborative Finance Roadmap

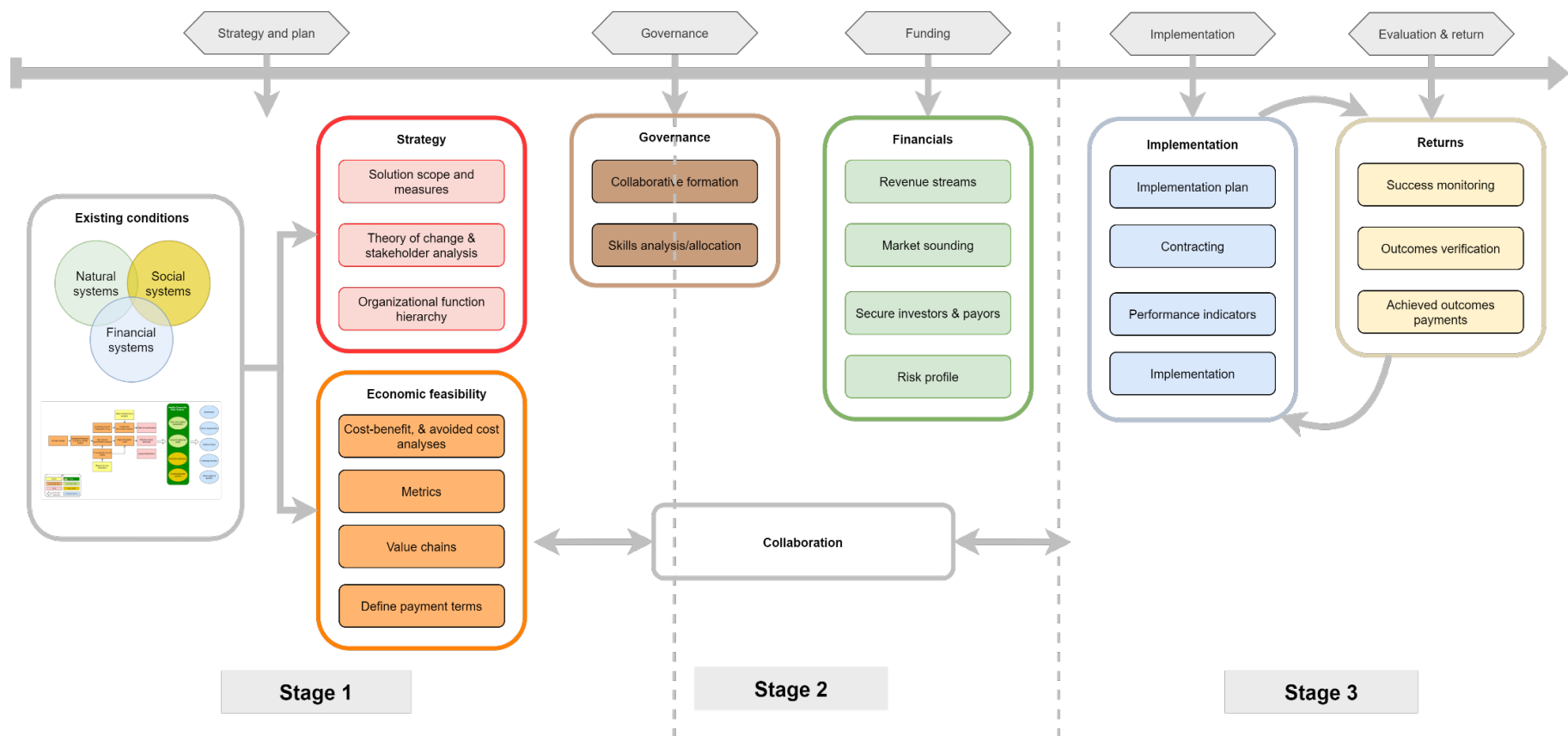


Figure 1. Collaborative finance roadmap. Adapted from [Altamirano et al., 2020](#).