

Sierra to Sea: a regional funding & implementation pilot to reduce fire risk, improve water conditions, and protect communities at speed and scale

Problem

Strategic investment in nature-based solutions (NBS) on working lands can help farmers, ranchers, and timber producers stay in business, better withstand macroeconomic shocks, manage through drought, and deliver food and fiber to Americans more affordably. It can also efficiently reduce the risks and costs of catastrophic fires and floods (\$1 spent now on NBS saves \$6 in post-disaster spending).

Unfortunately, our current conservation approach for working lands is splintered into complicated and siloed funding programs, so large landscapes get broken into fragmented project-by-project efforts each weighed down by heavy process. Local stakeholder groups are left in the middle trying to piece together funds to implement a fraction of the projects needed.

We need a different approach that achieves conservation results at pace and scale.

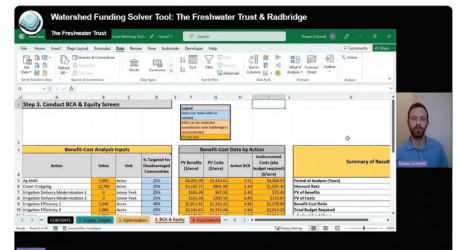
Solution: “Sierra to Sea” regional funding & implementation pilot

In response to compounding climate-driven fire, drought, and flood impacts in the region, partners are piloting a data-driven, integrated regional funding and implementation approach in an area that spans the forested headwaters of the Eldorado National Forest (ENF) down through the American, Cosumnes, and Mokelumne Rivers, through the Sacramento-San Joaquin Delta and into the San Francisco Bay. See map on next page.

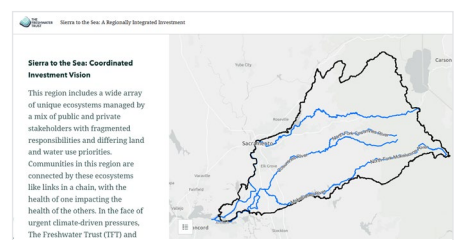
This region has water-vulnerable agricultural communities, communities at risk from wildfire, significant ecological value, and a robust partnership foundation, including the Healthy Eldorado Landscape Partnership (HELP) and other anchor programs in the lower watershed. To develop and pilot this approach, The Freshwater Trust (TFT) secured funding from the Innovative Finance for National Forests (IFNF) grant program, Blue Forest, and Resources Legacy Foundation.



For an overview of the challenges and solution, watch this brief video:
<https://vimeo.com/1076212045>



For a quick summary of how the Solver Tool works, watch this video:
<https://vimeo.com/857875992>



Explore a regional story map:
<https://bit.ly/sierra-to-sea>



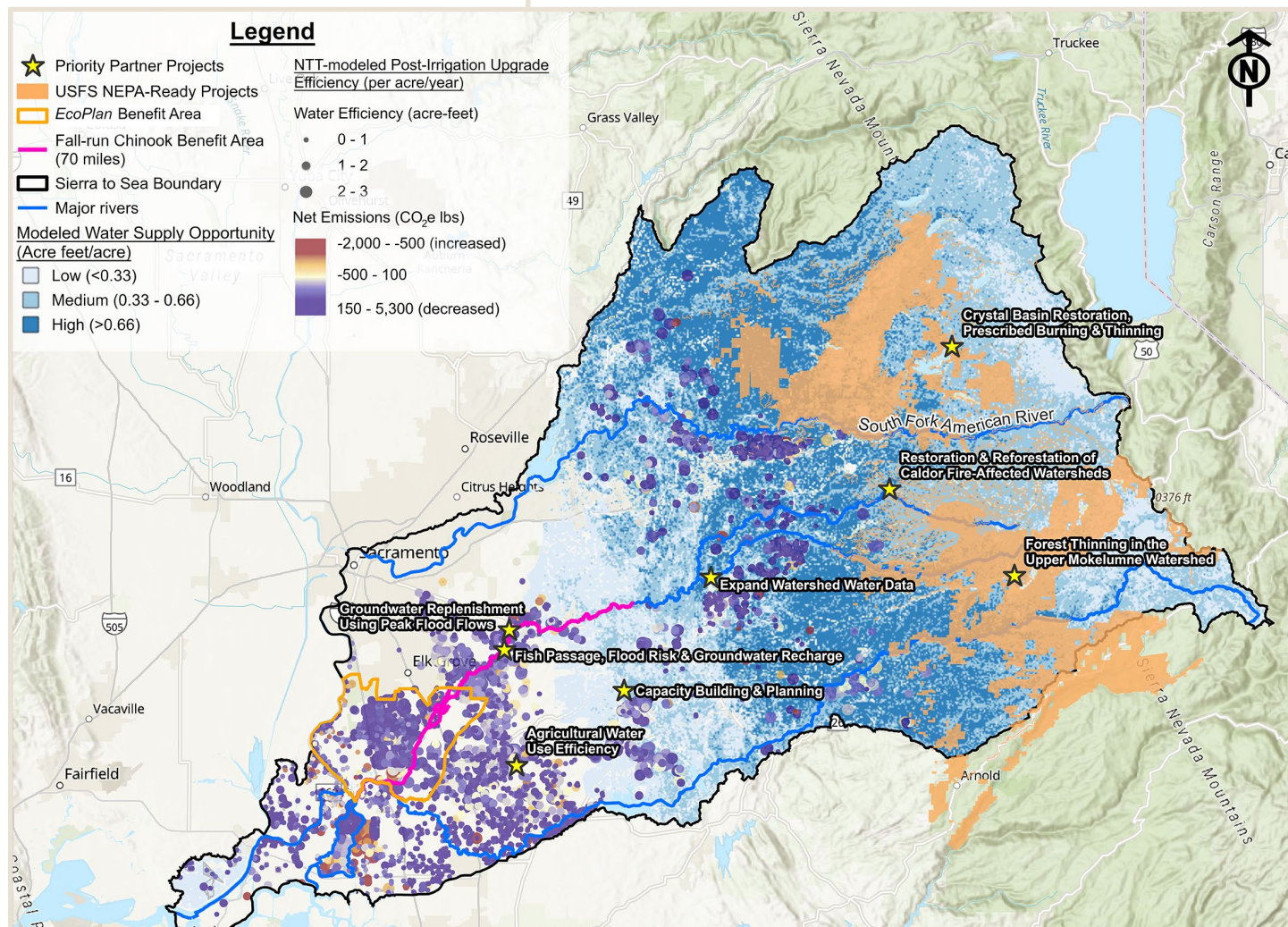
Read in-depth articles in The Water Report: <https://bit.ly/WOB-TWR253>

Utilizing the Watershed Outcomes Bank framework

The Sierra to Sea pilot employs the “Watershed Outcomes Bank” (WOB) framework. The framework utilizes advanced technology to prioritize where we invest; secures and aggregates funding; directs otherwise fragmented funding to the most effective projects; and streamlines administration, management, and reporting.

The WOB framework follows these replicable steps:

1. Define regional water quantity and quality, greenhouse gas (GHG), fire, and flood risk resilience targets
2. Quantify project outcomes using those same metrics for an array of key project types (e.g., forest thinning, irrigation upgrades, aquifer recharge, habitat restoration, etc.)
3. Use a “Solver Tool” to identify the most cost-effective solution
4. Identify high-impact, solution-aligned projects and quantify benefits to get them funding-ready
5. Pursue regional scale funding proposals (using units as “currencies” to attract new funders)
6. Match multiple funds to projects through the Bank
7. Secure and deploy programmatic financing to smooth out cashflow gaps
8. Consolidate reimbursement, accounting, tracking, and reporting in centralized database



Questions? Please reach out to Tim Wigington, VP of Finance & Policy, at tim@thefreshwatertrust.org.

Sierra to Sea: Frequently Asked Questions

Why do this, and why now?

There's not much to lose and everything to gain. California projects that by 2050, the cost of climate change will be \$113 billion/year. Investing in nature-based solutions upfront can help cut that cost down by 6x, but the current funding and implementation approach cannot deliver on that potential. We must implement a structural approach that integrates fragmented funding and implementation efforts into an efficient, targeted regional solution that delivers results at speed and scale.

Why should public funders support the WOB, and why is the WOB needed?

Agencies have been charged with "integrated regional water management," building "landscape/ multijurisdictional projects that provide multiple benefits" (Prop 4 § 90620), and maximizing funding leverage "to produce greatest public benefit" (Prop 4 § 90050a). Programs like the Regional Forest & Fire Capacity (RFFC) also call for "demonstration projects that showcase scalable models for management, funding, and achieving and quantifying multiple benefits" (Cal. PRC 4208.1(b)).

Even with strong State interest, it has not been feasible to deliver funds and projects at the intergovernmental level. The WOB public-private-partnership (P3) model creates the needed "connective tissue" between multiple partner efforts, and provides a formal governance structure for flexible and efficient operation in the space between programs.

How does the WOB framework work?

1. *Prioritization and Integration services.* The Freshwater Trust (TFT) helps partners scale efforts, including identification of the "optimal portfolio" of projects, regional funding proposal support, and consolidated accounting/tracking.
2. *Partner governance.* TFT and the USFS signed a partnership agreement. An attached Partner Charter describes a voluntary agreement to collaborate on the pilot, and outlines roles, responsibilities, and shared expectations.
3. *Professional funding aggregation, matchmaking and on-time delivery.* TFT utilizes a nimble clearinghouse entity to aggregate resources for the watershed. Partners can contract with the WOB to help secure new federal, state, or private match dollars, to act as a fiscal sponsor, or to serve as the lead applicant for landscape proposals. The WOB also provides upfront financing to ensure dollars get to projects on time.

Why should partners participate in this voluntary effort?

Once operational, the WOB provides a streamlined, scalable approach that partners can opt into. Every partner currently

duplicates skills, personnel, and time to pursue and manage complex public funding agreements. Instead of competing against each other for scarce resources, the WOB allows partners to focus on project development, engagement, and implementation. Working together also enables large "portfolio" funding proposals and creates more collective bargaining power to negotiate programmatic permits and "green tape" cuts. All partners benefit from a region becoming a funding magnet.

Who is a partner on the Sierra to Sea pilot?

The following partners have signed onto the Charter: American Forests, American Rivers, Blue Forest, Calforests, El Dorado Water Agency, El Dorado & Georgetown Divide Resource Conservation Districts, Great Basin Institute, Northern Delta GSA, and The Freshwater Trust.

What is the quantification "throughline" that enables the WOB?

The WOB relies on a common set of outcome metrics that appeal to the greatest cross-section of funders, are readily quantifiable using existing data and tools, can be applied to multiple project types, and can scale up to regional/landscape targets. This "throughline" connects prioritization, project development, leveraged funding, and tracking activities.

Why was this geography selected for this Sierra to Sea pilot?

We chose a scale that would allow us to integrate efforts from the headwaters down to the ocean. Our intent is "big enough but not too big." To be successful, a WOB area needs a critical mass of projects, funders, and benefits, as well as regional resilience targets to shoot for. The focus now is on refining the framework through this pilot so that it's easier to replicate in other geographies soon.

What do we get from this approach?

Drive efficiencies at multiples scales: By centralizing key functions and avoiding role duplication, we can gain efficiencies in funding pursuits, administration, tracking, and reporting.

Access to more funding: By quantifying the multiple benefits of projects, the WOB opens up a wider array of potential funders and creates more project-funder combinations.

Better ROI: Conservation funding is finite so we must invest effectively. This data-driven framework maximizes results (e.g., find, fund, and implement projects that return the best \$/outcome), and reduces costs. By building up bigger, more predictable funding levels through the WOB, supply chains will start to deliver more cheaply. The WOB also saves on consolidated administration costs and can reduce contractor costs by addressing cashflow gaps.

Faster progress: We're currently constrained by the pace of funding reimbursement, with stops and starts, and continuous operational challenges. The WOB provides access to programmatic financing, which in every other sector of the economy, is what has unlocked speed.



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Sierra to Sea: Technical Questions

Governance & Benefits

What is the WOB governance structure?

With so much fragmented effort, we realized the need for a more formal, but still flexible, operational structure to successfully integrate and leverage many partner efforts. The umbrella organizing feature is a Master Participating Agreement between USFS and TFT. The MPA is more formal than an MOU and allows for later addition of project funding and subsequent federal project funding agreements. Attached to the MPA is a partner charter that outlines the principles/non-binding commitments partners are making to each other to pilot the WOB. Those who sign agree to participate in a data-driven, coordinated funding approach (WOB) because we recognize that our current funding and implementation efforts are incapable of delivering results at the pace and regional scale needed to protect against fire, flood, and drought. The charter can be signed at any time. The MPA/charter provides enough structure for TFT to deliver the “soft” functions of the WOB: a ledger of funding-ready projects with quantified benefits to appeal to multiple funders, support putting together larger regionally coordinated funding proposals, coordinated sales, more match/leverage options, and consolidated accounting/tracking.

How does money flow in the WOB? Do all the \$ have to flow through the WOB?

The soft WOB functions are enabled by the MPA/charter, but the MPA/charter does not cover the movement, matching, leveraging or matchmaking of funds. This is what the actual WOB entity is for. The WOB entity (subsidiary LLC of TFT formed for each geography) is a transaction entity for formally matching/leveraging, co-funding, contracting, and financing activities. The WOB offers three main contracting vehicles around project dollars. *First*, if a partner secures an award/contract but needs more \$ for a project, it can sign a match/parallel co-funding commitment with the Bank whereby the Bank can use that \$ as match to try and secure more \$ and/or the Bank can bring more \$ to the project. *Second*, the Bank can serve as a fiscal sponsor and be lead applicant for a consolidated set of groups and projects. *Third*, the Bank can also be a direct recipient of funding that it secures on its own. The WOB then offers consolidated accounting, reporting, and tracking functions associated with all the \$ and benefits associated with projects.

How does the WOB avoid creating extra layers/costs of administration?

The WOB does take more time to set up on the front end but ultimately delivers multiple efficiencies once operational (see next bullet). Specific to labor costs, the WOB only charges for the costs of its functions (which can be spread across agree-

ments or subsidized through securing operation-only grants and donations). With respect to indirect costs, the WOB follows federal rules that ensure that pass through entities do not “double dip” on indirect related to project costs (see definition of “modified total direct costs” and use of federal NICRA indirect rates).

What are the benefits of this arrangement versus funding going straight to implementation entities?

The WOB offers several potential benefits/efficiencies: **1)** allows implementers to focus their efforts on project development, stakeholders, and efficient project implementation, while delegating the grant administration, reporting, tracking and fiscal responsibility that are currently capacity barriers to accessing funds and delivering projects; **2)** instead of competing, implementers can combine projects into bigger applications with the grant management support necessary to manage a larger effort than would have been possible; **3)** the WOB considers a wider array of potential match funders (e.g., federal and state programs across multiple disciplines, compliance, corporate, foundation, private). The quantification of projects offered by the WOB makes these new project-funding combinations possible; **4)** building a match/leverage pool at the watershed (wholesale) scale is more efficient and creates more opportunities than if doing at the project scale; **5)** this approach allows for larger regional efforts, which can lead to better landscape scale results. With the quantification throughline, it is easier to report/track outcomes at scale; **6)** coordination of funding at this scale creates the opportunity to become a “funding magnet” and opens access to programmatic scale financing. TFT also spends extensive time working with agency leadership and legislative appropriators helping these decision-makers structure their programs in a way that will ultimately open opportunities for WOB-like funding and implementation models.

How were the metrics chosen and how are they used in the WOB?

The WOB has a strong data “throughline” based on a common set of metrics. The HELP Data Workgroup spent 1+ year sorting through and then selecting a handful of “Rosetta Stone” funding metrics that appeal to the greatest cross-section of funders, are readily quantifiable using existing data and tools, that can be applied to multiple project types, and that also have watershed-scale targets in those same units. Selecting and using these units opens an entire funding and implementation framework. We can first use a “Solver Tool” to determine how much of which key action types can most cost-effectively achieve watershed-scale targets. This recommendation allows us to focus on identification/cultivation of specific projects that fit those criteria. With those project benefits quantified, we can then mix/match/package projects into larger-scale proposals and find new ways to connect new funders with projects. We can then quantify outcomes from implemented projects and dynamically track progress against the original targets. This whole throughline enables easier prioritization, funding pursuit, tracking, reporting, and adaptive management.



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What lessons does this approach incorporate compared to the SNC/Cal Fire/USFS landscape block grant pilot?

The same intent, just implemented one layer down (instead of at the intergovernmental level), with a specialized professional aggregator/clearinghouse/general contractor in the middle to ensure that the desired efficiency, scale, and speed benefits are realized.

Risk & Liability**How is liability distributed between funders, the WOB, and partners?**

There are three key partners in this arrangement. The funder, the implementer, and the WOB. The funder makes an award. If the award is routed through the WOB, the WOB can advance payments to implementers. The conditions for this advance would be defined in an agreement between the WOB and the implementer, with the WOB assuming the risk of final project compliance with funder requirements.

What if implementation performance doesn't meet standards?

Performance standards are defined by the funder and, if managed through the Bank, through the WOB-implementation subcontract agreement (which may bundle requirements from multiple funders into a single contract with the implementer). The WOB assumes some forward risk by advancing payments but will only make advances if pre-defined conditions that indicate a project is likely to meet standards have been met.

What if my priority project does not get fully funded?

The WOB will support you in trying to secure a full funding stack, or help in breaking the project into fundable phases. Similar to standard conservation funding, it is advisable to develop and implement projects in relation to secured project funding. The WOB can help secure more funding, faster than going it alone, and can also help bridge the gap between project expenses and funder reimbursement.

If the Bank advances funding to a project, is the implementer responsible for paying back interest costs?

No, the implementer is not responsible for the cost of financing. The Bank will implement contractual triggers to ensure that projects are implemented on a timely basis once advances have been made to ensure that it does not carry expenses for unexpectedly long periods of time.

Does the implementer have to repay the principal?

It depends. If the reimbursement arrangement is directly with the Bank, the implementer will have no obligation to repay the principal. If the reimbursement arrangement is directly with the implementer, the implementer will need to transfer those reimbursed funds back to the Bank so that the Bank can repay the principal amount that was advanced.



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