PEAKS TO PEOPLE WATER FUND

OPERATIONS MANUAL





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VISION

A Colorado where rural and urban communities join to enhance the natural resources, wildlands, and agricultural areas upon which our quality of life depends.

MISSION

To create a watershed investment fund where community members support land stewards who conserve and enhance nature's ability to provide clean and abundant water, healthy food, productive soils, carbon storage, wildlife habitat, and inspiring open spaces for all community members to enjoy.

ACKNOWLEDGMENTS

The development of the Peaks to People Water Fund has been supported by many knowledgeable and dedicated individuals over many years. A committee made up of volunteer community stakeholders was established in 2010 to lead the initial development of the Water Fund through the completion of the Situation Analysis and Feasibility stage; which ended in March of 2014. In the Exploration and Feasibility stage, the Committee worked extensively on stakeholder outreach, encouraging input and participation by diverse groups—utilities, companies, and others on the funding side, and private landowners and public land management agencies on the land conservation and stewardship side. Upon conclusion of the Exploration and Feasibility stage the committee was disbanded with members forming the Working Group.

The Working Group was composed of diverse stakeholders; individuals and organizations; with expertise and interest in the development of the Water Fund. Members included scientists and economists, private landowners, public land managers, non-profit organizations, city utilities, businesses, consultants, and other stakeholder groups. The Working Group supported the continued build-out of the Water Fund and working with the Director to strategically advance the goals of the Water Fund.

In late 2017 the Working Group split into two primary groups; the Stakeholder Committee and the Science Advisory Committee. These two groups now support the Executive Director of the Water Fund and the further development of this program.

The development of this Operations Manual was supported by the valuable guidance and direction by the following partners:

- Heather Schinkel, Executive Director of the Peaks to People Water Fund
- Kate Shelton, Coordinator of the Peaks to People Water Fund
- Jerry Gibbens, Northern Water
- Eric Reckentine, City of Greeley
- Jenn Vervier, New Belgium Brewing Company
- Corey Odell, Odell Brewing Company
- Robert Sturtevant, Colorado State Forest Service (retired)
- Mary Bollinger, Landowner
- Ben Gannon, Colorado Forest Restoration Institute

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DOCUMENT ORGANIZATION

The Peaks to People Water Fund (Water Fund) Operations Manual (Manual) provides all the material necessary for understanding and participating in the Water Fund. The table below provides a summary of the contents of the Manual. The primary audience of the Manual is current and potential participants in the Water Fund. This document is organized into the following major sections, along with a set of more detailed appendices.

OPERATIONS MANUAL CONTENTS

Section 1: Overview of the Water Fund	Provides an overview of the objectives, scope, and primary participants of the Water Fund.
Section 2: Participation in the Water Fund	Defines the detailed process for landowners and land managers to participate in the Water Fund, including fulfilling ongoing verification requirements.
Section 3: Investing in the Water Fund	Defines the detailed process for those who benefit from a healthy watershed and other stakeholders to invest in the Water Fund.
Section 4: Managing the Water Fund	Describes in detail the process for verifying, tracking, and reporting environmental benefits generated through the Water Fund and incorporating new information and best available science into the Water Fund over time.
Appendices	
Error! Not a valid result for table.	Defines key terms used throughout the Operations Manual
Appendix B. Watershed Coalition Contact Information	Provides contact information for watershed coalitions operating in the Cache la Poudre and Big Thompson watersheds.
Appendix C. Pay for Performance Contracting Options for Beneficiaries	Describes potential funding structures for investments through the Water Fund.

NEED & OPPORTUNITY

Colorado's watersheds have provided generations of community members with clean water, abundant wildlife, inspiring places for recreation, healthy forests, locally grown food, and much more. But our watersheds are threatened. Colorado's population is expected to double in the next 40 years. Wildfires are occurring at greater scales and intensities. Our climate is less predictable. Water supplies are limited, and the purity of our streams and lakes are suffering. Funding to address these issues is limited.



Figure 1. Threats to watersheds include sprawl, wildfire, and sediment.

The Water Fund is intended to preserve and enhance our quality of life by proactively addressing the growing threats to critical natural resources and watershed health. The Water Fund seeks to establish an innovative new mechanism—a watershed investment fund—that will leverage current funding programs and foster expanded collaboration in the Cache la Poudre and Big Thompson river basins in Northern Colorado. The Water Fund is currently envisioned as a voluntary, incentive-based watershed fund for the upper portions of these basins. The Water Fund may also consider future development of a regulatory-based, water quality trading program (nutrient trading) for the lower portions of these basins.

By working together to protect the health of watersheds, the Water Fund can ensure that the natural resources communities rely upon will remain healthy, vibrant, and economically productive for decades to come.

The Water Fund will achieve these objectives by:

- Leveraging the combined investments from multiple stakeholders,
- Using collaborative, science-based analyses to prioritize investments and actions,
- Tracking program accomplishments and verifying project outcomes through post-treatment monitoring, and
- Increasing resources available to support forest stewards.

GOALS & GUIDING PRINCIPLES

The Water Fund envisions a Colorado where rural and urban communities join to enhance natural resources, wildlands, and agricultural areas upon which our quality of life depends.

The Water Fund will achieve this vision through two goals:

 Preserve our quality of life by raising the awareness of rural-urban interdependence on the benefits of healthy forests and rangelands, and the threats to water quality and quantity, wildlife habitat, and recreational opportunities. 2. Create a voluntary, incentive-based watershed investment fund enabling transparent and efficient payments to landowners and natural resource managers who use best management practices in priority places that enhance nature's benefits and protect water supply infrastructure in the upper Poudre & Big Thompson watersheds.

GUIDING PRINCIPLES

The following principles have and will continue to guide the development of the Water Fund's watershed investment fund.

Collaboration

The Water Fund seeks the involvement of both public and private land managers, communities, the private sector, government agencies, non-profit and university participants, and will seek to compliment, rather than replace, existing conservation programs.

Voluntary & Incentive-based

The Water Fund invites voluntary participation by both "beneficiaries" and "stewards." Beneficiaries participate voluntarily to the extent it supports their economic, social and environmental goals. Stewards are incentivized to participate with financial and technical assistance.

Science-based & Quantitative

The Water Fund will utilize quantitative tools to measure watershed improvements that are scientifically supported, credible, usable, standardized, transparent and repeatable. The Water Fund will also employ clear, consistent operating protocols to validate projects and estimate, certify, register, and transfer environmental benefits from stewards to beneficiaries.

Flexible

The Water Fund will be adaptable to new geographies, changing circumstances and new knowledge, using performance results to modify and improve procedures and outcomes.

CONTEXT & SCOPE

The Water Fund is developing a program in the Cache la Poudre River and Big Thompson River watersheds (Figure 2). The program is voluntary and incentive-based for both landowners and investors.

The Water Fund prioritizes financial investments based on scientifically-driven objectives to maintain and improve source water quality. For instance, a beneficiary may invest funding to support a certain acreage of forest health improvements (such as forest fuels reduction projects) to achieve a measurable improvement on source water quality by reducing the likelihood and severity of watershed impacts from wildfire.

One compelling feature of the Water Fund program is the cost-effectiveness of its approach. It is shown to be much less costly to implement green infrastructure practices (such as removing nutrients and sediment from water in the upper portions of watersheds before they reach downstream water treatment plants and end users) than it is to replicate the ecosystem services provided by the forest, including installing expensive new water treatment equipment, fighting wildfires, and post-fire rehabilitation.¹

¹ Talberth, J., Mulligan, J, Bird, B, Gartner, T. A Preliminary Green-Gray Analysis for the Cache la Poudre and Big Thompson Watersheds of Colorado's Front Range. Phase I Final Report.

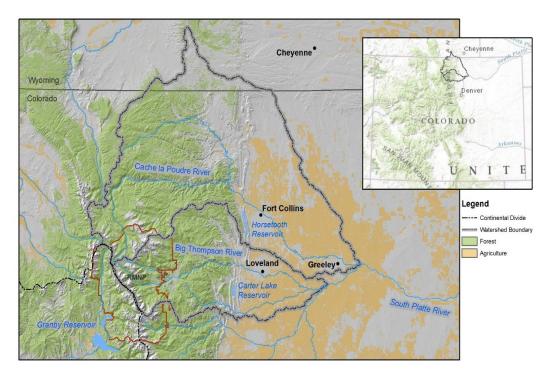


Figure 2. Cache la Poudre River and Big Thompson River Watersheds

OPERATIONS OVERVIEW

The Water Fund acts as a connector between **beneficiaries**, those who want to manage business risks or support watershed improvements, and **stewards**, those whose practices can improve the provision of nature's benefits (Figure 3). The Water Fund helps identify priority places for restoration and best practices for enhancing those places in our watersheds. Local businesses, individuals, or organizations (beneficiaries) who have a need for benefits like improved water quality invest into the Water Fund's watershed investment fund. The Water Fund then matches the investment with landowners, watershed coalitions, public land managers and other land managers (stewards) who implement new, expanded or improved practices on their lands to meet the beneficiaries' goals.

The types of practices implemented should include strategies for reducing the probability of high severity wildfire that will lead to erosion, such as forest fuels reduction projects. While many stewards already use some of these practices, there are often financial hurdles preventing more widespread and effective implementation. A credible third party will monitor projects, measure, report and verify that practices have resulted in benefits such as improved water quality. The Water Fund, in turn, will reports to the beneficiaries and will make payment to the land stewards. The return on the beneficiaries' investment is in the form of ecosystem service benefits received, such as improved water quality.

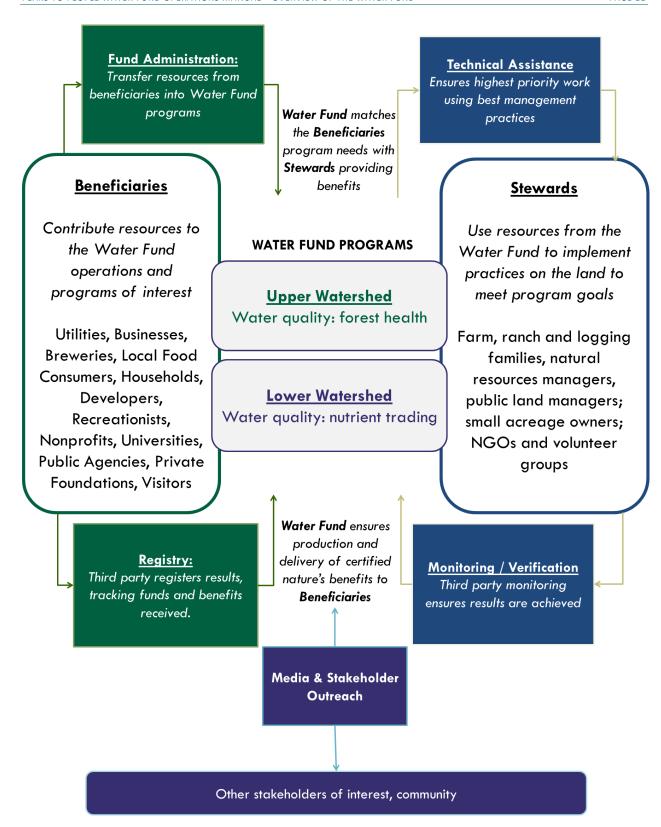


Figure 3. Flowchart of the Water Fund's Processes and Stakeholders

COLLABORATION WITH WATERSHED COALITIONS

There are many organizations working in the Poudre and Big Thompson watersheds whose missions overlap closely with the Water Fund. Their work is important to the watersheds and relevant to the Water Fund. Many landowners and land managers will require help planning and implementing a forest health improvement project. These landowners and land managers are encouraged to contact their watershed coalition for support in participating in the Water Fund. Given the level of expertise developed by these watershed coalitions in administering grants, hiring contractors, and implementing complex projects, watershed coalitions are expected to be ideal vehicles for receiving grants from the Water Fund. See *Appendix B. Watershed Coalition Contact Information* for help locating your local watershed coalition.

Water Fund members have identified ways the Water Fund can add value to existing and future efforts in watersheds; these include:

- Fill the gap between restoration need and available funding.
- Leverage new funding to scale up existing restoration efforts; including providing matching funds to increase size of partner grant applications.
- Scale up restoration efforts within watersheds and across watersheds.
- Jointly develop and standardize restoration priorities; including places, practices and monitoring.
- Expand/improve monitoring to measure change in multiple ecosystem services.
- Connect and quantify economic values of restoration efforts (using the Watershed Investment Tool, Co-Benefits Calculator).
- Directly connect landowners with investors, develop certificates and contracts to ensure restoration implementation and success.
- Scale up awareness of watershed needs to support watershed efforts.

Three of the organizations have conceptually drafted how they might work together, which may apply to all of these organizations (Figure 4).

Watershed Coalitions

- Develop watershed restoration plans
- Implement on-the-ground restoration projects from plans
- Project monitoring (including 3rd party) to assess results and report to funders
- Raise & manage funding for local projects & apply to the Water Fund for funding
- Outreach for local projects

Shared

- Joint priority setting of places, practices & monitoring
- Joint grant application
 - Joint outreach

Water Fund

- Distribute funding to stewards for priority restoration projects
- Create & manage a new watershed fund to track projects and funding
- Create & manage a registry to verify & certify ecological uplift & report to beneficiaries
- Outreach to support current and future restoration across multiple watersheds
- Expand programs over time to bundle/add ecosystem services
- Use 3rd party monitoring for verifying environmental benefits

Figure 4. Individual and Shared Roles for the Watershed Coalitions & Peaks to People Water Fund

ORGANIZATIONAL STRUCTURE & ROLES

The organizational structure of the Water Fund includes a Board of Directors, Executive Director, Steering Committee, Science Advisors, Fund Manager, and Technical Assistance Providers to ensure the Water Fund is effectively managed and improved over time (Figure 5). Information regarding the key duties for each of these entities is provided below.

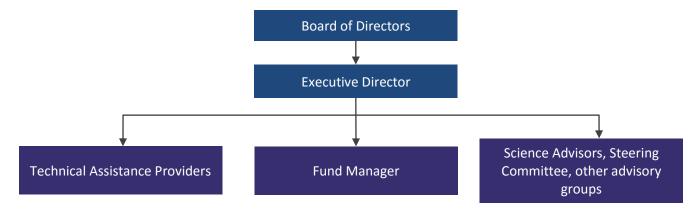


Figure 5. Organizational Structure of the Peaks to People Water Fund.

Board of Directors

The Board of Directors is a formal group responsible for selecting a qualified Executive Director, overseeing the operations of the Water Fund, and making high-level Water Fund management decisions. The Board of Directors and its processes are governed by the Bylaws in the Articles of Incorporation for the Water Fund. The Water Fund will be incorporated as a non-profit entity. Table 1 outlines key ongoing duties of the Board of Directors.

Table 1. Key Responsibilities of the Water Fund Board of Directors

	BOARD OF DIRECTORS - KEY RESPONSIBILITIES
Ensure Program Performance	 Evaluates annual reports from the Executive Director that assess the effectiveness of projects in relation to overall Water Fund performance goals; provides reports to stakeholders as necessary. Oversees contracts and associated finances. Executes annual audit, or contracts for the auditing of, the Executive Director's finances and operations, and determines if corrective actions are needed to ensure finances and operations are sufficient to support ongoing, consistent operations of the Water Fund.
Oversee Water Fund Management	 Approves and convenes Science Advisors as necessary. Selects and manages a qualified Executive Director. Resolves disputes among Water Fund participants that cannot be resolved independently or in consultation with the Executive Director.
Ensure Water Fund-wide Adaptive Management	 Discusses and adopts adaptive management and improvement recommendations provided by Executive Director and others. Gains input from Science Advisors on recommendations to be incorporated into the Water Fund's tools and processes.

Executive Director

The Executive Director manages the operations of the Water Fund and reports directly to the Board of Directors. The Director makes day-to-day management decisions based on authority granted in the Bylaws, and the direction provided by this Water Fund Manual. See the *Administrator's Handbook* for a

detailed overview of the Executive Director role. Table 2 outlines the key responsibilities that are necessary for the Director to perform.

Table 2. Key Responsibilities of the Executive Director

	EXECUTIVE DIRECTOR - KEY RESPONSIBILITIES
Water Fund	Manages day-to-day Water Fund operations.
Administration &	 Manages all Water Fund tools, guidance and forms.
Accounting	 Manages the Registry.
Steward &	 Responds to inquiries of interest from Beneficiaries and Stewards, connecting them to
Beneficiary	relevant resources.
Engagement	 Ensures any necessary additional outreach to Stewards and Beneficiaries occurs.
	 Develops annual performance reports and provides to the Board of Directors and
Donorting 9	relevant stakeholders.
Reporting & Accountability	 Brings improvement recommendations to the Board of Directors for consideration.
Accountability	 Performs quality-control checks on information submitted by Technical Assistance.
	Providers and Water Fund participants.
Compliance 9	 Ensures Water Fund compliance with relevant state and federal policies.
Compliance & Enforcement	 Works with Stewards to ensure contract compliance and implement corrective actions
Lillorcement	through remedial action plans, when appropriate.
	 Contracts for project implementation, verification and monitoring.
Financial &	 Confirms financial assurances when necessary.
Contracting Support	 May facilitate auctions or requests for proposals (RFPs) for Beneficiaries.
	 May administer contract payments between Beneficiaries and Stewards.
Colones O Tooknies	 Coordinates with Science Advisors and Technical Assistance Providers for any relevant
Science & Technical	feedback, research or analyses.
Support	 Confirms verification and monitoring for projects.

Advisory Groups

Science Advisory Group

The Science Advisory Group consists of qualified scientists whose purpose is to evaluate and inform the development and revision of assessment methods for resources included in the current scope of the Water Fund, and to inform verification and monitoring efforts. The Science Advisors may also contribute a scientific perspective to guide Water Fund transactions.

Science Advisors are selected by and advice the Executive Director. The Bylaws outline the process by which Science Advisors are selected and provide the Board with the authority to appoint additional Science Advisors in the future to provide guidance on other species or natural resources addressed by the Water Fund.

Stakeholder Committee

The Stakeholder Committee is a volunteer committee that helps guide the Water Fund's strategy and operations. Made up of regional stakeholders and partners, the Steering Committee supports the Executive Director with specific issues and gives guidance as specific issues arise.

Fund Manager

The Fund Manager manages all funds collected by the Water Fund until funds are distributed for restoration or management of project sites.

Technical Service Providers

Technical Service providers support the work of the Water Fund by providing technical capacity to the Director to conduct treatments, verify project outcomes, and monitor projects through time. Technical Service Providers are managed by the Director.

ADAPTIVE MANAGEMENT

Under the process outlined in this Operations Manual, the Water Fund is expected to manage a transparent and inclusive process to improve the Water Fund over time. This annual learning process will also improve the efficiency and effectiveness of conservation actions and water quality overtime. The process includes prioritizing information needs and monitoring, gathering suggestions for how to improve the Water Fund from stakeholders, and reporting on watershed basin performance to donors and other interested stakeholders. See the *Administrator's Handbook* for a detailed description of the proposed annual adaptive management process.

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CTION 2: PARTICIPATING IN THE WATER FUND	

This section provides an overview of the process for Stewards to participate in the Water Fund. This section is intended for landowners, watershed coalitions, public land managers and other land managers who wish to use the Water Fund to implement and/or maintain forest health projects on their lands.

Although the watershed investment fund can be used for a wide variety of best management practices, the initial focus of the Water Fund is water security and quality in the Poudre and Big Thompson watersheds. The goal is to establish a watershed investment fund that will begin financing projects on forested lands in the upper watersheds in 2018, and potentially on agricultural lands primarily in the lower watersheds once the viability and success of the upper watershed implementation is determined.

BENEFITS OF PARTICIPATION

The Water Fund will support **Stewards** to quantify the environmental benefit from implementing watershed protection and restoration practices. These quantified benefits can attract funding from public and private investors seeking to improve water quality and overall watershed health. By participating in the Water Fund, stewards can:

- Efficiently identify the areas and opportunities with the greatest potential to preserve or create environmental benefit.
- Get financial support for land stewardship practices that protect and restore the functionality of ecosystems.
- Create a tangible product from preservation and restoration efforts with financial, social and environmental value.
- Be able to confidently include preservation and restoration projects into their annual planning processes.

PROJECT RESTORATION & STEWARDSHIP PROCESS

The following steps outline the process for Stewards to work with the Director to plan, implement, and steward projects, including reporting project performance over time and accessing stewardship funds for ongoing maintenance (Figure 6).

1. Project Restoration & Stewardship Planning

- a. Complete Project Site Evaluation The Steward works with the Director using the Watershed Investment Tool and Co-Benefits Calculator to evaluate the project site and identify potential restoration actions that meet investor requirements and watershed goals. The Director, or a technical service provider, works with the Steward to recommend restoration actions that will meet investor needs, contribute to watershed goals, and maximize ecological benefits and environmental return on investment. The Steward signs the Eligibility Form, and the Director approves site to proceed with restoration design.
- b. Identify & Compare Alternative Conceptual Project Designs The Steward and Technical Service Provider will create and evaluate multiple alternative project designs, if appropriate, and identify a preferred alternative based on the cost to implement and environmental return on investment.
- c. Complete & Submit Conceptual Project Restoration Designs The Steward completes and submits the alternative project designs to the Director for input. Any alternative design should, at a minimum:

- i. Identify expected project outcomes, and timeline for achieving outcomes;
- ii. Include a map(s) showing the location of the site in relation to other restoration sites, and site-specific details as part of the restoration design plan;
- iii. Set out the techniques/actions necessary to achieve restoration and stewardship objectives;
- iv. Provide an estimate of restoration cost and long-term stewardship costs for the full duration of the project;
- v. Provide an estimated timeline for the work and identify which entity will be responsible for carrying out the work, including long-term stewardship;
- vi. Identify any regulatory or other barriers that must be overcome to implement the plan;
- vii. Identify any funding available or sources to be approached to fund the work, exclusive of the Water Fund
- d. Approve Conceptual Design & Plan for Execution Project Designs are presented to the Director who will review the project design, expected outcomes, and restoration and stewardship costs, and provide relevant feedback. Approval from the land owner is needed prior to presenting designs to the Director, if different from the implementing organization. This land tenure requirement is included in the Eligibility Agreement.
- e. Prepare Final Project Design The Steward will produce a detailed, final project design along with final cost projections and timeline for restoration and stewardship (i.e., number of years of project stewardship), as well as sufficient information on expected project performance (i.e., environmental benefits generated and maintained) to allow the Director to determine project funding needs and potential investor partners. A Management & Monitoring Plan be drafted if stewardship tasks extend beyond initial implementation. The Management & Monitoring Plan will include annual tasks, expected costs, and, if needed, requirements for utilizing the Water Fund's Stewardship Fund.
- f. Secure Concessions & All Regulatory Approvals The Steward will submit documentation to the Director demonstrating approved assurances are in place so that the project will be maintained over time and that all permits, easements and other private and governmental agency approvals required for project implementation have been secured.
- g. Approve Project and Provide Funding Final design documents and accompanying information are presented to the Director for approval or modification. The Steward and the Director will develop a Stewardship Agreement committing to defined project outcomes for the full project duration, with Project Design, Management & Monitoring Plan, and Eligibility Form. Project outcomes should represent a combination of the expected environmental benefits created or protected as quantified by the Watershed Investment Tool, Co-Benefits Calculator, as well as a defined verification, monitoring, and adaptive management actions. Upon approval, the Director will transfer funds to the Steward for the project implementation, per the terms of the Stewardship Agreement.

Figure 6. Process for Stewards to Engage with Peaks to People Water Fund.

Project Restoration & Stewardship Process

The following steps outline the process for stewards to work with the Director and the Water Fund to plan, implement, and monitor projects, including reporting performance over time and accessing funds for ongoing maintenance



2. Project Restoration Implementation

- **a. Implement Project** The Steward will implement restoration work based on the final, approved project design. The Director will provide funding as defined in the stewardship agreement.
- **b. Monitoring and Reporting Progress** The Steward and any associated contractors must prepare and submit annual reports for the first three years, including restoration actions taken, project-related expenditures, and project performance. The criteria and reporting on project outcomes will likely vary depending on the specific implementation phase. Reports are delivered to the Director who will review site designs and confirm significant changes with the Science Advisory Group and beneficiaries (as needed).
 - The Peaks to People Stewardship Agreement will outline the actions needed in the event of project failure due to force majeure circumstances or in the case of intentional reversal.
- c. Report Progress & Calculate Benefits Realized—Within three years after project implementation has begun, or upon successful completion of the project, the Director or the Technical Service Provider, will use the Watershed Investment Tool and Co-Benefits Calculator to recalculate the quantity of environmental benefits generated on site based on post-project conditions for tracking and system-wide reporting. The Steward will submit a final report within 90 days of completing restoration work on site.
- d. Report Accomplishments to Beneficiary & Director The Director or restoration provider (depending on specific contract arrangements) reports on project performance information and watershed-wide outputs and benefits to relevant beneficiaries and stakeholders, as needed.

3. Steward Project & Report Ongoing Performance

- a. Access Long-term Management Fund The Water Fund plans to develop a Long-Term Management Fund that will be available to participants in the Water Fund. This fund will cover the costs of all stewardship activities for the full duration of each project, as determined during project design and defined in the Stewardship Agreement and Long-term Management Plan. This fund will support the maintenance of the environmental benefits created by the treatment. Stewards may request to access these funds to perform ongoing maintenance as necessary.
- **b. Conduct Project Stewardship** The Steward will use long-term management funds, when available, to conduct stewardship activities on the project site to maintain the project, as defined in the stewardship agreement or as becomes necessary over time.
- c. Monitor Performance & Produce Stewardship Reports The Steward, or a Technical Service Provider, depending on the contract terms, will conduct the monitoring of project performance before and after project implementation and report to the Director. Otherwise, the Director may withhold future stewardship funding until reporting is received, per the terms of the Stewardship Agreement.
- d. Communicate Performance & Stewardship Reports to Beneficiaries The Director, with input from the Steward, will report project performance information to relevant beneficiaries and stakeholders annually (or otherwise agreed upon timeframe), who will then use the information from the performance reports for internal and external reporting for the full duration of the project. If approved by the Steward, the Director will also report project outcomes on the Water Fund website to demonstrate success and progress toward restoration goals.

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This Section provides an overview of the process for beneficiaries to invest in the Water Fund. This section is intended for local businesses, individuals, or organizations (beneficiaries) who wish to work with the Water Fund to protect forest health and source water quality in the watershed.

BENEFITS OF PARTICIPATION

Any organization or business that is dependent on high quality water supply, or that is interested in safeguarding the watersheds and communities of the Front Range, can work with the Water Fund to create on-the-ground environmental outcomes. The Water Fund's projects, funded by Beneficiaries, will support essential forest restoration projects in the Big Thompson and Cache la Poudre watersheds, which in turn will protect water, habitat, and recreation.

Beneficiaries can efficiently invest with confidence, knowing that project outcomes are consistently quantified and useful in comparing the relative improvements across projects to find opportunities for achieving the greatest environmental benefit. This increases accountability with taxpayers and local constituents and allows for greater coordination with other investors to fund large-scale projects. By participating in the Water Fund, investors can:

- Increase the effectiveness of environmental investments, maximizing the environmental return on investments.
- Increase efficiency by relying on the Water Fund structure to identify quality projects with willing landowners, guide project design and verify that the completed project delivers the expected amount of benefit.
- Consistently report results that are verified and periodically checked to ensure that they are appropriately maintained.
- Invest with the confidence knowing that their investments are producing environmental benefits without having to define success for each unique project and maintain staff to monitor and verify project outcomes.

HOW TO SUPPORT THE WATERSHED

The following steps demonstrate the process that brings an interested beneficiary from first contact with the Water Fund to final outcome reporting (Figure 7). As mentioned above, the process will be tailored to the interests and needs of the funder.

1. Initial Engagement & Priority Identification

- a. Initial Engagement between the Water Fund and Interested Beneficiary—Businesses, organization, agencies, or individuals who are interested in supporting the Water Fund's mission should reach out to the Director for an introduction to the Water Fund's mission and process.
- b. Discuss Beneficiaries Goals & Priorities The Water Fund will work with each Beneficiary to determine how to meet unique priorities and interests, including tailoring treatment types and project locations to specific needs and budget.
- c. Review Investor-Ready project options or develop RFP—Depending on the goals and interests of the beneficiary, the Director will provide a menu of investment options. These could include selecting specific investor-ready projects that meet the Water Fund's eligibility criteria and are identified as high-priority projects in the watershed. If existing project sites do not meet the needs of the Beneficiary, the Water Fund can create a Request for Projects (RFP) that solicits applications for specific habitat project types.
- **d. Determine Investment Target(s)** —Once projects are reviewed, the Beneficiary will select one or more projects to support.

e. Determine Payment Structure — The Beneficiary and the Director will discuss the best method for the Beneficiary to invest in the Water Fund. The payment structure will be based on the Beneficiaries interests as well as the project's needs. Potential payment structures are discussed below in "Investment Strategies" and in *Appendix C*. Pay for Performance Contracting Options for Beneficiaries.

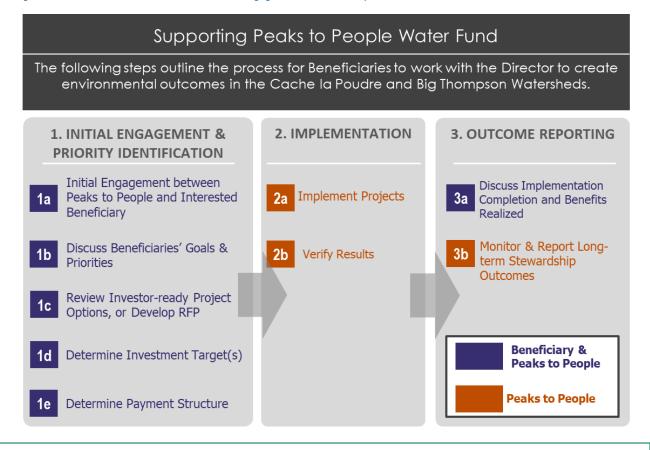
2. Implementation

- **a. Project(s) Implemented** Once funding is committed to a specific project or projects, the steward will implement their forest thinning treatment. See Figure 6 for the project implementation steps.
- **b. Results Verified** After the treatment is completed on a site, the Water Fund will provide an estimate of the risk reduction outcomes of each project using the Watershed Investment Tool and Co-Benefits Calculator.

3. Outcome Reporting

- a. **Discuss Implementation Completion and Benefits Realized**—The Director will report the verified outcomes of the project to the Beneficiary, and work with the Beneficiary to appropriately capture and communicate their impact on the watershed.
- b. **Monitor and Report Long-term Stewardship Outcomes**—As defined in the Management & Monitoring Plan for the treatment site, outcomes will continue to be verified and reported such that the Beneficiary and the Water Fund can be assured their investment created lasting results.

Figure 7. Process for Interested Beneficiaries to Engage with Peaks to People Water Fund.



INVESTMENT STRATEGIES

The Water Fund, as a performance-driven conservation program, will facilitate the investment of funds to source water protection projects in watersheds within its geographic scope. Through proper planning and

prioritization of projects; verification, tracking, and reporting of project outcomes; and ongoing program improvements, the Water Fund will provide high confidence to beneficiaries of the benefits produced by each dollar invested. The Water Fund will use pay for performance contract mechanisms to ensure conservation outcomes are achieved for each project funded.

Beneficiaries can participate in the Water Fund in a variety of ways, and the Director will work with each interested party to develop a contract that meets their needs. *Appendix C. Pay for Performance Contracting Options for Beneficiaries* outlines several Pay for Performance contract mechanisms that help ensure project success and reduce the risk of the funder. By paying for project outcomes, and incentivizing long-term stewardship, the Beneficiary can ensure their support will benefit the watershed and water security.

TRANSACTION FEES

Transaction fees may be required of the beneficiary, to cover normal administrative and overhead costs for managing the Water Fund. These fees may include, but are not limited to, transaction support (including use of the Watershed Investment Tool and Co-Benefits Calculator), long-term management and verification, program reporting, and annual adaptive management of policies and the Watershed Investment Tool.

SECTION 4: MANAGING THE WATER FUND

This section defines the process for managing the Water Fund, including soliciting projects; verifying, tracking, and reporting environmental benefits generated; and incorporating new information and best available science into the Water Fund over time. This section is intended to be an overview of the program administration; for specific information please see the *Administrator's Handbook*.

CREATING ENVIRONMENTAL BENEFIT IN THE WATERSEHD

Key to the approach of the Water Fund is the quantification of environmental benefits achieved through projects implemented with support from the Water Fund. The Water Fund will use the Watershed Investment Tool and Co-Benefits Calculator to prioritize investments in the watershed, estimate the ecological and financial benefits generated in the watershed, and track and report progress towards watershed goals.

PROJECT SOLICITATION, EVALUATION & SELECTION

The Water Fund is currently developing their protocol for project solicitation, evaluation, and selection. The Water Fund is working closely with Technical Service Providers and other partners to build a network of investor-ready projects. The Water Fund will prioritize projects highlighted as critical by the Watershed Investment Tool and Co-Benefits Calculator. As the Water Fund becomes more robust, specific evaluation criteria will be developed to select treatment projects.

PROJECT VERIFICATION & MONITORING

Each project funded by the Water Fund will meet eligibility criteria and attain specific wildfire risk-reduction metrics to ensure the project creates benefit for the watersheds and downstream communities. Additionally, each project must be monitored before and after treatment to ensure treatment success. Pre-project and post-project data will be used by the tool to estimate benefits generated by the project.

The Water Fund will work with The Nature Conservancy, CFRI, USFS, and other organizations to develop a standard methodology for monitoring forest health treatments that is compatible with the data requirements of the tool. A standard operating protocol will be developed to ensure data provided by individual projects can be easily incorporated into the tool. Projects may be required to be monitored throughout the expected duration of the treatment.

The data collected during pre-and-post-treatment monitoring will be tracked and included as inputs to the tool in order to refine and inform optimization of future projects.

Calculating Environmental Benefits & Return on Investment

As part of the verification process, the Director will use the Watershed Investment Tool and Co-Benefits Calculator to estimate the environmental benefits of all projects funded through the Water Fund. This information will be reported in the Annual Performance Report.

Water utilities and other downstream users may provide estimates of infrastructure impact costs (e.g., dredging, filtration, and treatment costs) to inform an estimate of the return on investment generated through treatments in the watershed. These costs will vary based on water infrastructure and the operational constraints of the water utility. These estimations will be used by potential beneficiaries to determine the cost-savings of participating in and funding the Water Fund projects. It is important to note there are many co-benefits, such as habitat for species and recreation benefits, that would not be captured in these calculations.

Project Funding

Prior to issuing funding for the project, the Director reviews all documentation submitted by the Steward. Once the Director confirms that all documentation for a project is complete and accurate, the Director issues the agreed upon payments to the Steward.

REGISTRY

The Water Fund will use a registry system, the Peaks to People Watershed Health Outcomes Tracker, to track individual projects and progress towards watershed goals completed by the Water Fund. The Water Fund will encourage the USFS, Colorado State Forest Service (CSFS), watershed coalitions, and other organizations to submit treatment information for other projects that can be included in the Outcomes Tracker. The primary unit of accounting of this registry will be cubic meters of avoided sedimentation.

The Outcomes Tracker will be used to track the number of acres treated, dollars spent, estimated cost savings, status of each project and expected treatment duration, and any additional metrics as desired by the Director or Board of Directors. The Co-Benefits Calculator will be used to measure expected and actual benefits from the forest treatment projects.

The information collected in the registry system will be used to keep the tool current with treatment data.

REPORTING

The Director of the Water Fund will use the registry and adaptive management process to report annually on the performance of the Water Fund.

Two reports will be generated annually, including a Performance Report intended for stakeholders and the public and an Annual Improvements Report to describe the adaptive management process of the Water Fund and recommend improvements to the Board of Directors.

Performance Report

In the annual Performance Report, the Water Fund will report the number of acres treated, dollars spent, erosion (sediment) avoided, estimated cost savings, and anticipated improvements identified during the adaptive management process.

The Water Fund may, with permission of the submitting organization, also publish the contribution of other organizations in the watershed that have submitted treatment information to the Water Fund to show the complete picture of watershed health based on the collective work in the region.

Co-benefits generated by the Water Fund through treatment projects will also be reported, including the increase in water security, improved wildlife habitat, avoided loss of homes due to wildfire, avoided loss of recreation opportunities and riparian health.

Annual Improvements Report

The Annual Improvements Report sent to the Board of Directors detailing the Water Fund's adaptive management process which will include what has been learned in the previous year and what changes would be made in the coming year to make the Water Fund more successful. See 'Annual Performance Reporting' in the *Administrator's Handbook* for more information.

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APPENDICES

APPENDIX A. GLOSSARY

TERM	DEFINITION
Administrator's Handbook	The responsibilities of the Water Fund's Administrator (Executive Director) are described in greater detail in the Administrator's Handbook. The Handbook is internal guidance for the administer of the Water Fund.
Beneficiaries	Contribute resources to the Water Fund to manage their business risks or support watershed improvements.
Benefit Unit	Environmental benefit from implementation of watershed protection and restoration practices. The benefit unit is used to define and report the effectiveness of conservation projects.
Board of Directors	The Board of Directors oversees the Water Fund, including strategy, finances, and operations.
Co-Benefits Calculator	The Co-benefits Calculator is designed to estimate the benefits of fuels treatment to resources at risk to wildfire. For more information, See the <i>Co-Benefits Calculator Manual</i> .
Executive Director (Director)	Responsible for the day-to-day operations of the Water Fund.
Investors	Investors are beneficiaries in the Water Fund and provide funds for Stewards to implement project restoration.
Landowners	Landowners and land managers will voluntarily choose to participate and the more practices implemented the more potential payments may be received. See also <i>Stewards</i> .
Operations Manual (Manual)	This document which provides all the material necessary for understanding and engaging in the Water Fund.
Participants	Include beneficiaries and investors. Current and potential participants in the Water Fund are the primary audience of the Operations Manual.
Peaks to People Water Fund (Water Fund)	A watershed investment fund where community members support land stewards. The Water Fund matches the investors (beneficiaries) with ranchers, public land managers and other landowners (stewards), who implement new, expanded or improved practices on their lands.

Project Restoration & Stewardship Process	Includes planning, implementation, and stewardship of projects, including reporting project performance over time and accessing stewardship funds for ongoing maintenance.
Science Advisory Committee	This technical committee supports the Water Fund, especially in the development and management of the Watershed Investment Tool, Co-Benefits Calculator, program monitoring and management protocols, and ecosystem service verification.
Stakeholders	Include Stewards (Landowners) and Beneficiaries (Investors). Stakeholders comprise the steering committee and working groups.
Stakeholder Committee	Comprised of volunteer community stakeholders and established in 2010 to lead the initial development of the Water Fund. Members included consultants, scientists and economists, private landowners, public land managers, non-profit organizations, city utilities, businesses, and other stakeholder groups
Stewards	Stewards use Water Fund resources to modify their land management practices resulting in improved watershed benefits. Stewards can include landowners, watershed coalitions, public land managers and other land managers.
Technical Service Providers	Technical Service Providers support the Water Fund and Stewards plan and implement the forest treatment projects. These consultants can be involved in the entire life of the project, or just be consulted for specific tasks.
Watershed Coalitions	Individuals and groups working in both watersheds whose missions overlap closely with the Water Fund.
Working Group	The Working Group was composed of diverse stakeholders; individuals and organizations; with expertise and interest in the development of the Water Fund. The Working Group was dissolved in 2017, with most of its members joining the Stakeholder Committee or Science Advisory Committee.

APPENDIX B. WATERSHED COALITION CONTACT INFORMATION

Landowners and land managers who require help planning and implementing a forest health improvement project are encouraged to contact their watershed coalition for support in participating in the Water Fund. Refer to the contact information below. This contact information was last updated in May, 2018.

Coalition for the Poudre River Watershed

Jennifer Kovecses 320 E. Vine Drive, Suite 213 Fort Collins, CO 80524 jenk@poudrewatershed.org (970) 222-5754 www.poudrewatershed.org

Big Thompson Watershed Coalition

Shayna Jones 1530 Boise Ave, Ste 204 Loveland, CO 80537 <u>shayna.jones@bigthompson.co</u> (970)800-1126 www.bigthompson.co

Little Thompson Watershed Coalition

P.O. Box 1413 435 High St. #201 Lyons, CO 80540 Info@ltwrc.org (970) 821-5604 www.ltwrc.org

Estes Valley Watershed Coalition

P.O. Box 4494 1191 Woodstock Dr. Suite #5 Estes Park, CO 80517 (970)290-1829 www.evwatershed.org

APPENDIX C. PAY FOR PERFORMANCE CONTRACTING OPTIONS FOR BENEFICIARIES

Pay for Performance contract mechanisms align the incentives of beneficiaries and stewards to cost-effectively produce and sustain conservation outcomes that achieve watershed goals. Linking payments to conservation outcomes, rather than reimbursing expenses, minimizes beneficiary risk of funding ineffective projects that do not deliver intended results. For the Water Fund, specific outcomes related to forest health and fuel load reduction will be defined for each project and will be used to measure the success of each project. Furthermore, Pay for Performance (PFP) contract mechanisms share risk with those in the best position to manage it – stewards – while providing financial incentives that inspire innovation, improve the effectiveness, and reduce the cost of conservation.

Two PFP strategies the Water Fund may use are described below, Partial Pay for Performance and Seed Funding. This list is not comprehensive, and the Water Fund will work with each Beneficiary to determine the preferred Payment Structure, as described in Section 3.

Further information on Pay for Performance can be found on the Environmental Incentives' <u>Pay for Performance Toolkit</u>. This toolkit provides contract language, examples of pay for performance programs, and other resources.

PARTIAL PAY FOR PERFORMANCE

Partial Pay for Performance (Partial PFP) provides an initial payment to the steward to cover some or all of the costs to implement the conservation project, and a secondary payment once conservation outcomes are verified. This strategy reduces the Water Fund's risk of investing in a project that does not produce intended results and losing invested capital. Additionally, the Partial PFP contract structures the secondary payment such that the landowner or watershed coalition is motivated to deliver conservation outcomes so that it can maximize payment. The secondary payment reduces the Water Fund's risk of funding an ineffective project, but the beneficiary still assumes a significant portion of risk of the financial loss if the project does not deliver intended results. The amount of risk sharing is determined by the portion of funding that is paid upfront versus the portion paid upon verification of conservation outcomes.

How it Works

Figure C1 depicts the steps below:

- A beneficiary, through the Water Fund, provides upfront capital to the Water Fund.
- 2. The Water Fund solicits project proposals and a contract is executed between the Water Fund and the selected stewards (landowner, public agency, or watershed coalition), which define project requirements and terms of payment for both upfront primary payments and secondary payments upon verification that the project achieves the requirements described in its contract and produces the expected environmental benefits.
- 3. The Water Fund pays the steward as specified in the contract based on terms for primary payments.
- 4. The steward implements the project and meets contract terms.
- 5. The treatment, as defined in the Stewardship Agreement and project design, creates ecological benefits.
- 6. The outcomes are verified by a third party.
- 7. Water Fund makes final payment to steward.

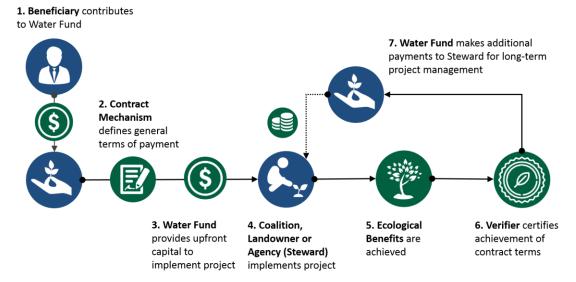


Figure C1. Partial Pay for Performance model for funding projects through the Water Fund. Stewards may include individual landowners, public agencies, or watershed coalitions that work with multiple landowners to implement projects.

SEED FUND

A seed fund model allows the Water Fund to solicit private and public funding as capital to finance conservation projects. The credits generated from projects are intended to be sold to beneficiaries according to pre-determined contract terms. Upon sale of credits, seed funds are paid back, in whole or in part, to the original private and public funding source. If the credits are not sold because conservation outcomes are not achieved, the funds are not repaid. The funding source may choose to keep repaid funds, or reinvest in an additional round of project funding, thus creating a revolving fund.

This seed funding strategy requires the funding source and the Water Fund to rigorously scrutinize projects before committing capital to finance project implementation. This strategy eliminates or reduces the need for the steward to secure private capital to implement a project.

How it Works

Figure C2 demonstrates the flow of capital and environmental benefits of a Seed Fund model:

- 1. The Water Fund establishes a seed fund through public or private sources.
- 2. The Water Fund selects projects with the highest conservation potential and then works with the steward to refine and finalize the project scope. Contract is signed.
- 3. The Water Fund provides upfront capital from the seed fund to enable the steward to implement the project.
- 4. Steward implements project, as defined by the contract terms in the stewardship agreement, and project-design.
- 5. Ecological benefits are achieved on the ground outcomes.
- 6. A third party verifies benefits using Watershed Investment Tool, Co-Benefits Calculator and the Water Funds monitoring protocol.
- 7. A beneficiary purchases the credits generated according to pre-determined contract terms. Funds from the credit transaction are transferred to the steward as a secondary payment for project implementation.
- 8. The steward pays back the Water Fund for the upfront capital provided in Step 2, based on agreed-upon payment terms, and keeps any remaining funds.

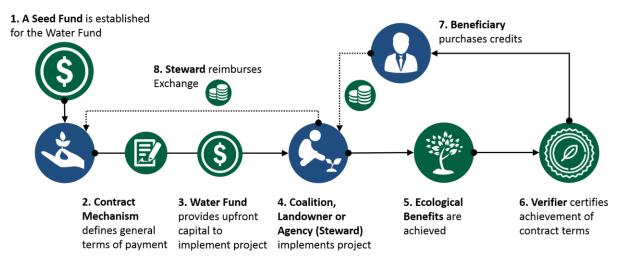


Figure C2. Seed fund model for funding projects through the Water Fund. Stewards may include individual landowners, public agencies, or watershed coalitions that work with multiple landowners to implement projects.

As a hypothetical example of Seed Funding, the Water Fund could, after entering into appropriate contracts with a landowner, pay upfront capital to the landowner to restore his forest near the headwaters of the Poudre River. Clear methodologies for measuring the outcomes of this work would be in place, and the project success would be verified by a trained third party. A beneficiary, such as a downstream user, could purchase these credits from the landowner. The landowner would then reimburse the Water Fund, creating a revolving fund.