



COLORADO

Colorado Water Conservation Board

Department of Natural Resources

Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	The Friends of the Yampa	
Name of Water Project	Yampa River Scorecard Project and Yampa River Stewardship Program	
Grant Request Amount		\$576,570.00
Primary Category		\$576,570.00
<i>Watershed Health & Recreation</i>		
Total Applicant Match		\$283,029.00
Applicant Cash Match		\$283,029.00
Applicant In-Kind Match		\$0.00
Total Other Sources of Funding		\$116,500.00
River Network		\$8,500.00
Community Agriculture Alliance		\$108,000.00
Total Project Cost		\$976,099.00

Applicant & Grantee Information

Name of Grantee: The Friends of the Yampa
Mailing Address: 743 Oak Street Steamboat Springs CO 80487
FEIN: 273,657,002

Organization Contact: Lindsey Marlow
Position/Title: Executive Director Email: lindsey@friendsoftheyampa.com
Phone: 830-402-0330

Grant Management Contact: Lindsey Marlow
Position/Title: Executive Director Email: lindsey@friendsoftheyampa.com
Phone: 830-402-0330

Description of Grantee/Applicant

No description provided

Type of Eligible Entity

- Public (Government)
- Public (District)
- Public (Municipality)
- Ditch Company
- Private Incorporated
- Private Individual, Partnership, or Sole Proprietor
- Non-governmental Organization
- Covered Entity

Other

Category of Water Project

- Agricultural Projects
Developing communications materials that specifically work with and educate the agricultural community on headwater restoration, identifying the state of the science of this type of work to assist agricultural users among others.
- Conservation & Land Use Planning
Activities and projects that implement long-term strategies for conservation, land use, and drought planning.
- Engagement & Innovation Activities
Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website.
- Watershed Restoration & Recreation
Projects that promote watershed health, environmental health, and recreation.
- Water Storage & Supply
Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging existing reservoirs to restore the reservoirs' full decreed capacity and Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap.

Location of Water Project

Latitude	40.486875
Longitude	-106.833641
Lat Long Flag	Default/Proponent headquarters: If the location cannot be defined with flags above, use location of project proponent headquarters
Water Source	Yampa River
Basins	Yampa/White/Green
Counties	Routt; Moffat
Districts	44-Lower Yampa River; 57-Middle Yampa River; 58-Upper Yampa River

Water Project Overview

Major Water Use Type	Environmental
Type of Water Project	Planning
Scheduled Start Date - Design	5/1/2024
Scheduled Start Date - Construction	

Description

The Yampa River Scorecard Project (YRSP) and the Yampa River Stewardship Program (YStew) will work in tandem in an annual cycle to assess current river health, identify desired future conditions and strategies for achieving these conditions, and provide training and resources to practitioners, landowners, and land managers for how to implement these strategies. Launched in 2022 by Friends of the Yampa (FOTY), the YRSP is a long-term river health monitoring program that collects and scores data on 30 indicators spanning the categories of ecological health and function, river uses and management, and people and community benefits. Every year, one of the five segments of the Yampa basin (Upper Yampa, Steamboat segment, Elk River, Middle Yampa, and Lower Yampa) is monitored. In 2024, a group of local conservation and agricultural nonprofits will launch YStew, a program that uses data from the YRSP (as well as other available data) to identify desired future conditions of river segments, identifies best management practices (aka strategies) to move from current conditions to those

desired future conditions, and develops outreach tools and provides training, support, and resources to practitioners, landowners, and land managers to guide them in implementing the identified best management practices.

Measurable Results

	New Storage Created (acre-feet)
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
	Existing Storage Preserved or Enhanced (acre-feet)
	New Storage Created (acre-feet)
151,008	Length of Stream Restored or Protected (linear feet)
	Length of Pipe, Canal Built or Improved (linear feet)
	Efficiency Savings (dollars/year)
	Efficiency Savings (acre-feet/year)
	Area of Restored or Preserved Habitat (acres)
	Quantity of Water Shared through Alternative Transfer Mechanisms or water sharing agreement (acre-feet)
	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
750	Number of Coloradans Impacted by Engagement Activity

Other

Increased capacity for practitioners, landowners, and land managers to implement restoration projects and best management practices for river health. We expect improvements to water quality, floodplain connectivity, riparian habitat, and dispersed natural storage as benefits of these future projects.

The length of stream (linear ft) to be restored or protected noted above is not intended to represent the length that will be restored or protected directly during the YStew program, but rather the length that will be primed for restoration or protection as a result of the groundwork (defining strategies or best management practices to achieve desired future conditions of a given river segment, landowner outreach, and practitioner, landowner, and land manager guidance, support, resources, and training to implement those strategies) undertaken during the course of YStew.

Water Project Justification

The Yampa River Scorecard Project (YRSP) collects data on the health and uses of the Yampa River to establish baseline conditions and monitor trends, while the Yampa River Stewardship Program (YStew) uses that data to develop best management strategies and then provides support, resources, and training to landowners, land managers, and practitioners to build capacity for implementing these strategies. Both projects directly support the visions, goals, objectives, areas of focus, and IPPs of the Colorado Water Plan, the Yampa White Green Basin Implementation Plan, the Yampa White Green Education Action Plan, and the Yampa Integrated Water Management Plan.

Colorado Water Plan Support

In the Colorado Water Plan, one of the four identified action areas is Thriving Watersheds, the vision of which states that “comprehensive water resources planning should incorporate conditions of forests, streams, wetlands, and wildlife habitat” (page 9). The YRSP is a comprehensive long-term monitoring program in the Yampa Basin incorporating metrics like riparian condition, floodplain connectivity, aquatic connectivity, and macrohabitat, which previously did not exist (and, in fact, was developed specifically because of data gaps and to improve inter-organization coordination of monitoring efforts in the Yampa Basin). Data from and results of the YRSP are therefore critical to defining the conditions of the Yampa’s riparian forests, streams, wetlands, and wildlife habitat. Indeed, the YRSP, as well YStew, are further supported by the Thriving Watersheds action area in specific identified partner actions (as detailed on page 177) in the following ways:

- “Wise Water Use: Resilient systems recognize social, ecological, and economic connections.” In YStew, we will be balancing these connections by working with agricultural producers in the basin to identify multi-benefit land management practices that maintain and enhance ecosystem health while upholding economic productivity and preserving cultural values.
- “Healthy Lands: Shared stewardship improves watershed health and resilience across multiple jurisdictions.” Shared stewardship to improve river health and resilience is the underlying tenant of YStew, and because the YRSP and YStew will be implemented on both private and public lands throughout the basin, the program reaches across multiple jurisdictions, including counties, city open lands, state wildlife areas, private ranches, and federal lands like Bureau of Land Management lands. For the YRSP, data collection partnerships already exist, from federal agencies like the United State Geological Service to local entities like the City of Steamboat Springs. More specifically, on page 206 of the Colorado Water Plan in the Healthy Lands section, the plan reads “From state agencies to local watershed collaboratives, the goal must be to jointly work backward from the desired end results and focus on high-value, prioritized opportunities to address risk and create opportunities to enhance stream and watershed health.” This results-oriented process is the exact approach that YStew will use in terms of defining desired future conditions of river segments first and then developing strategies to achieve those conditions while building capacity for project implementation.
- “Engaged Partners: Agencies and stakeholders need to plan together, prioritize together, and act together.” Because both the YRSP and YStew are recommendations of the Yampa Integrated Water Management Plan, a collaborative effort that incorporated a diverse group of stakeholders on the Yampa White Green Basin Roundtable, they both have broad stakeholder support. And from a project-specific lens, YStew will involve stakeholders like practitioners, landowners, and land managers in the planning and prioritization steps (through two stakeholder engagement meetings each year) and in the acting step (through practitioner training and through providing resources to build capacity for practitioners, landowners and land managers to implement projects).

In addition to supporting the Thriving Watersheds action area, the YRSP and YStew also support the tools identified to meet water needs across Colorado, most specifically, the stream/watershed restoration and enhancement tool laid out on page 170. The YRSP and YStew are crucial foundational steps to undertake before restoration and enhancement projects can proceed in a strategic, prioritized manner; the YRSP measures water quantity and quality, and then YStew uses this data to identify priority projects, conducts outreach to stakeholders to gather input on projects to ensure community support, and builds the capacity of project implementers. Finally, the third year of the YStew program will include a demonstration project that takes into account the considerations laid out in the tool’s description – namely that “stream restoration projects should consider the effects of drought, climate change, and aridification.” We will promote the demonstration project to increase awareness of YStew in order to spur additional projects.

Yampa White Green Basin Implementation Plan Support

The YRSP and YStew also support the Yampa White Green Basin Implementation Plan (BIP) at multiple levels, including identified challenges, goals, and objectives. First, Volume II of the BIP lists five key challenges for the basin, with three of them (climate change, the recovery of the four endangered fish species, and water quality concerns) being directly addressed by the YRSP and YStew; the YRSP will collect data on these challenges through quantifiable metrics like the hydrograph, snowpack, and temperature indicators for climate change, native fish indicator for the endangered species, and dissolved oxygen, pH, macroinvertebrates, nutrients, and metals indicators for water quality (page 130-132). Then, YStew will utilize this data to address these challenges by promoting the following: climate resiliency through strategies like shade-providing riparian plantings, recovery of endangered fish through the recommendations of the existing programmatic biological opinion (PBO) for the Yampa River, and local actions that improve water quality like point-source and non-point source pollution controls, among other best management practices.

BIP Goal 6 Support

Of the eight goals identified in the BIP, goals six and seven are directly supported by both proposed projects. Goal six is to “quantify and protect environmental and recreational water uses” (Vol II, page 30). Through a contract with the City of Steamboat Springs, for example, the YRSP collects temperature data with HOBO dataloggers that determines if the stretch of river through downtown Steamboat Springs – which is currently listed as a 303(d) impaired stream for temperature – is meeting identified environmental regulations. Further downstream, the YRSP’s monitoring helps to determine whether recovery actions recommended in the PBO are making meaningful progress toward the environmental use of endangered fish species recovery under the Upper Colorado River Endangered Fish Recovery Program. And by measuring indicators in the River Uses and Management attribute of the YRSP – which quantifies recreation uses like boating, fishing, and birding, as well as agricultural use – the YRSP effectively quantifies water uses, recreational and otherwise.

How specific objectives of goal six will be supported by the YRSP and YStew:

- “Recommend potential site-specific solutions and projects in collaboration with local water users” (Vol II page 31). This objective will be supported by YStew, which aims to work with landowners and land managers along the Yampa’s mainstem and main tributaries (many of which are water users) to identify land management goals and identify hyper-local (i.e., site-specific) solutions and projects.
- Research and design multi-purpose projects to improve riparian or aquatic ecology and bank stability without changing the existing flow regime while voluntarily modernizing irrigation diversion systems and reducing bedload deposits” (Vol I page 22). This objective will be supported by the identification of on-the-ground strategies to achieve a given river segment’s desired future conditions (i.e., improving riparian or aquatic ecology and bank stability) in YStew, as well as by the demonstration project that implements these strategies.
- “Analyze the impact of projects on nonconsumptive needs. Ascertain whether further nonconsumptive projects need to be identified” (Vol I page 22). The YRSP will be well-positioned to collect pre-and post-project implementation data to quantify impact because it is designed to collect data in a given river segment on a 5-year cycle. Additionally, identification of the gap between current conditions and desired future conditions during the YStew process will provide insight into whether further nonconsumptive projects need to be pursued to reach desired future conditions.
- “Invest in education and outreach efforts that inform a broader audience (both in-basin and statewide) about E&R water needs and how they can be met in the basin, and provide a forum for a two-way exchange of ideas to enhance participation” (Vol I page 23). A major component of both the YRSP and YStew is landowner outreach through mailers and targeted communication. YStew in particular will support this objective through its stakeholder engagement meetings (held twice annually to gather community input on desired future river conditions) and through providing resources to landowners and managers on best management practices.
- “Recognize that floodplains, riparian areas, and wetlands are natural storage reservoirs, and implement restoration projects to maintain and improve these storage reservoirs. Rehabilitation of degraded riparian areas and reconnection of floodplains in degraded stream systems allow spring floods to recharge groundwater tables to slow release to the stream system later in the summer, which supports low flows and helps maintain non-consumptive benefits” (Vol II page 31). The major purpose of YStew is to act as the connector between insights gained from data collection during the YRSP and projects implemented to improve river health and ecological function. By identifying river-segment-specific strategies to improve river health, identifying project opportunities, and building the capacity of stewards along the Yampa and its major tributaries by providing resources, education, and training, YStew will lay the necessary groundwork for strategic, prioritized restoration projects throughout the basin. Additionally, the demonstration project that will be implemented in 2026 as part of YStew is anticipated to address multiple ecological challenges – like degraded riparian areas and disconnected floodplains – using low-tech, low-cost techniques.

BIP Goal 7 Support

Goal seven of the BIP is to “maintain and consider the existing natural range of water quality that is necessary for current and anticipated water uses” and lists “Support the River Health Scorecard by Friends of the Yampa” (now

called the YRSP) as one of the near-term focus projects (Vol II, page 34). Because the intention of YStew is to lay the groundwork to maintain and enhance the health of the Yampa River, including addressing existing water quality concerns like high temperatures and installing a demonstration project, YStew will also directly support goal seven of the BIP.

How specific objectives of goal seven will be supported by the YRSP and YStew:

- “Encourage and support water quality protection and monitoring programs in the subbasins of the YWG Basin through watershed groups, municipalities, land management agencies, and other efforts” (Vol II, page 34). YRSP, as a comprehensive monitoring program, directly supports this objective.
- “Evaluate solutions to address how stream temperature problems might be alleviated in the face of a warming climate” (Vol II, page 35). Elevated temperature is one of the biggest river health concerns on the Yampa, so evaluating solutions to warming water temperatures will be an important consideration when developing strategies to achieve desired future conditions within the YStew process.
- “Increase public access to data and facilitate better coordination with the water quality work currently being done in the basin. Investigate the feasibility of a single database or data portal” (Vol II, page 35). Because the YRSP incorporates multiple other data sources in its results, the YRSP website largely fills this role, especially because one of the goals of the YRSP is to make river data more accessible, more easily digestible, and visually appealing to the public.
- “Facilitate public awareness of threats to water quality, including catastrophic wildlife, and promote participation in efforts to mitigate those threats” (Vol II, page 35). YStew directly supports this objective, as the main goal of the program is to build the awareness and capacity of riparian land stewards and practitioners to participate in restoration, protection, and enhancement efforts that will improve river health throughout the basin.

BIP IPPs Support

- The YRSP is one of the identified projects and processes (IPPs) in the BIP (YW-2020-0053): The Friends of the Yampa has initiated a planning process to implement a long-term year-to-year health monitoring program of the Yampa River that results in a Yampa River Scorecard for different segments of the basin.
- The YRSP and YStew are two of the recommendations of the Yampa River Integrated Water Management Plan, which is listed as YW-2020-0019.
- Yampa-White-Green Basin Roundtable chair Steve Hinkemeyer is currently updating the IPPs and will add YStew to the database.

Other Plan Support

- The BIP’s discussion of the Yampa Integrated Water Management Plan (IWMP) states that three areas of focus for the plan have emerged after extensive stakeholder engagement and background assessments. One of these areas of focus is “Riparian habitat, wetland, and natural bank stability: Identify projects and strategies that balance the needs of water infrastructure with increasing high-quality habitat in riparian lands through voluntary incentives for riverside landowners to sustainability manage their lands and livestock” (Vol I, page 12). This identification of projects and strategies to better steward riparian lands while maintaining economic viability and our basin’s agricultural heritage is precisely what YStew aims to accomplish.
- One of the six topics identified in the Yampa White Green’s 2021 Education Action Plan by the PEPO as critical for education and outreach in the Yampa White Green’s 2021 Education Action Plan is the Yampa IWMP and projects/initiatives that came out of it (Vol II, page 127). (Both the YRSP and YStew were identified in the IWMP as two of 20 recommendations, though YStew is called the Yampa River Recommended Practices Manual and the riparian buffer program in the IWMP). Additionally, the BIP also lists watershed health as one of the critical efforts for ongoing education and outreach. (Vol II, page 127). Not only is monitoring and improving watershed health the driving force behind the YRSP and YStew, respectively, from a programmatic perspective, but both programs also incorporate multiple different types of outreach (from materials like websites and mailers to in-person education during stakeholder engagement meetings and targeted landowner outreach).

Related Studies

The Yampa Integrated Water Management Plan was funded through CWCB Water Supply Reserve Funds. It lists as one of the 20 final recommendations and strategies “Utilize the Yampa River Scorecard Project (YRSP) to centralize collection and reporting of river ecosystem data.” The plan also includes recommendations to “Build Yampa River Recommended Practices Manual,” a “toolbox of approaches for sustainable land and water use management that will serve as resource for landowners, agencies, and other stakeholders,” and “Establish a riparian buffer program for the Yampa Basin,” which seeks to “identify priority river reaches where riparian buffer enhancements would provide greatest benefit and support interested landowners in designing and funding these projects.” These two strategies have since been combined to form the Yampa River Stewardship Program (YStew)

Additionally, in the fall of 2022, the Yampa River Collaborative (hereafter the “Collaborative”), a group of conservation and agricultural nonprofits in the Yampa Basin, hired a consultant team led by Jessie Olsen at The Watershed Center to develop a Scope of Work for YStew. This Scope of Work states that Yampa IWMP committee members agreed that there is a need for YStew “to serve as a set of guiding principles and resources for landowners and land managers whose actions and decisions impact the Yampa River riparian corridor;” lays out the target audience, draft vision statement, and the administrative program structure, tasks, deliverables, and budget for program implementation; and specifies that implementation will occur in phases based on geography in alignment with the YRSP. The Collaborative is therefore now well-prepared and well-positioned for program implementation.

Taxpayer Bill of Rights

None