FUTURE FISHERIES IMPROVEMENT PROGRAM GRANT APPLICATION

All sections must be addressed, or the application will be considered invalid

I. APPLICANT INFORMATION

A. Applicant Name: Katelin Killoy

Mailing Address: 730 ½ N Montana St.

City: Dillon State: MT Zip: 59725

Telephone: 406-596-1999 E-mail: Katelin.killoy@gmail.com

B. Contact Person (if different than applicant):

Address:

City: State: Zip:

Telephone: E-mail:

C. Landowner and/or Lessee Name (if different than applicant): Huntsman Ranch

Mailing Address: PO BOX 240086

City: Dell State: MT Zip: 59724

Telephone: (406) 276-3459 E-mail: dell@3rivers.net

II. PROJECT INFORMATION

A. Project Name: Red Rock Creek Stock Water System

River, stream, or lake: Red Rock Creek

Location: Township: 14 South Range: 1 East Section: 10

Latitude: 44.62294 Longitude: -111.58951 *Within project (decimal degrees)*

County: Beaverhead

B. Purpose of Project: *(high level, focus on why the project is important)*

The purpose of this project is to increase healthy riparian habitat along Red Rock Creek within the Arctic Grayling Centennial Valley Candidate Conservation Agreement with Assurances program (CCAA). This project plans to install a stock water system to improve riparian health along Red Rock Creek.

Huntsman Ranch is enrolled in the CCAA and in cooperation with the CCAA program, Huntsman Ranch has agreed to manage and improve riparian corridors in compliance with their CCAA site plan. On 8/2/2024, the CCAA agencies and Huntsman Ranch agreed to develop a new stock water system to improve grazing distribution and utilization and reduce reliance of Red Rock Creek for stock water. Currently, the pasture does not have reliable stock water due to beaver activity routing Red Rock Creek away from the Huntsman property. This project drilled a new well in the fall of 2025 to 140’ to provide reliable yearlong stock water. This well will tie into the construction of 700’ of pipeline with two tire stock water tanks to provide reliable stock water throughout summer and winter months during drought and normal conditions. Since this pasture is far away from electrical power, a solar system will be connected to provide power to the system.

Secondary resource concerns benefited by installation of the proposed projects include; Soil - Reduced bank erosion along streams or water conveyance channels; Plant – Enhanced plant productivity and health; Animal – Adequate livestock water.

The Objectives of the project include the following:

1. Maintain fall/winter grazing timing.
2. Improve grazing distribution
3. Improve bank stability.
3. Maintain or improve cover of deep rooting species.
4. Improve water quality and temperature.

C. Brief Project Description (attach additional information to end of application). Please include the anticipated construction schedule:

In cooperation with the CCAA program, Huntsman Ranch has agreed to manage and improve riparian corridors in compliance with their CCAA site plan. In 2024, the enrolled landowners determined that current water sources are inadequate in a pasture that is mostly uplands along Red Rock Creek. A stock water system will provide the enrolled landowner the ability to graze longer in this pasture which allows longer rest in riparian pastures. A new stock water system will improve grazing distribution and utilization and reduce reliance of Red Rock Creek for stock water. Currently, the pasture does not have reliable stock water due to beaver activity routing Red Rock Creek away from the Huntsman property. This project will tie two tire stock water tanks onto the 140' deep well to provide reliable stock water throughout summer and winter months during drought and normal conditions.

Scope of Work:

- Install a pump and solar system for a stock tank system
- Install two tire stock tanks with 700' of pipeline

This project builds on a watershed scale restoration effort for Arctic grayling in the Centennial Valley through the CCAA program. The CCAA works with private landowners to address threats and implement conservation measures that benefit Arctic grayling and other native fish species.

D. What was the cause of habitat degradation and how will the project correct the cause?

Through landowner visits Red Rock Creek was determined to not be a reliable source for stock water. Additionally, adding a stock water system will reduce grazing pressure along this portion of Red Rock Creek.

E. Length of stream or size of lake that will be treated (project extent): 2.78 stream miles

Length/size of impact, if larger than project extent (e.g., stream miles opened): N/A

F. Project Budget Summary:

Grant Request (Dollars):	**$**	**34,250.00**
Matching Dollars:	**$**	**34,250.00**
Matching In-Kind Services:*	**$**	

**salaries of government employees are not considered matching contributions*

Other Contributions (not used as match)	**$**	
Total Project Cost:	**$**	**68,500.00**

G. Attach itemized (line item) budget – *see budget template*

H. Attach project location map(s) that include:

- ☐ Extent of the project, including context (relation to major landmark or town)
- ☐ Indication of public and private property
- ☐ Riparian buffer locations and widths (if applicable) and grazing locations

I. Attach project plans:

- ☐ Detailed sketches or plan views with the location and proposed restoration
- ☐ Pre-project photographs (GPS location strongly recommended)
- ☐ If water leasing or water salvage is involved, attach a supplemental questionnaire (*https://myfwp.mt.gov/getRepositoryFile?objectID=36110*)

J. Attach support letters or statements of (e.g., landowner consent, community or public support). For FWP statement, attach provided template. List any other project partners:

Biologist statement from Ryan Kreiner

III. MAINTENANCE AND MONITORING (attach additional information to end of application):

A. A 20-year maintenance commitment is required*. Please confirm that you will ensure this protection and describe your approach. Attach any relevant maintenance plans.

Yes	No
X	

**If it is a water leasing project, describe the length of the agreement.*

This project is part of the landowner's Site-Specific Conservation Plan (SSP) through the Centennial Valley Arctic Grayling CCAA. The SSP addresses threats to Arctic grayling on the landowner's property including riparian health. The SSP is a 10-year agreement that is getting signed in 2026. The landowner has implemented numerous conservation projects for Arctic grayling in good faith and successfully improved habitat, stream flows and connectivity that have benefited Arctic grayling and other native and sportfish. The landowner has signed both MFWP and USFWS landowner agreements (20 and 10-year agreements, respectively).

B. Will grazing be part of or adjacent to the project? If so, describe or attach land management plans, including short term and long term grazing regimes. If the landowner is not the applicant, please describe their involvement in the project. *If you want assistance with grazing plan development, note your need.*

In cooperation with the CCAA program, the landowner has continually worked with FWP on grazing schedules in compliance with their SSP. The current grazing plan calls for a short duration grazing in riparian pastures after October 1st. The stock water systems will allow the landowners better manage and maintain their grazing schedules.

C. Will the project be monitored to determine if goals were met? If so, what are the short-term and long-term plans to assess benefits and lessons learned? Were pre-project data collected? Will monitoring information be shared with FWP?

The project will be monitored every five years as a part of the CCAA program using NRCS Riparian Assessment Method (NRCS 2004). Additionally, Arctic grayling population estimates are conducted annually on Red Rock Creek by FWP staff, and biennially for spawning substrate surveys on Red Rock Creek and its tributaries. Combined, these surveys help managers determine the causes of grayling population fluctuations and should be positively influenced by the proposed project near Red Rock Creek.

IV. PROJECT BENEFITS (attach additional information to end of application):

A. What species of fish will benefit from this project?

Arctic grayling (*Thymallus arcticus*), a designated Species of Concern by the State of Montana.

B. How will the project protect or enhance wild fish habitat?

Improved riparian health along the Red Rock Creek (primary spawning stream in the Centennial Valley) enhances grayling habitat by increasing tree cover and reducing sediment inputs into the stream. Additionally, increased tree cover helps to maintain cold water in Red Rock Creek.

C. What is the expected improvement to fish populations, both short term and long term? How might the project translate to angler success?

Improved riparian health of Red Rock Creek will benefit Arctic grayling by providing thermal shading, stable banks, and suitable instream habitat in important conservation reaches. This provides the public with an opportunity to appreciate and catch a unique Montana species.

D. Will the project increase public fishing opportunity for wild fish and, if so, how? Is public fishing allowed onsite? Is it allowed by permission? If not, describe how the public would benefit.

This project will increase public opportunity of quality fishing experience by improving conditions for Arctic grayling persistence in the Centennial Valley.

E. Aside from angling, what local or large-scale public benefits will be realized from this project?

This project is part of an ongoing, large-scale habitat improvement program in the Centennial Valley which has positively influenced grayling population levels since its inception. Improved riparian health of Red Rock Creek equates to improved spawning and rearing conditions for grayling that migrate large distances within Red Rock Creek, and more opportunity for the public to appreciate and catch a unique Montana species. Additionally, a stable and healthy grayling population eliminates the need to protect Arctic grayling under the ESA, which would place restrictions on land-use and angling.

F. Will the project interfere with water or property rights of adjacent landowners? (explain):

No. Project will not interfere with any water rights or property rights.

G. Will the project result in the development of commercial recreational use on the site (including paid access)? Explain:

No. The project is located on a working ranch. There will be no development of commercial recreational use.

H. Is this project associated with the reclamation of past mining activity?

No.

Each approved project applicant must enter into a written agreement with Montana Fish, Wildlife & Parks specifying terms and duration of the project. The applicant must obtain all applicable permits prior to project construction. A competitive bid process must be followed when using State funds.

V. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature: Katelin Killoy Date: 5/14/2026

Submittal: **Applications must be signed and received on or before November 15 and May 15 to be considered for the subsequent funding period**. Late or incomplete applications will be rejected.

Mail to:	FWP Future Fisheries Fish Habitat Bureau PO Box 200701 Helena, MT 59620-0701	Email:	Future Fisheries Coordinator FWPFFIP@mt.gov (electronic submissions must be signed) For files over 10MB, use https://transfer.mt.gov and send to bailey.duxbury@mt.gov

BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

Both tables MUST be completed appropriately or the application will be invalid. Please see the example budget sheet for clarification.

PROJECT COSTS					GRANT REQUEST AND FUNDING			
Work Items (Itemize by Category)	**Number of Units**	**Unit Description***	**Cost/Unit**	**Total Cost**	**FUTURE FISHERIES REQUEST**	**Matching Contributions (Cash or In-Kind)*** **	**Other Contributions (Funds not used as match)**	**Total Funding**
**Units = feet, hours, cubic yards, etc. Do not use lump sum unless necessary.*								
Personnel								
Survey				$ -				$ -
Design				$ -				$ -
Engineering				$ -				$ -
Permitting	1	cultural	$5,000.00	$ 5,000.00		5,000.00		$ 5,000.00
Oversight				$ -				$ -
Maintenance**				$ -				$ -
			Sub-Total	$ 5,000.00	$ -	$ 5,000.00	$ -	$ 5,000.00
Travel								
Mileage				$ -				$ -
Per diem				$ -				$ -
			Sub-Total	$ -		$ -	$ -	$ -
Construction Materials								
Rubber tire stock tanks	2		$1,000.00	$ 2,000.00	1,000.00	1,000.00		$ 2,000.00
Pump	1		$2,000.00	$ 2,000.00	1,000.00	1,000.00		$ 2,000.00
Pipeline	700	feet	$10.00	$ 7,000.00	3,500.00	3,500.00		$ 7,000.00
235W Solar Panels	8	panel	$400.00	$ 3,200.00	1,600.00	1,600.00		$ 3,200.00
Solar Panel 8 mount rack	1		$1,800.00	$ 1,800.00	900.00	900.00		$ 1,800.00
Concrete	2	3' diameter around tank	$3,594.00	$ 7,188.00	3,594.00	3,594.00		$ 7,188.00
				$ -				$ -
				$ -				$ -
			Sub-Total	$ 23,188.00	$ 11,594.00	$ 11,594.00	$ -	$ 23,188.00
Equipment, Labor, and Mobilization								
Tank and pipeline Mobilization	1	this is a separate contractor from the contractor who installs the pump and solar system	$4,000.00	$ 4,000.00	2,000.00	2,000.00		$ 4,000.00
Tank, pipeline, and concrete installation	2		$10,406.00	$ 20,812.00	10,406.00	10,406.00		$ 20,812.00
install 3' gravel ring	2		$1,000.00	$ 2,000.00	1,000.00	1,000.00		$ 2,000.00

BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

install metal protection fence	2		$3,000.00	$ 6,000.00	3,000.00	3,000.00		$ 6,000.00
Pump/solar mobilization	1	this site takes a long dirt road so there is higher mobilization costs	$3,500.00	$ 3,500.00	2,250.00	1,250.00		$ 3,500.00
Solar and pump installation	1		$4,000.00	$ 4,000.00	4,000.00			$ 4,000.00
				$ -				$ -
				$ -				$ -
				$ -				$ -
				$ -				$ -
			Sub-Total	$ 40,312.00	$ 22,656.00	$ 17,656.00	$ -	$ 40,312.00
			OVERALL TOTALS	$ 68,500.00	$ 34,250.00	$ 34,250.00	$ -	$ 68,500.00

OTHER REQUIREMENTS:

**For projects that include a maintenance request, it cannot exceed 10% of the total project cost.

***Match can include in-kind materials or labor. Justification for in-kind labor (e.g. hourly rates used) can be noted below. Do not use government salaries as match.

Additional budget detail:

APPLICATION MATCHING CONTRIBUTIONS

Total should equal match listed above; do not include requested funds

CONTRIBUTOR	IN-KIND	CASH	TOTAL	Secured? (Y/N)
USFWS Partners Program	$ -	$ 5,000.00	$ 5,000.00	Y
State Wildlife Grant	$ -	$ 29,250.00	$ 29,250.00	Y
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
TOTALS	$ -	$ 34,250.00	$ 34,250.00	

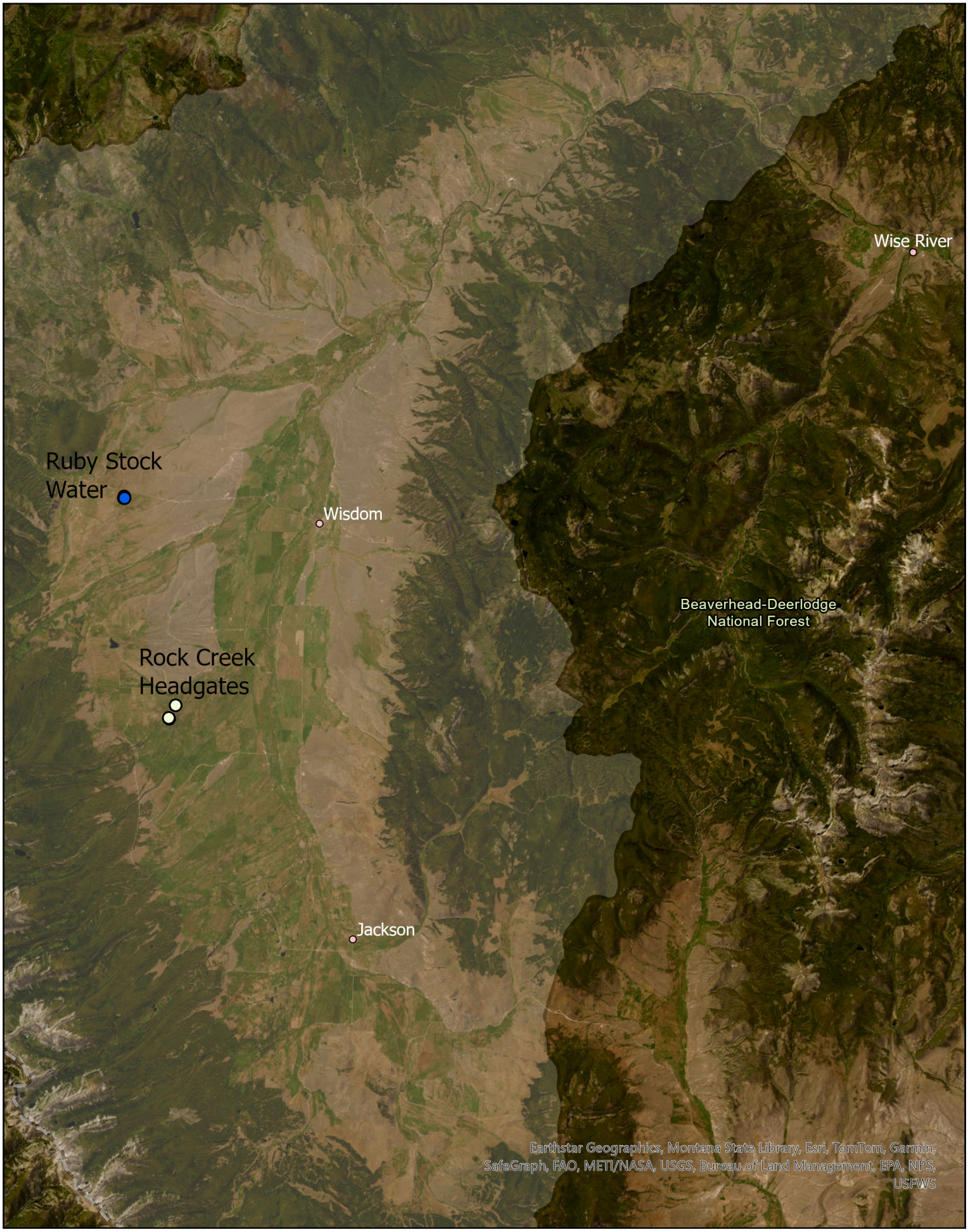
OTHER CONTRIBUTIONS

Total should equal other contributions listed above; these are funds not specically matched to the Future Fisheries application

CONTRIBUTOR	IN-KIND	CASH	TOTAL	Secured? (Y/N)
	$ -	$ -	$ -	

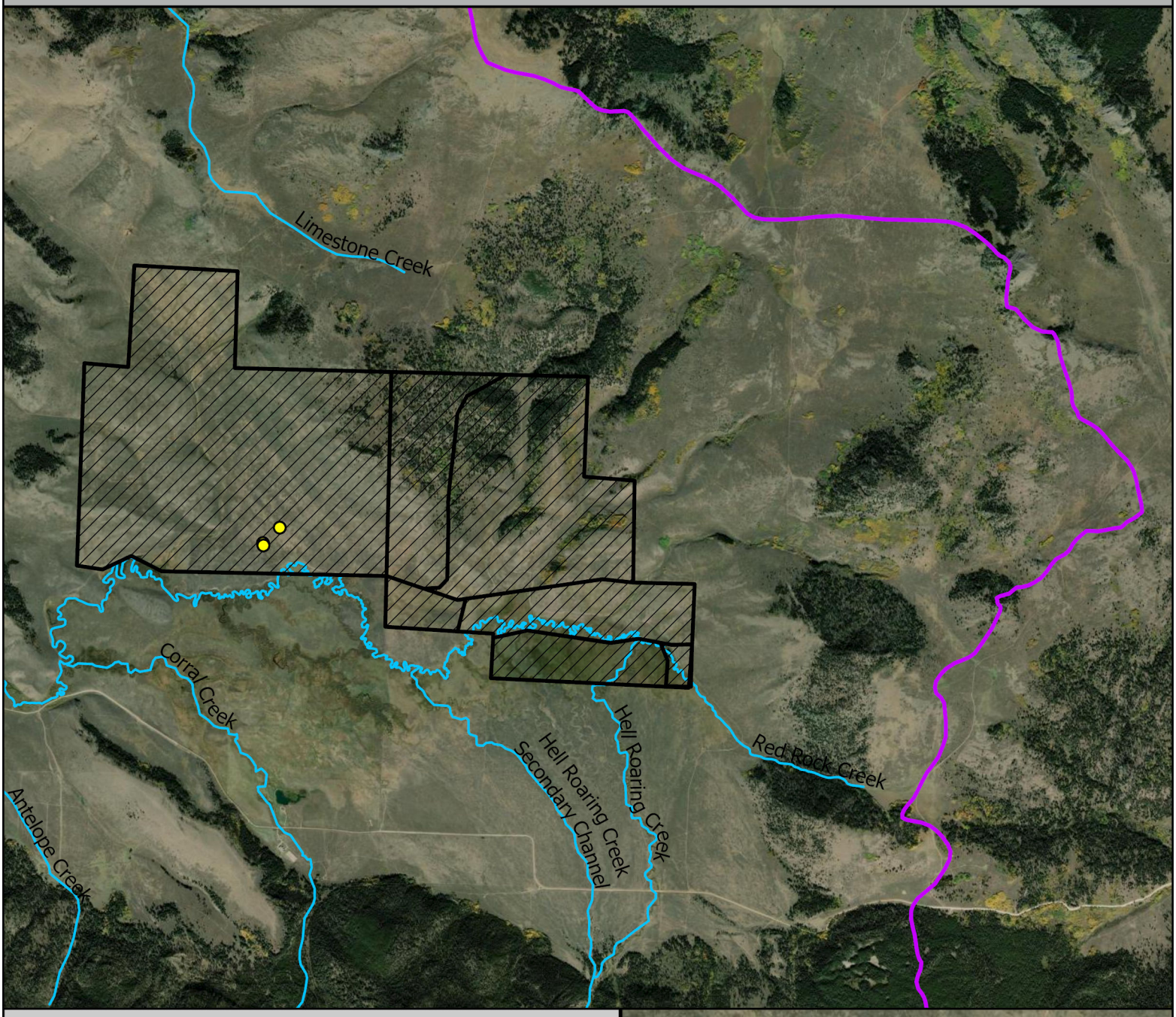
BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
TOTALS	$ -	$ -	$ -	


Wise River
Ruby Stock Water
Wisdom
Beaverhead-Deerlodge National Forest
Rock Creek Headgates
Jackson
Earthstar Geographics, Montana State Library, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USFWS

Red Rock Creek Stock Water Project

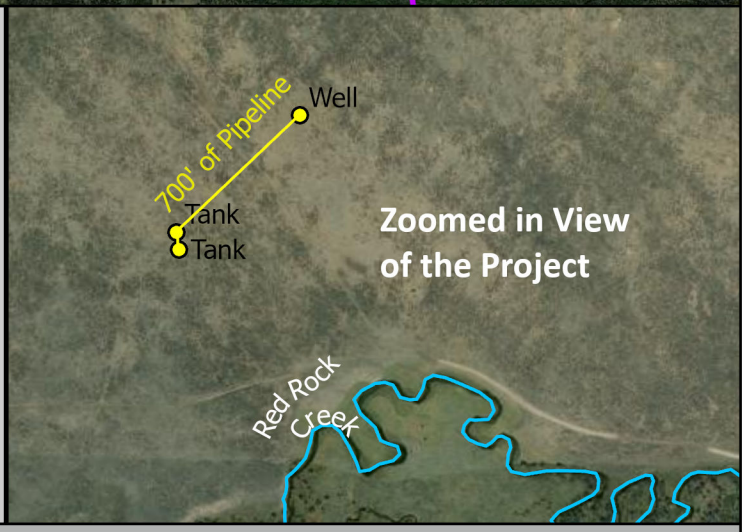
MONTANA FWP



Legend

- Hunstman Pastures
- Centennial Valley CCAA
- Stock Water
- Centennial Valley CCAA Streams

N



Map Produced by: Katelin Killoy (FWP) Fisheries Region 3
Date produced 4/28/2026

0 1 2
Miles

along both reaches to improve cattle distribution and timing of grazing. Infrastructure such as stock tanks or irrigation improvements may further improve these reach conditions. Infrastructure will be considered and prioritized as identified and agreed upon by the landowner and the Agencies.

Red Rock Creek Reach B

This reach rated “At Risk” in the 2020 and 2025 riparian assessments with a score of 68% due to previous incision that is now recovering, high levels of human induced lateral erosion on outside and inside banks, poor width to depth ratio, fine sediment accumulation in point bars, low cover of riparian/wetland vegetation, and high colonization of introduced graminoids.

There was low woody species establishment and regeneration. The adult age class was absent and there were very few saplings. Winter browsing may be limiting recruitment. If seedlings do not naturally revegetate, then willow staking may be used to facilitate willow establishment and continued presence. Select areas along Reach B will likely benefit from willow plantings to improve bank stability and cover. Reach B may also need streambank restoration with the same protocol as Reach A. Willow staking and streambank restoration will be identified by the Agencies and agreed upon in selected areas with the landowner.

Below Reach B on Red Rock Creek in the Refuge beaver activity caused a channel avulsion event. A side channel was created with a lower elevation than the original channel causing majority of the flow to go down the side channel and dewater the main original channel. The original channel below this avulsion would flow into the Huntsman property. The side channel was flowing through an area that was previously upland, so deep rooting riparian vegetation was not already established. Without riparian vegetation the side channel began to incise. One large Beaver Dam Analog was installed in the new side channel in the Summer of 2024 to raise the bed elevation to match the original channel, so that water flows equally in both channels and the channel is restored from incision allowing riparian vegetation to establish.

In Pasture 1 (Figure 12), the main channel of Red Rock Creek has been an important source of drinking water for cattle. Infrastructure such as stock tanks may further improve these reach conditions and provide reliable water. In the fall of 2025, a well was drilled to 140 feet producing over 60 gallons per minute. To access the well location, the Agencies worked with the Huntsman Ranch to improve road conditions to the well location. The stock tank and pipeline off the well is planned to be installed during 2026.

The Refuge allows the Huntsman Ranch to graze in the Refuge in return for the Huntsman Ranch to defer grazing along Red Rock Creek till the fall for a short duration grazing event. If Reach B does not improve by the 2030 riparian assessment, the Agencies will work Huntsman Ranch to identify changes in stocking rate, stream restoration, or infrastructure to improve riparian health.

MONTANA FISH, WILDLIFE & PARKS

Future Fisheries Improvement Program

Appendix: FWP Statement

Project Title: Red Rock Stockwater

Please describe the potential impact of the project, including the priorities of the Fisheries Division and the importance to Montana's anglers.

The purpose of this project is to increase healthy riparian habitat along Red Rock Creek, which is the primary spawning tributary for aboriginal Arctic grayling in the Centennial Valley (CV). This project will provide livestock an off-channel stock water system which will allow for recovery of riparian vegetation, and improve bank stability, water quality, and temperature. Spawning habitat surveys conducted biennially on Red Rock Creek indicate that this section of stream contains habitat which is over-widened, unshaded, and too silty for successful spawning of grayling. The primary spawning location for grayling is located immediately downstream of this property, and improvements to this property will both benefit downstream locations and increase the distribution of suitable habitat for spawning fish in the system. When the Red Rock Creek population was at its peak of abundance (2012-2014), grayling were documented to utilize this property for spawning and rearing. Since then, beaver dams have caused the stream to migrate and blocked access. The new channel is degraded and over-widened due to historic agricultural practices.

The Centennial Valley Arctic grayling CCAA program was modeled after the successful CCAA program in the Upper Big Hole River. The program works to address four primary threats to grayling on private land: 1) Reduced Streamflows, 2) Riparian Health, 3) Barriers to grayling movement, and 4) Entrainment in irrigation ditches. While most of the distribution of CV grayling occurs on federal National Wildlife Refuge land where significant improvements have been documented in habitat quality, this property is the largest private inholding on the creek and has significant room to be improved. The property recently enrolled in the CCAA program and is now a top-priority for habitat improvements as identified in their site-specific plan. Based on results observed in the Big Hole River, off-channel stockwater systems allow for rapid improvements in riparian health and percent shading. This has resulted in reduced stream temperatures and an increase in the overall grayling population.

Name of FWP Biologist Ryan Kreiner Date: 5/14/2026

Please attach to the FFIP application and materials and submit according to listed deadlines.

Riparian conditions along Red Rock Creek near the project area. This stream reach is expected to improve with the stockwater system as the system will provide the landowner the ability to delay grazing to late fall/winter when streambanks are stable and draw cattle away from the riparian area. Riparian conditions have already improved from their cooperation with the Red Rock Lakes Wildlife Refuge. The Refuge provides grazing ground so the Huntsman's can rest their riparian pastures for longer.