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@mt.gov

B. Contact Person (if different than applicant):

Address:

City: State: Zip:

Telephone: E-mail:

C. Landowner and/or Lessee Name (if different than applicant): Harrington Company

Mailing Address: PO Box 834

City: Jackson State: MT Zip: 59736

Telephone: 406-660-3500 E-mail:

II. PROJECT INFORMATION

A. Project Name: Swamp Creek Riparian Fence

River, stream, or lake: Swamp Creek

Location: Township: 2 South Range: 15 West Section: 9, 16

Latitude: 45.65987 Longitude: -113.46822 *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 Swamp Creek, a tributary of the Big Hole River within the Arctic Grayling Big Hole CCAA. This project will reconstruct 1.07 miles of riparian fence along 1.15 stream miles of Swamp Creek to improve riparian health.

The Objectives of the project include the following:

1. Improve grazing timing.
2. 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:

The Harrington Company is enrolled in the Candidate Conservation Agreement with Assurances for Arctic Grayling in the upper Big Hole River Program (CCAA). In cooperation with the CCAA program, the Harrington Company have agreed to manage and improve riparian corridors in compliance with their CCAA site plan. On March 31st, 2025, a landowner meeting on the Swamp Creek determined that current fences along Swamp Creek are inadequate to prevent grazing in the riparian zone. To mediate this condition, Harrington Company and Katelin Killoy discussed the reconstruction of 1.07-mile section of new fence along Swamp Creek to replace failing fence that was constructed by FWP in 2007. Following the riparian fence construction, Harrington Company will be able to better manage grazing distribution so riparian areas remain resilient to short, intense grazing periods during the fall and winter when streambanks are stable rather than continuous grazing. The overall intended results from this fencing project are enhanced riparian function and health.

Scope of Work:

- New Fence
  - 48” treated jacks every 10’
  - 21’ round rail on top and one on the riparian side leg of the jack
  - 4 strands of wire
  - Bottom wire smooth
  - Remove and dispose of existing fence

This project builds on a watershed scale restoration effort for Arctic Grayling in the Big Hole River through the Candidate Conservation Agreement with Assurances Program (CCAA). 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?

Wear and tear over time caused the fence to break down over time. Since the channel has migrated and the wetland area has expanded the fence is no longer fully functioning and Harrington Company has an issue with cattle getting into the exclusion area. The expanding wetland is also an indicator that the Swamp Creek riparian area has been improving since the initial fence was built.

E. Length of stream or size of lake that will be treated (project extent): 1.15 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):	**$**	**24,250.00**
Matching Dollars:	**$**	**24,250.00**
Matching In-Kind Services:*	**$**	

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

Other Contributions (not used as match)	**$**	
Total Project Cost:	**$**	**48,500.00**

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):

		Yes	No
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.	X	

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

This project is part of the Landowners Site Specific Conservation Plan (SSP) through the Big Hole Arctic Grayling CCAA. The SSP address threats to Arctic Grayling on the landowner's property including riparian health. The SSP is a 10-year agreement that has been renewed in 2025. 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).

Additionally, this project was first funded by Future Fisheries in 2007 as part of a larger riparian fence and stock water project that has been successful at increasing the riparian health of Swamp Creek.

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.*

The landowner, Harrington Company, is enrolled in the Arctic Grayling Candidate Conservation Agreement with Assurances program in the Big Hole (CCAA). 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 call for a short duration fall grazing in Swamp Creek. This has been effective in improving the riparian health of Swamp Creek to "Sustainable" using the NRCS rapid riparian assessment method. This method is expected to remain effective in maintaining a "Sustainable" score.

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, FWP annually monitors grayling abundance and genetic diversity downstream of the project area (on the other side of the highway from the project area). Ongoing large-scale restoration efforts in the Big Hole River have positively influenced the overall grayling population and provides resilience to drought and other threats identified in the State of Montana's Upper Missouri River Arctic Grayling Conservation Strategy (2022). Lastly, this project is anticipated to maintain or improve adequate stream temperatures. On Swamp Creek there is a Tru Track to monitor water temperature and stream stage and there is four thermographs to additionally monitor water temperature in other locations along the stream.

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 of Swamp Creek enhances grayling habitat by increasing tree cover and reducing sediment inputs into the stream. Additionally, increased tree cover helps to maintain cold water for Swamp Creek as a tributary of the Big Hole River.

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 an upper Big Hole River tributary will benefit Arctic grayling by maintaining cold water in important conservation reaches. This provides the public an opportunity to appreciate and catch a unique Montana species. Without fencing repairs, Swamp Creek could become a source of fine sediment inputs and warm water into the Big Hole River as streambank erosion would increase from cattle grazing when it is not appropriate for the system.

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 a quality fishing experience by improving conditions for Arctic grayling persistence in the Big Hole River.

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 Big Hole River which has positively influenced grayling population levels since its inception. Improved riparian health of Swamp creek equates to improved spawning and rearing conditions for grayling that migrate large distances within the Big Hole River, 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: 5/15/2025

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 mmcgree@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		n/a		$ -				$ -
Design		n/a		$ -				$ -
Engineering		n/a		$ -				$ -
Permitting	4	hrs; provided by USFWS		$ -				$ -
Oversight	10	hrs; provided by FWP		$ -				$ -
Maintenance**				$ -				$ -
			Sub-Total	$ -	$ -	$ -	$ -	$ -
Travel								
Mileage				$ -				$ -
Per diem				$ -				$ -
			Sub-Total	$ -		$ -	$ -	$ -
Construction Materials								
48" treated jacks	566	treated jacks	$15.00	$ 8,490.00	4,245.00	4,245.00		$ 8,490.00
21' round rail	1130	peeled split rails	$12.00	$ 13,560.00	6,780.00	6,780.00		$ 13,560.00
wire, staples, and lag screws	1	lumpsum	$3,000.00	$ 3,000.00	1,500.00	1,500.00		$ 3,000.00
				$ -				$ -
				$ -				$ -
				$ -				$ -
				$ -				$ -
				$ -				$ -
			Sub-Total	$ 25,050.00	$ 12,525.00	$ 12,525.00	$ -	$ 25,050.00
Equipment, Labor, and Mobilization								
Repair fencing and water crossings labor	1	lumpsum	$13,450.00	$ 13,450.00	6,725.00	6,725.00		$ 13,450.00
Repair exisiteing fence mobilization	1	lumpsum	$3,000.00	$ 3,000.00	1,500.00	1,500.00		$ 3,000.00
Remove existing fence	100	hours	$50.00	$ 5,000.00	2,500.00	2,500.00		$ 5,000.00
Remove exisiting fence disposal	1	lumpsum	$2,000.00	$ 2,000.00	1,000.00	1,000.00		$ 2,000.00

BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

								$ -
								$ -
				$ -				$ -
				$ -				$ -
				$ -				$ -
				$ -				$ -
				$ -				$ -
			Sub-Total	$ 23,450.00	$ 11,725.00	$ 11,725.00	$ -	$ 23,450.00
			OVERALL TOTALS	$ 48,500.00	$ 24,250.00	$ 24,250.00	$ -	$ 48,500.00

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)
Partners Program funding from USFWS		$ 500.00	$ 500.00	Y
State Wildlife Grant (SWG)	$ -	$ 23,750.00	$ 23,750.00	Y
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
TOTALS	$ -	$ 24,250.00	$ 24,250.00	

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)
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	

MONTANA FISH, WILDLIFE & PARKS

Future Fisheries Improvement Program

Appendix: FWP Statement

Project Title: Swamp Creek Riparian Fence

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

Swamp Creek is an important spawning and rearing tributary for Arctic grayling in the upper Big Hole River near Wisdom. Since monitoring for the CCAA program began in 2006, Swamp Creek is the third highest producer (yearly average) of young of year (YOY) grayling out of thirteen sites sampled. The stream has ideal grayling habitat, with low-gradient meanders and laminar flow. However, this makes it very susceptible to degradation, as boulder and cobble-sized substrate is not abundant. This stream type is dependent on a strong riparian community of willows and native grasses. The riparian habitat has improved greatly since fencing went in and it is important that we maintain the fence to allow continued improvement. I believe Swamp Creek has greater potential, not only as a spawning tributary, but as habitat for adult grayling.

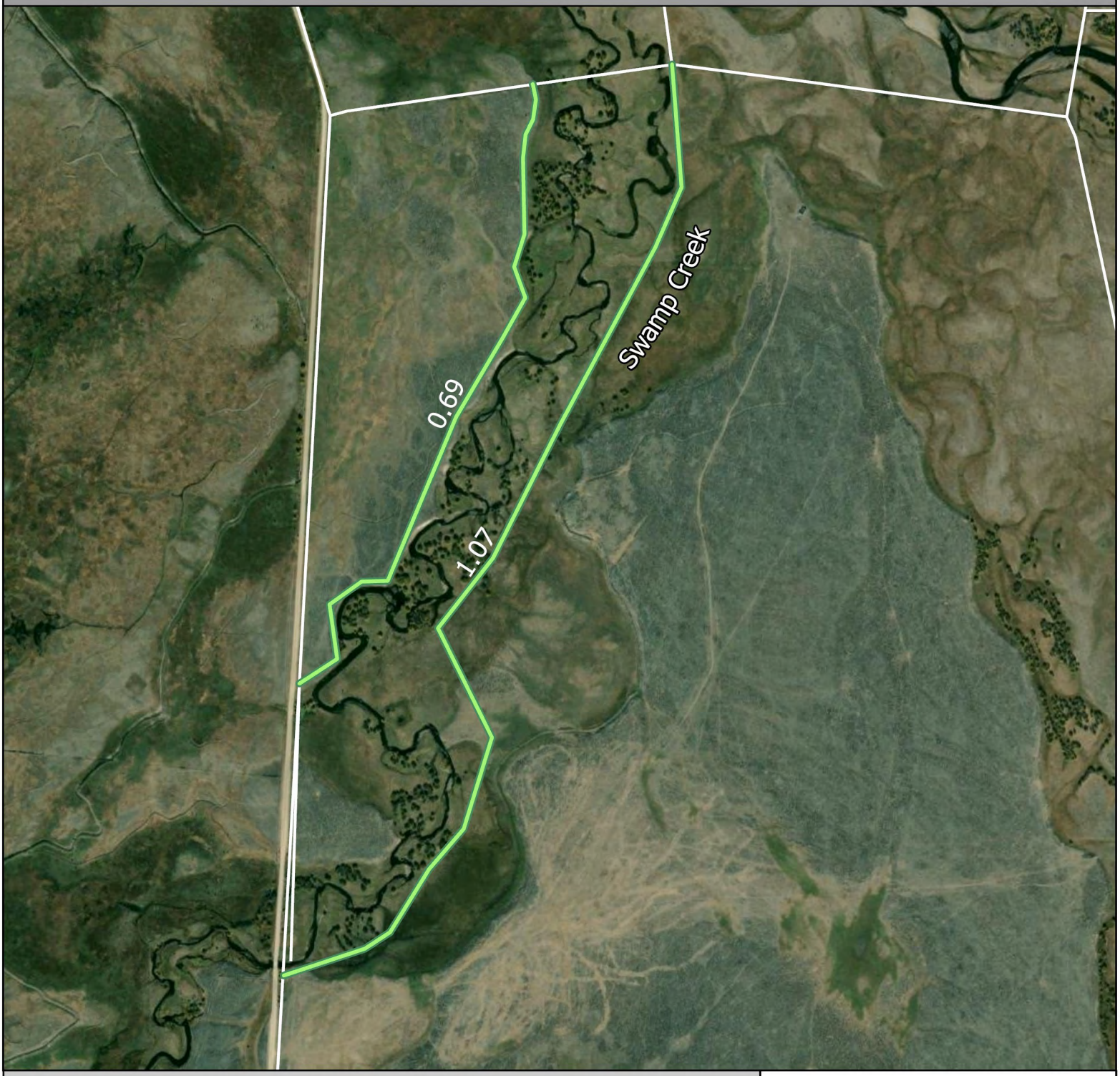
The upper Big Hole River CCAA program has been highly successful at improving the grayling population by addressing four primary threats: 1) Reduced Streamflows, 2) Degrading and non-functioning habitat types, 3) Barriers to grayling movement, and 4) The potential for grayling entrainment in irrigation ditches. It has been so successful that the US Fish and Wildlife Service specifically called out the program as a primary reason in their 2020 finding that Upper Missouri River Arctic grayling were not warranted for protections under the Endangered Species Act. Specifically, they state that *Conservation actions associated with the Big Hole CCAA and Strategic Habitat Conservation Plan have reduced water temperatures in tributaries, increased instream flows in tributaries and the mainstem Big Hole River, decreased the duration of stressful or lethal water temperatures for Arctic grayling, connected almost all core habitat so Arctic grayling can access thermal refugia if water temperatures become too warm in parts of the Big Hole River system, and improved riparian health.* Further, they conclude that *It is now apparent that these threats are being effectively mitigated on private land (Big Hole River) by conservation actions under the Big Hole CCAA and do not appear to be present or acting at a level to warrant concern on most of the other populations.*

Name of FWP Biologist Ryan Kreiner Date: 5/11/2025

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

Harrington Company

MONTANA FWP

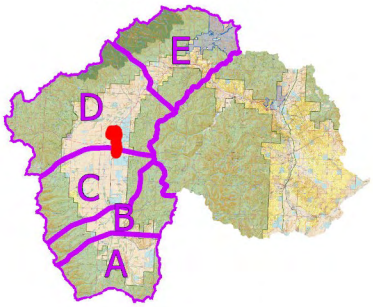


Legend

- Fence Replacements 2025
- Existing Fences (2018)

N

Area of Interest



Map Produced by Katelin Killoy Fisheries Region 3
Date Produced 7/4/2024

0 0.1 0.2
Miles

2023 BIG HOLE RIVER WATERSHED-MONITORING

willow clumps are shooting out suckers. Sedge and rush communities are abundant near the water's edge. The stock water tank is in good working order and is only used during the spring months. Overall, this project has met its objectives to enhance riparian health and grayling habitat. The decreased operations of the ranch have seemed to aid in the project's longevity, specifically the fencing and stock water tanks. The landowner has no concerns about the fence or the stock water tank.

Figure 21. Deep Creek Riparian Enchancment Project CONDITIONS IN 2023: Stock water tank in good working order (left) and fence protecting the riprian zone and streambanks from oversue and browse (Right). Note the robust willow coMmunities on the riprian side of the fence (Right).

Swamp Creek Riparian Fence Project 037-2007

In 2007, Montana Fish Wildlife and Parks completed the Swamp Creek Riparian Fence project. The project involved installing 12.5 miles of riparian fencing (6.25 miles of stream on both sides) along Swamp Creek and the installation of two a stock water system to provide off-stream water to livestock (**Figure 22**). The project was a collaborative effort with 3 landowners and includes a section of State land. The purpose of the riparian fence was to enhance native vegetation that would result in improved fish habitat, bank stability, channel morphology and floodplain function. The fence split the

2023 BIG HOLE RIVER WATERSHED-MONITORING

properties into multiple pastures and was in conjunction with a grazing management plan developed by the landowners for the CCAA program. The stock water tanks were developed to enable the landowners to utilize alternative pastures outside of the riparian corridor. The project was monitored in June 2012 by MFWP. During that monitoring visit, it was noted that a portion of the fence was nonfunctional and was going to be replaced.

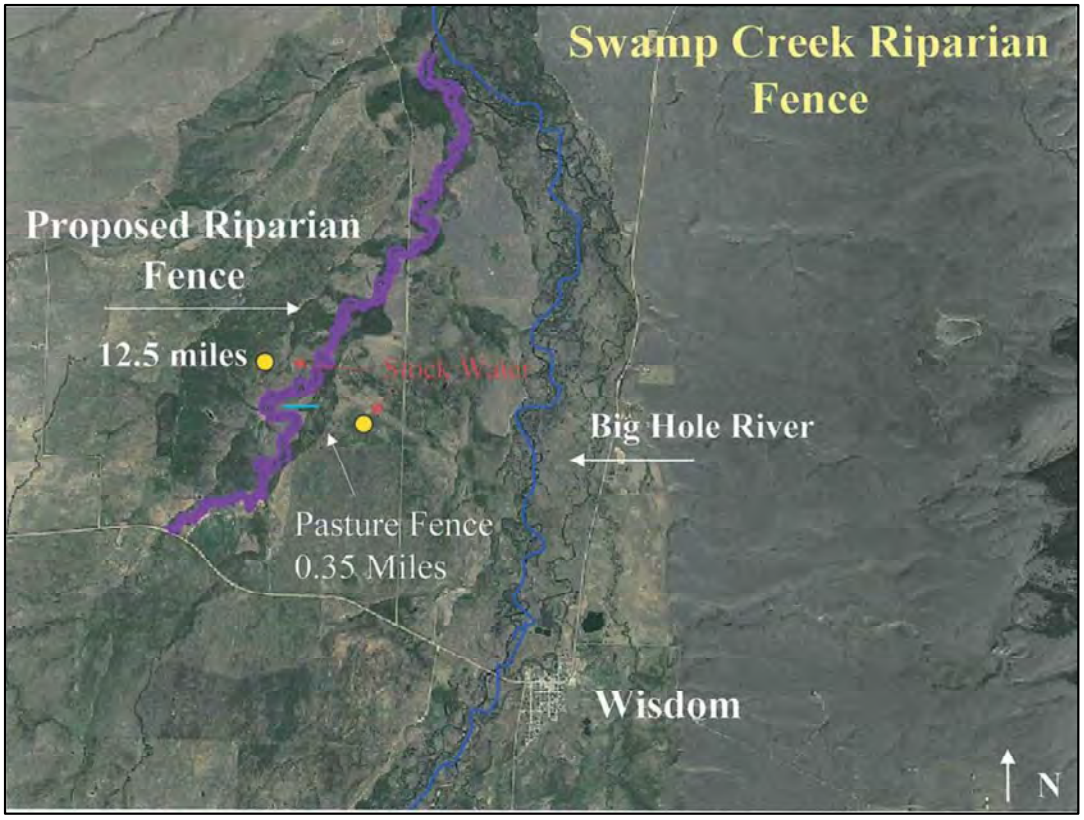


Figure 22. Swamp creek Riparian Fence Project map included in 2007 FFIP proposal.

This project was inspected in June of 2012. During that inspection, a portion of the fence was nonfunctional but scheduled for repair. Cattle were in the exclosed area during the 2012 inspection, but were quickly removed before damage could be done. BHWC inspected the Swamp Creek Riparian Fence Project on September 11, 2023 (**Figure 23**). The fence is still up and in good working order. The riparian area within the fence looked healthy and when comparing pre project photos to 2023, it is evident that there has been an ecological uplift and vegetation recovery. There was a lone cattle within one reach of the fence and BHWC notified the landowner. Both stock tanks were present and in good working order. Overall, this project has proven to be successful. The landowners are happy with

2023 BIG HOLE RIVER WATERSHED-MONITORING

how well the fence has held up over the years. The bankside vegetation is robust, and natural recovery is on an upward trend.

Figure 23. Swamp Creek Riparian Fence Project CONDITIONS IN 2023: Before photo Swamp creek before fence Installation (top left), After photo of the same location in 2012, looking NE (top right), After photo of the same location in 2023 (lower left), Average Swamp Creek Fence conditions in 2023(lower right)

APPENDIX E. Riparian Management Plan

Proposed Action:

This riparian management plan is intended to provide an adaptive approach for improving riparian habitat conditions identified as being "At Risk" on the Harrington Company Ranch within the 15-year timeline for sustainability. The Agencies and Harrington Company met during Fall of 2024 to discuss management alternatives for this riparian management plan. As identified in the conservation actions for Riparian Zone Conservation and Restoration of site-specific plan, the following "At Risk" riparian reaches require riparian management development to improve toward "Sustainable" conditions:

Steel Creek

Reach A1 in 2024 rated "Non-Sustainable" with a score of 38% due to active channel incision causing banks to collapse, lateral erosion on both the outside and inside banks, poor sediment transport, over widened channel, high colonization of introduced graminoids, and heavy browsing. Bare ground is common and the young established willows observed in the last assessment have been heavily browsed.

Reach A2 in 2024 rated "At Risk" with a score of 55% due to active channel incision caused by cattle trialing, lateral erosion primarily on the outside banks, poor sediment transport, over widened channel, high colonization of introduced graminoids, and heavy browsing.

Riparian vegetation was beginning to establish on the banks from the last assessment. In 2020 the score had increased from 65% to 82%. The decline observed in 2024 was due to the pastures being grazed for longer than normal resulting in high utilization. Riparian fence along Steel Creek is failing due to age and the gates are no longer functional. Without functioning riparian fence Harrington Company has not been able to follow the grazing management plan set during the creation of the previous SSP. In the previous grazing management plan reaches A1 and A2 were turned into riparian pastures with 30-day grazing after September 1st. The Agencies suggest returning to short duration grazing practice with utilization not exceeding 50% following the repairs to the Steel Creek riparian fence. It is expected with short duration grazing the channels will begin to improve again.

Reach B of Steel Creek rated "At Risk" with a score of 78% due to high colonization of introduced graminoids. This reach is improving and just needs more time to reach "Sustainable." Currently, there are no management suggestions.

Swamp Creek

Reach G2 of Swamp Creek rated "At Risk" with a score of 67% due to over-widened channel, low cover of riparian deep rooting species, high colonization of introduced

graminoids, and low recruitment of desirable woody species. This reach has already been fenced into a riparian pasture and has had improved since the last assessment that scored 57%. The 2020 assessment was an improvement from the previous assessment that ranked "Non-Sustainable." In the previous grazing plan this pasture was grazed for 60 days after September 1st. The Agencies recommend grazing in these riparian pastures to be deferred to September 1st with utilization not to exceed 50% which may result in fewer days than 60.

Big Hole River

Reach J of the Big Hole River rated "At Risk" with a score of 68% in 2020 due to heavy lateral erosion on the outside banks, low cover of riparian deep rooting species, and high colonization of introduced graminoids. This reach has been static over time, but grazing does not appear to be the limiting factor as little grazing pressure has been observed. The main limiting factor is low cover in the understory of desirable deep rooting species. The Agencies recommend grazing in these riparian pastures to be deferred to September 1st or as late as possible. If it is not possible to defer grazing, then the Agencies recommend short duration grazing with a 45-day rest interval days rest following each grazing event with utilization not to exceed (50%). Additionally, select areas along these reaches will likely benefit from willow plantings to improve bank stability and cover. This will be identified by the Agencies and agreed upon in selected areas with the landowner.

Reach K of the Big Hole River rated "At Risk" in 2024 with a score of 50% due to lateral erosion on both banks due to heavy cattle trailing, over-widened channel, low cover of riparian deep rooting species, high colonization of introduced graminoids, and low recruitment of desirable woody species. Currently this pasture has grazing pressure throughout the entire summer. The Agencies recommend two grazing events a summer that is short duration and has a 60-day rest following each grazing event with utilization not to exceed (50%). If Reach K does not show improvement by the 2029 or 2034 riparian assessments, then the Agencies recommend looking into riparian fencing along the Big Hole River with either traditional fences or virtual fences.

Reach L of the Big Hole River rated "At Risk" with a score of 70% due to recovering lateral erosion on the outside banks, poor width to depth ratio, low cover of riparian deep rooting species, and high colonization of introduced graminoids. Some of the banks were recovering from lateral erosion. The Agencies recommend grazing in these riparian pastures to be deferred to September 1st or as late as possible. If it is not possible to defer grazing, then the Agencies recommend short duration grazing with a 45-day rest interval days rest following each grazing event with utilization not to exceed (50%). Additionally, the Agencies suggest willow staking along the outside banks currently still eroding laterally.

Reach P of the Big Hole River rated "At Risk" in 2024 with a score of 50% due to recovering lateral erosion on both banks, low cover of riparian deep rooting species, high colonization of introduced graminoids, and high utilization of available forage. The Agencies recommend grazing in these riparian pastures to be deferred to September 1st

or as late as possible. If it is not possible to defer grazing, then the Agencies recommend short duration grazing with a 45-day rest interval days rest following each grazing event with utilization not to exceed (50%). Additionally, select areas along these reaches will likely benefit from willow plantings to improve bank stability and cover. This will be identified by the Agencies and agreed upon in selected areas with the landowner.

The riparian fencing along the Big Hole River has developed weak points from age and wear and tear. The Agencies recommend repairing the riparian fence after repairs to the Swamp Creek and Steel Creek riparian fences have been completed.

North Fork of the Big Hole River

Reach O of the North Fork of the Big Hole River rated "At Risk" with a score of 77% due to low cover of riparian deep rooting species and high colonization of introduced graminoids. This reach has been slowly improving with each assessment over time. This reach just needs more time to reach "Sustainable." The Agencies suggest maintaining the current management of this reach.

McVey Creek

Reach N of McVey Creek rated "At Risk" in 2023 with a score of 67% due to human induced low cover of riparian deep rooting species causing lateral erosion on outside banks and high colonization of introduced graminoids. The Agencies recommend grazing in these riparian pastures to be deferred to September 1st or as late as possible. If it is not possible to defer grazing, then the Agencies recommend short duration grazing with a 45-day rest interval days rest following each grazing event with utilization not to exceed (50%). Additionally, the Agencies recommend seeding the banks with a riparian seed mix. If Reach N does not show improvement by 2029 or 2034 then the Agencies recommend looking into additional alternatives such as sod transplants and stream restoration.

Sustainable Reaches

This riparian management plan is intended to provide an adaptive approach for improving riparian habitat conditions identified as being "At Risk" on the Harrington Company property within the 15-year timeline for sustainability. In the 2020/2024 riparian assessments, reaches C – F of Steel Creek, Reach G1 of Swamp Creek, Reach H/I of the Big Hole River, and Reach N2 of McVey Creek rated "Sustainable." Due to the current riparian conditions on Reaches C, D, E, F, H/I, and N2, the Harrington Company is not required to make changes to the existing grazing strategy for those riparian areas. For all of the riparian habitat that rates "Sustainable" for the Harrington Company, they are asked, but not required, to consult with the Agencies should any significant changes to the existing grazing strategy be required for the operation. the Harrington Company will continue to operate and manage livestock in all riparian areas that maintains "Sustainable" conditions. If riparian areas degrade below "Sustainable" conditions this riparian management plan will be amended to improve management actions in the

riparian habitat. At any time, the Participating Landowner asks for future guidance or riparian management recommendations, the Agencies will assist in drafting and submitting an amendment to this site-specific plan as agreed upon with the Participating Landowner.