

FUTURE FISHERIES IMPROVEMENT PROGRAM GRANT APPLICATION



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

	LDLIFE				LDLIFE
I.	AP	PPLICANT INFORMATION			
	A.	Applicant Name: Will McDowell, Clark Fork	Coalitio	n	
		Mailing Address: Box 7593			
		City: Missoula	State:	MT Zip:	59804
		Telephone: 406-396-7716	E-mail:	will@clarkfork.o	rg
	В.	Contact Person (if different than applicant):			
		Address:			
		City:	State:	Zip:	
		Telephone:	E-mail:		
	C.	Landowner and/or Lessee Name (if different than applicant):	Sue Bal	entine	
		Mailing Address: 895 Rt. 3 Browns Guld	h Road		
		City: Butte	State:	MT Zip:	59701
		Telephone: 406-565-8939	E-mail:	Balentinecam@	gmail.com
II.	PR	ROJECT INFORMATION			
	A.	Project Name: Upper Browns Gulch Fish So	creens		
		River, stream, or lake: Browns Gulch, tributa	ary to Sil	ver Bow Creek	
		·	nge:	8W	Section: 5 and 4
		Latitude: 46.1246 Lor	ngitude:	-112.6160	Within project (decimal degrees)
		County: Silver Bow			

B. Purpose of Project:

The purpose of this project is to provide upstream fish passage, and prevent entrainment of trout, in the Browns Gulch irrigation diversions #6, #7 and #8 on Balentine Ranch in the Silver Bow Creek drainage. This project is part of a larger, multi-partner effort to improve the westslope cutthroat trout fishery in Browns Gulch itself, and downstream in Silver Bow Creek.

C. Brief Project Description (attach additional information to end of application):

Browns Gulch rises out of mountains along the Continental Divide just west of Butte, and flows into Silver Bow Creek near Ramsay, MT. During the past decade, sediment reduction, aquatic habitat enhancement, and fish passage restoration work by the Watershed Restoration Coalition (WRC), Mile High Conservation District, Clark Fork Coalition (CFC), and the Natural Resource Damage Program (NRDP) has resulted in stream health improvements in many parts of the drainage. Today, Browns Gulch sustains a trout fishery, including hefty brook trout and 100% genetically pure westslope cutthroat trout.

Studies by Fish, Wildlife & Parks (FWP) have shown that – while westslope cutthroat are present throughout the 85-square mile Browns Gulch drainage – their population is particularly robust in the high-elevation headwaters. The primary obstacles to expanding trout numbers, and outmigration

to Silver Bow Creek, include entrainment and upstream passage, including 4 problematic irrigation diversions, sitting right in the heart of the cutthroat stronghold in the upper end of the watershed. These diversions are documented trout killers. They block upstream passage for juveniles and cause entrainment and mortality of adults and juveniles in irrigation ditches. As a result, CFC and the WRC are partnering with the Balentine Ranch on a project to rebuild the ranch's 4 rustic diversions and install small fish screens that will eliminate entrainment risks once and for all. The plan is to build a 24-inch corrugated water

screen for the largest ditch, and three small screens for the upper 3 diversions.

The largest screen, coded Diversion #5, was funded by Future Fisheries, George Grant TU, and private dollars **in a separate Project**. This Proposal focuses on the upper three (3) diversions, designated #6, #7, and #8, all of which are smaller, but according to the FWP Biologist, also important to screen because of their location in the heart of the best cutthroat trout populations near the USFS boundary.

Designs for the 3 new diversions and their fish screens are 90% complete, dating from 2020. We have a small "design" budget to look for ways to fine tune these designs to save money and further reduce maintenance issues at these three upper fish screens, using the same firm, Confluence Consulting, who did the designs. All three diversions and their screens will be re-built as one publicly bid construction project. Once built, we will add these new fish screens to the list of projects that a recently-hired WRC field tech will monitor and maintain during the irrigation season. (The field tech is a local resident in Butte).

Match for this Proposal comes from the US Fish and Wildlife Service Fish Passage Program, two private foundations, the Clark Fork Coalition, and the landowner. The landowner, Cam and Sue Balentine, have completed several conservation projects on their ranch, and are committed to the diversion upgrade and fish screens. The Balentines own the hayland being irrigated by diversions #6 and #7, and lease the hayland irrigated by diversion #8 from their upstream neighbor, the Woods family. The Balentines will contribute materials to the Project, including angular fill rock, small riprap, and a culvert for a temporary crossing of Browns Gulch at diversion #8 during construction.

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

The existing rustic irrigation diversions are a combination of local rock and planks, and they require nearly annual use of heavy equipment in the stream to prepare for irrigation season. The entrainment of trout from this small stream is a result of the diversions' configuration and additional materials (such as planks) used in these structures, and the flood irrigation practices which divert flows primarily during cutthroat migration season. This Project will upgrade the diversions using large imported angular rock for weirs and fish bypass, and minimize future maintenance issues. The headgates and screens to be installed will pass debris and fish back to the stream, and allow better control of diverted water. Fish will be able to pass upstream and downstream unimpeded.

E.	Length of stream or size of lake that will be treated (project extent): One half mile
	Length/size of impact, if larger than project extent (e.g., stream miles opened): Eight miles
F.	Project Budget Summary:
	Grant Request (Dollars): \$ 37,890
	Matching Dollars: \$ 76,376
	Matching In-Kind Services:* \$ 0 *salaries of government employees are not considered matching contributions
	Other Contributions (not part of this app) \$ 39,750
	Total Project Cost: \$ 154,016
G.	Attach itemized (line item) budget – see budget template
Н.	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 letters or statements of support (e.g., landowner consent, community or public support, and fish biologist support). List any other project partners:
	Watershed Restoration Coalition for the Upper Clark Fork (WRC) is contributing a project maintenance person (funded by NRDP). Mile Hi Conservation District will be a key partner for permits, and US Fish and Wildlife Service is a key funding partner.
MA	INTENANCE 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. *If it is a water leasing project, describe the length of the agreement. Yes \[\times \] \[\times \]
	The Balentines are committed to maintenance of these new structures (see letter). The CFC is participating in a fish screen operation and maintenance program with WRC, TU, FWP, and NRDP in the Upper Clark Fork with a part-time staff person. This program will attend to 15 existing and planned fish screens in the Clark Fork above Hwy 12.

III.

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 Balentine Ranch grazes some pastures adjacent to these diversions, particularly #6 and #7. The fish screens will need to be fenced to avoid damage, which will be a responsibility of the landowner.

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

The CFC, WRC, TU and NRDP are developing a fish screen monitoring and maintenance program that will include weekly visits to screens throughout the irrigation season, with notes taken on performance and addressing required maintenance onsite. The logs will be shared with FWP to help evaluate the performance and maintenance requirements of a variety of fish screens. In 2023, FWP has started a trout radio-tracking project to determine the movement of cutthroat trout throughout the Silver Bow Creek drainage, including Browns Gulch.

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

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

Westslope cutthroat trout are the main beneficiary of this Project. Brook trout and native sculpins also exist in Browns Gulch, as do Western Pearlshell mussels (a State species of concern).

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

This Project will enhance wild fish habitat by removing barriers to save upstream and downstream movement of adult and juvenile trout in Upper Browns Gulch. Traditional irrigation practices, including the use of rustic push-up dams, broke up the connectivity of the habitat in Browns Gulch. The project is restoring this connectivity, by focusing on high priority irrigation structures, particularly in the westslope cutthroat stronghold reaches in the upper watershed.

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

The short-term benefit is increased survival of trout in this reach. The long-term benefits to the fishery are 1) higher survival rate of juvenile trout, and 2) higher survival rates of adult westslope cutthroat translating to higher productivity of the populations, as more large adult fish live longer. More larger cutthroat trout surviving longer translates to more catch-and-release angler success in Browns Gulch and perhaps in Silver Bow Creek.

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

There are fishing opportunities on public USFS land less than a mile upstream of these diversions. Westslope cutthroat and brook trout in these reaches definitely grow large enough for angling. Some of the private landowners in this area will give permission for fishing if asked, including this landowner. Lower Browns Gulch is also used by locals as a trout fishery, as is Silver Bow Creek.

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

This Project is part of a larger restoration plan for Silver Bow Creek watershed, as part of the Natural Resource Damage Program's Aquatic Restoration Plan for the Upper Clark Fork. Bringing back native fish to the Silver Bow Creek drainage has been a huge goal of everyone involved in the Superfund cleanup around Butte and beyond. This Project specifically enhances a westslope cutthroat stronghold in Upper Browns Gulch, and helps connect the habitat from this stronghold to downstream areas which have benefitted from habitat restoration and enhancement.

Another benefit of this Project is enhancing conditions for westslope cutthroat as the preferred symbiotic host species for western pearlshell mussel, the only native mussel in western Montana, and a species of concern in the State.

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

The irrigation water rights and property rights at these three diversions are clearly understood, and managed without conflict by landowners in Browns Gulch. Two of these diversions irrigate land owned by Balentine Ranch, and one hayfield, irrigated by diversion #8 on Woods property, is currently leased by Balentine Ranch, as it has been for many years.

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

No.

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:

Willa Cowill

Date: May 15, 2023

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

Both tables must be completed or the application will be returned

PROJECT COSTS						contributions								
WORK ITEMS (Itemize by Category)	NUMBER OF UNITS	UNIT DESCRIPTION*	COST/UNIT		TOTAL COST	F	TUTURE FISHERIES REQUEST	MATCH (•	OTHER (Not part of this application)		TOTAL		
Personnel***														
Survey		day	\$2,000.00		4,000.00		1,000.00		00.00		\$	4,000.00		
Design		days	\$1,500.00		9,000.00		2,000.00	7,0	00.00		\$	9,000.00		
Engineering		days	\$1,500.00		36,000.00					35,500.00	\$	35,500.00		
Permitting		days	\$552.00		1,104.00				04.00		\$	1,104.00		
Oversight		days	\$552.00		4,416.00			4,4	116.00		\$	4,416.00		
Maintenance	20	hours	\$25.00	\$	500.00		500.00			500.00		1,000.00		
			Sub-Total	\$	55,020.00	\$	3,500.00	\$ 15,5	20.00	\$ 36,000.00	\$	55,020.00		
<u>Travel</u>														
Mileage	1200	miles	\$0.66	\$	786.00			7	786.00		\$	786.00		
Per diem				\$	-						\$	-		
			Sub-Total	\$	786.00	\$	-	\$	786.00	\$ -	\$	786.00		
Construction Ma	terials****													
15" screwgate	3	units	\$1,200.00	\$	3,600.00		3,600.00				\$	3,600.00		
15" CW Screens	3	units	\$7,500.00	\$	22,500.00		7,500.00	15,0	00.00		\$	22,500.00		
Screen "flume box" 30" rock for	3	units	\$3,500.00	\$	10,500.00		3,500.00	7,0	00.00		\$	10,500.00		
weirs & bypass	70	cubic yards	\$120.00	\$	8,400.00		2,000.00	6,4	100.00		\$	8,400.00		
Pin&plank #8		unit	\$9,000.00		9,000.00		6,000.00	<u> </u>	-	3,000.00	\$	9,000.00		
HDPE 10" pipe		feet	\$22.00		1,980.00		660.00	1,3	320.00	,	\$	1,980.00		
upland/wetland seed	7	lbs	\$20.00		140.00		140.00				\$	140.00		
angular 2"-6" rock (dirty)	30	yards	\$25.00	\$	750.00					750.00	\$	750.00		
				\$	-						\$	-		
				\$	-						\$	-		
			Sub-Total	\$	56,870.00	\$	23,400.00	\$ 29,7	20.00	\$ 3,750.00	\$	56,870.00		
Equipment, Lab	or, and Mobiliza	ation_												
Trak-hoe w/														
operator		days	\$1,500.00		18,000.00		4,000.00		00.00		\$	12,000.00		
Dump truck		days	\$800.00		6,400.00		2,000.00		100.00		\$	6,400.00		
Skid Steer		days	\$750.00		7,500.00		2,000.00		00.00		\$	7,500.00		
Mobilization		unit	\$5,000.00		5,000.00			5,0	00.00		\$	5,000.00		
Demolition	1	unit	\$2,500.00		2,500.00		2,500.00				\$	2,500.00		
Dewatering	10	days	\$500.00		5,000.00			5,0	00.00		\$	5,000.00		
Hand Labor	12	days	\$245.00	\$	2,940.00		490.00	2,4	150.00		\$	2,940.00		

BUDGET TEMPLATE SHEETS FOR FUTURE FISHER SHERES PROGRAM APPLICATIONS

013-2023

		\$	-						\$ -
		\$	=						\$ -
		\$	-						\$ -
		\$	-						\$ -
		\$	-						\$ -
		\$	-						\$ -
	Sub-Total	\$	47,340.00	\$	10,990.00	\$	30,350.00	\$ -	\$ 41,340.00
TOTALS							76,376.00	\$ 39,750.00	\$ 154,016.00

OTHER REQUIREMENTS:

All of the columns in the budget table and the matching contribution table MUST be completed appropriately or the application will be invalid. Please see the example budget sheet for additional clarification.

*Units = feet, hours, inches, etc. Do not use lump sum unless there is no other way to describe the costs.

**Can include in-kind materials. Justification for in-kind labor (e.g. hourly rates used). Do not use government salaries as match. Describe here or in text.

***The Review Panel suggests that design and oversight costs associated with a proposed project not exceed 15% of the total project budget. If design and oversight costs are in excess of 15%, applications may require a justification or minimum of two competitive bids for the cost of undertaking the project. For projects that include a maintenance request, it must not exceed 10% of the total project cost.

****The Review Panel recommends a maximum fencing cost of \$1.50 per foot. Additional costs may be the responsibility of the applicant and/or partners.

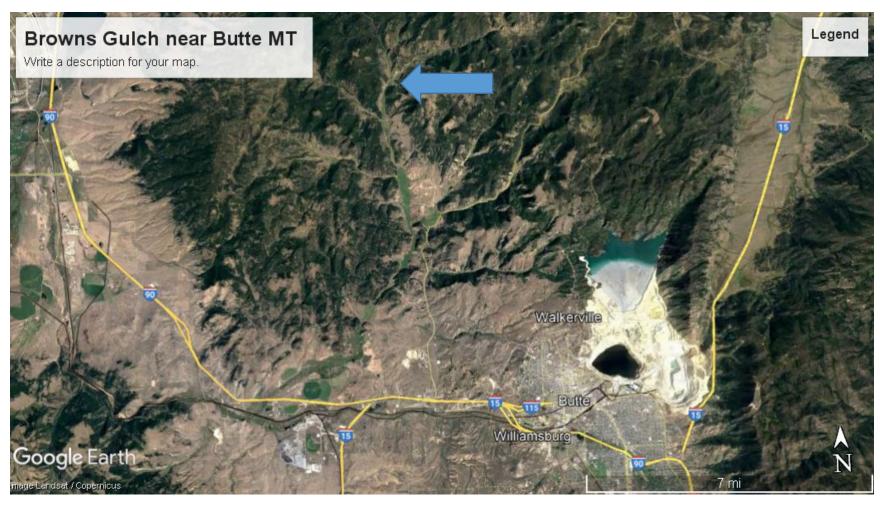
Add	ditional	l detai	IS:
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APPLICATION MATCHING CONTRIBUTIONS											
(do not include requested funds or contributions not associated with the application)											
CONTRIBUTOR	CASH		TOTAL	Secured? (Y/N)							
USFWS	\$	-	\$	58,500.00	\$	58,500.00	No				
Clark Fork Coalition	\$	-	\$	2,876.00	\$	2,876.00	yes				
Private Foundation	\$	-	\$	15,000.00	\$	15,000.00	yes				
	\$	-	\$	-	\$						
	\$	-	\$	-	\$	-					
	\$	-	\$	-	\$						
	\$	-	\$	-	\$						
	\$	-	\$	-	\$	-					
TOTAL	.S \$	-	\$	76,376.00	\$	76,376.00					

OTHER CONTRIBUTIONS									
(contributions not associated with the application)									
CONTRIBUTOR	IN-KIND	CASH	TOTAL	Secured? (Y/N)					
NRDP-Survey and Designs	\$ -	\$ 36,000.00	\$ 36,000.00	yes					

013-2023

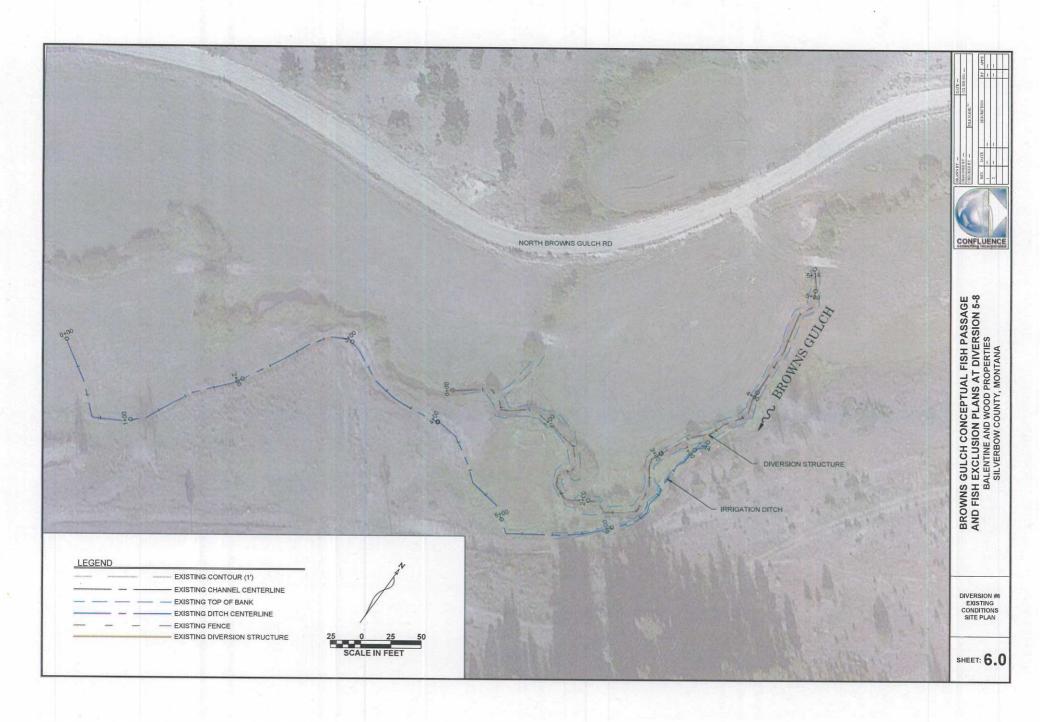
Landowner	\$ 3,750.00	\$ -	\$ 3,750.00	yes
	\$	\$ -	\$ -	
	\$	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
TOTALS	\$ 3,750.00	\$ 36,000.00	\$ 39,750.00	

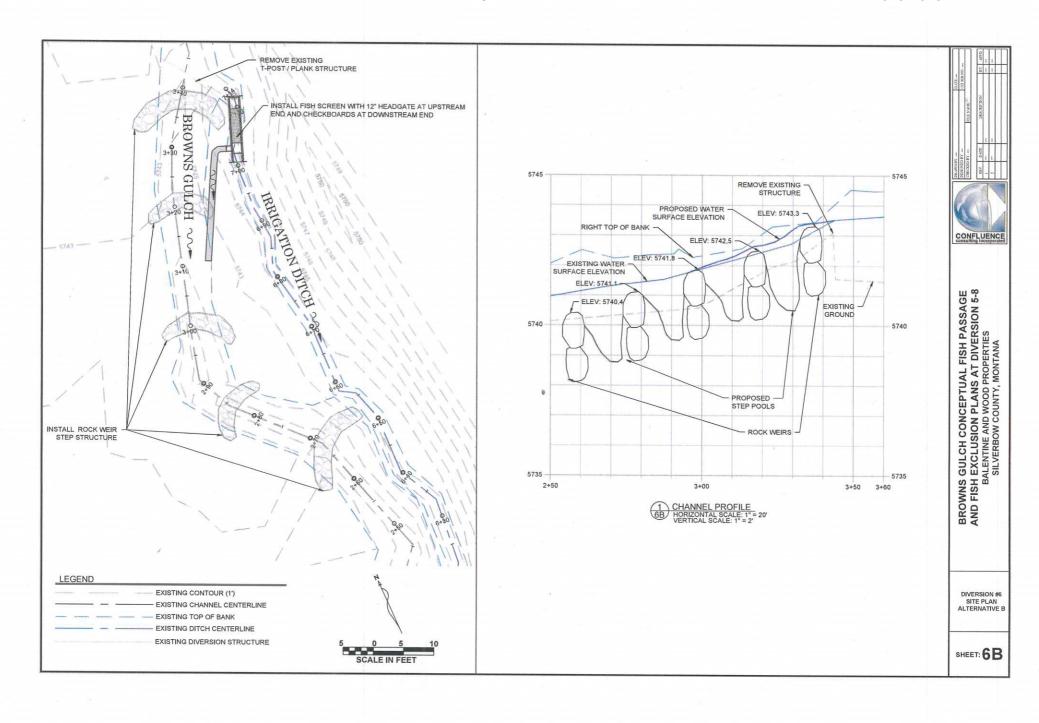


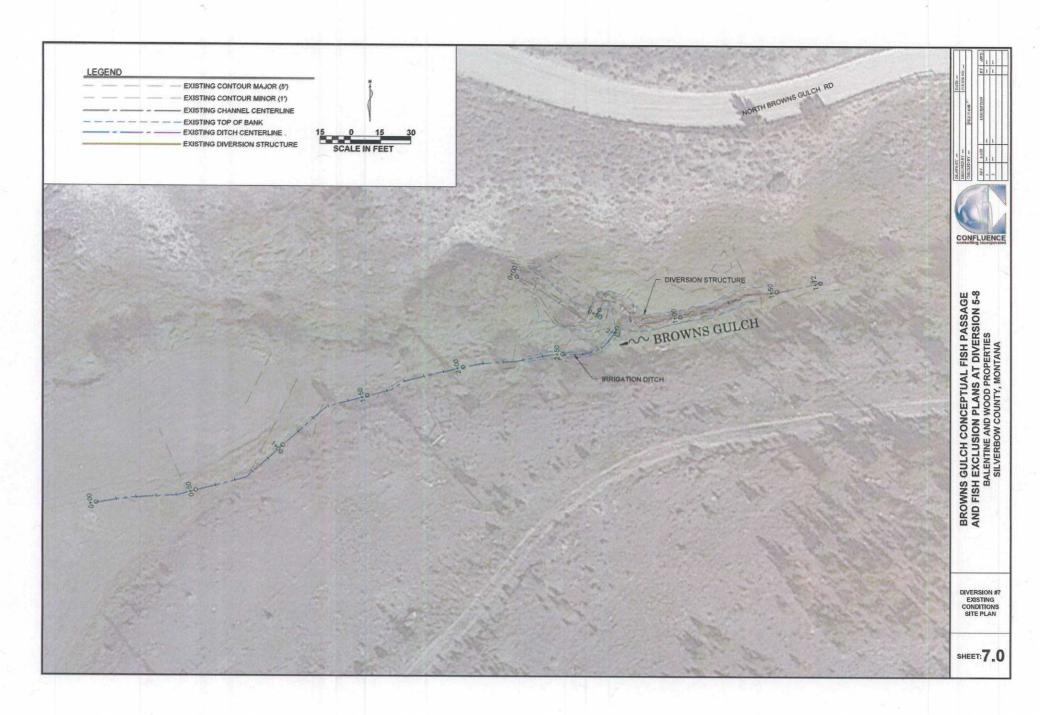
Browns Gulch Area near Butte, MT. Blue arrow points to upper Browns Gulch.

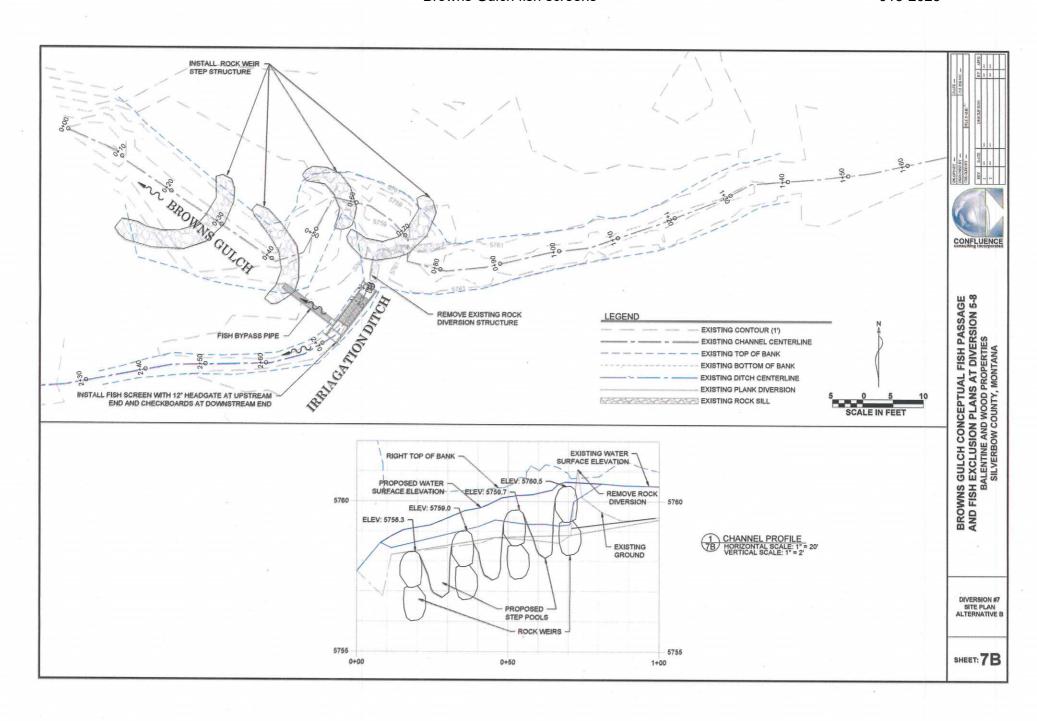


UPPER BROWNS GULCH FISH SCREENS: PROJECT LOCATION MAP

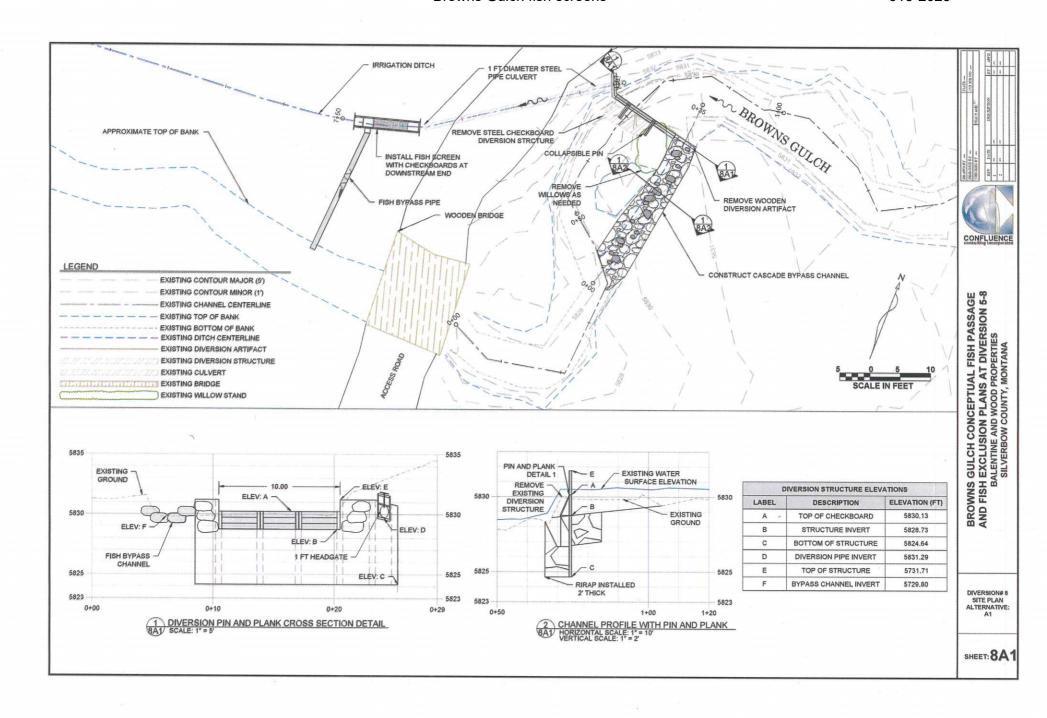


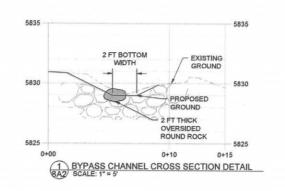


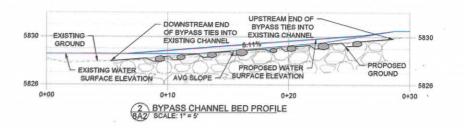












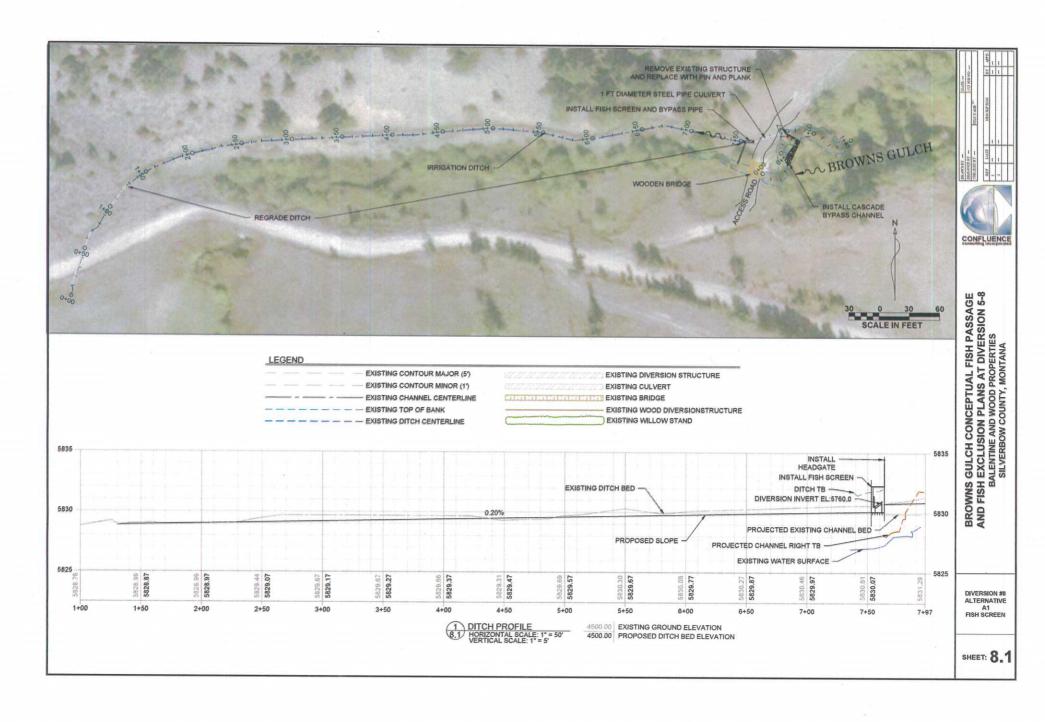
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BROWNS GULCH CONCEPTUAL FISH PASSAGE
AND FISH EXCLUSION PLANS AT DIVERSION 5-8
BALENTINE AND WOOD PROPERTIES
SILVERBOW COUNTY, MONTANA

DIVERSION# 8 SITE PLAN ALTERNATIVE: A1 DETAILS

SHEET:8A2



Future Fisheries Project: Upper Browns Gulch Fish Screens

We, Cam and Susan Balentine of 895 Rt 3 Browns Gulch Road, are in favor and support the two Balentine and woods diversion projects in the upper Browns Gulch drainage. We are willing to provide all of the rocks and dirt necessary for the projects, and agree to provide all necessary maintenance and operation of the diversions to provide correct operation of the diversions. Thank you for your time and consideration. She Salertine Cam Balentine May 11, 2023

FWP.MT.GOV

THE OUTSIDE IS IN US ALL.

Montana Fish, Wildlife and Parks - Region 2 3201 Spurgin Road Missoula, MT 59804 (406) 542-5500 05-11-2023

Montana Fish, Wildlife and Parks Future Fisheries Program, Attn: Michelle McGree PO Box 200701 Helena, MT 59621

RE: Support for the Browns Gulch Fish Screen Project on Balentine Screens 6, 7, and 8

Dear Michelle,

Fish, Wildlife and Parks (FWP) staff supports the fish screen project proposed on Browns Gulch. Based on fish surveys conducted by FWP in coordination with the Natural Resource Damage Program, Browns Gulch has been identified as a high priority stream for fisheries restoration. One goal is to protect and enhance westlsope cutthroat trout populations in Browns Gulch. Browns Gulch is one of three major tributaries to Silver Bow Creek and supports one of the few remaining intact westslope cutthroat trout populations in the drainage. Sources of recruitment for westslope cutthroat trout to Silver Bow Creek are limited and it is important to conserve all potential sources. The core area for westslope cutthroat trout in Browns Gulch includes the reach on the Balentine Ranch where diversions 6, 7, and 8 are situated. These diversions have all been documented as an entrainment risk to westslope cutthroat trout by FWP. Providing better fish passage and eliminating entrainment risk at these diversions will add resiliency to the population and help accomplish the restoration goals in Browns Gulch and the larger Silver Bow Creek system by protecting one of the remaining westslope cutthroat trout populations from entrainment risks.

This project meets the goals of the Future Fisheries Program by restoring wild native fish populations in Browns Gulch. We encourage you to reach out to Caleb Uerling, Fisheries Biologist, (406) 493-2694, Caleb.Uerling@mt.gov as the primary contact person with any questions or concerns about these comments.

Sincerely,

Randy Arnold

Regional Supervisor, Region 2

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