

Future Fisheries Improvement Program | Report to the 2027 Montana State Legislature

Summary of Program Activities from
April 1, 2024 to March 31, 2026

Montana Fish, Wildlife & Parks
Habitat Bureau
Fisheries Division

Future Fisheries Improvement Program

FY2025/2026 Accomplishments

$2.6M in grants and 41 habitat projects

were awarded during the period of this report (April 2024-March 2026). These projects will use an additional $10 million in matching funds and in-kind services from outside sources for a total value of approximately $12 million restoration dollars.

Completed Project Highlights

Albert Creek Culvert Replacement

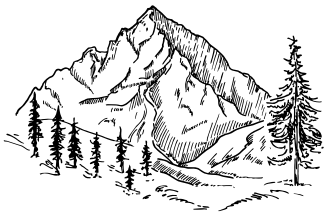
Fish passage



Removed a undersized culvert that was preventing native westslope cuttthroat trout and resident bull trout from migrating and spawning upstream.

Little Boulder River Restoration

Instream habitat improvement



Improved floodplain connectivity, in stream and terrestrial habitat, and fish passage within the project area.

Musselshell River Rowtown Bank Restoration

Instream and riparian habitat improvement



Repaired erosion caused from historical land use practices and drought/flooding. Improved both instream and terrestrial habitat as well.

Little Boulder River Restoration

Overwintering habitat



Increased depth to improve overwintering conditions for artic grayling. Installed a pipe to deliver oxygenated water to the site.

Local Dollars and Community Support

Most, if not all, of the funding from this program stays in Montana, supporting local contractors and communities. Projects are developed from partnerships between people from many backgrounds, including landowners, state and federal agencies, watershed groups, nonprofits, angler groups, and conservation districts. Oftentimes engineers or consultants are hired, and local contractors do the work. Even when materials are purchased, they typically come from local companies or sources.

Thank you for supporting the Future Fisheries Improvement Program

For 30 years, the FFIP has provided biannual funding for habitat improvements across Montana (MCA 87-1-272). Find the full report at: https://fwp.mt.gov/legislature

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Background and Overview

This report provides updates on Future Fisheries Improvement Program (FFIP) activities and expenses, project schedules, and anticipated expenses for the next 10 years.

Legislation

The FFIP was enacted in 1995 (MCA 87-1-272) to provide funding for the long-term enhancement of streams, rivers, and lakes. It was restructured by the River Restoration Program (authorized in 1989) and expanded opportunities to restore wild fish habitats. The FFIP was supplemented and amended in 1999 when the legislature enacted the Bull Trout and Cutthroat Trout Enhancement Program (MCA 87-1-283), which emphasized the enhancement of habitat for the natural reproduction of bull trout and cutthroat trout. In 2013, the emphasis on native species was amended and expanded to all native fish species. This expansion of the FFIP, which encompassed all native species (hereinafter referred to as Native Species Enhancement Program; NSEP), is a component of FFIP, separated by financials and project eligibility.

Legislative statute outlines the procedures and requirements of the FFIP. The Citizen Review Panel (Panel), appointed by the governor and legislative body, assesses proposed projects independently and makes recommendations for funding. The Fish and Wildlife Commission (commission) is responsible for final funding approval.

Program Status and Impact

Since the FFIP began, 769 projects have been completed across Montana (Figure 1), with significant contributions to fish habitat improvements (Table 1). Since 1996, with the help of Future Fisheries, almost 250 miles of riparian fence was installed (equivalent to the distance between Billings and Bozeman), and 154 miles of stream channel was restored (Great Falls to Kalispell).

TABLE 1. IMPACT OF COMMON PROJECT TYPES, SINCE PROGRAM INCEPTION (1996).

PROJECT TYPE	
Riparian fence installed	250 Miles
Stream channel restored	154 Miles
Fish screens installed	67 Screens
Fish passage structures installed, or barriers removed	293 Structures
Spawning structures placed in a lake or reservoir	13,964 Structures
Instream flow added	373 cubic feet per second

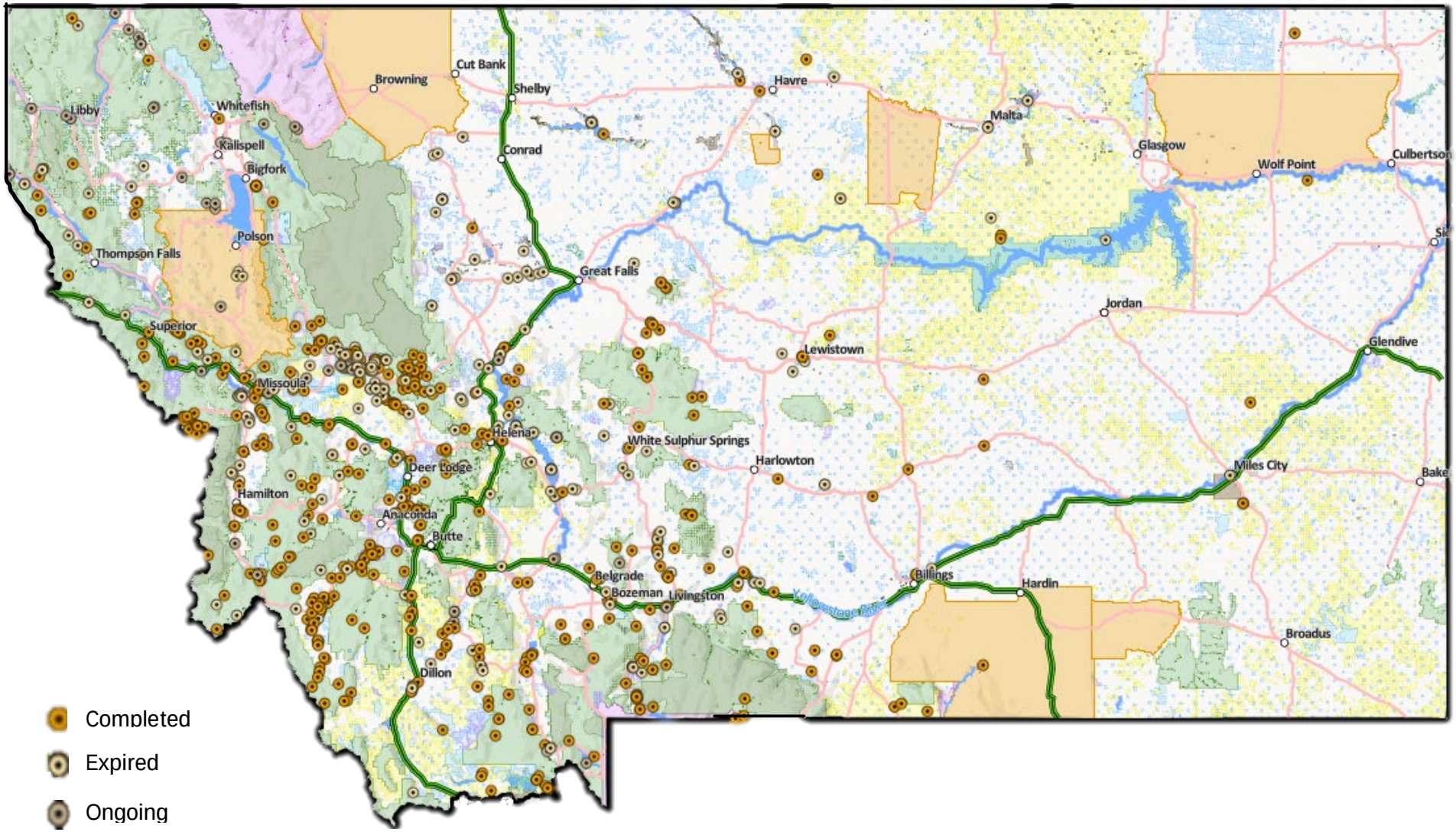


Figure 1. FUTURE FISHERIES IMPROVEMENT PROGRAM PROJECT LOCATIONS, SINCE 1996, DENOTED BY PROJECTS THAT ARE EXPIRED, COMPLETED BUT ACTIVE, AND ONGOING (NOT YET COMPLETED).

Since implementation of the FFIP in 1996, the commission approved $24 million for restoration projects that are ongoing or completed which, in turn, generated approximately $89.3 million in available matching funds (Figure 2). Matching funds come from a wide array of sources, including federal agencies, state agencies, sportsman's groups, conservation groups, watershed groups, private foundations, private companies, and landowners. **Nearly $113.3 million of habitat restoration work has been undertaken in Montana since 1996, with help from the FFIP.**



FIGURE 2. APPROVED FUNDING, MATCHING FUNDS, AND TOTAL DOLLARS SPENT ON COMPLETED OR ONGOING FISH HABITAT RESTORATION PROJECTS, SINCE 1996.

Program Goals and Funding Priorities

The overall goal of the FFIP (MCA 87-1-272) is to provide for the protection and enhancement of Montana fisheries through voluntary enhancement of spawning streams and other habitats, and to improve natural reproduction and growth of wild fish populations. The Panel developed additional project guidance, requiring one or more of the following goals to be considered for funding: 1) improve or maintain fish passage; 2) restore or protect naturally functioning stream channels or banks; 3) restore or protect naturally functioning riparian areas; 4) prevent loss of fish into water diversions; 5) restore or protect essential habitats for spawning; 6) enhance stream flow in dewatered stream reaches to improve fisheries; 7) improve or protect genetically pure native fish populations; or 8) improve fishing in a lake or reservoir.

When the NSEP was added to the FFIP, additional priority was put on projects that restore, protect, or enhance habitat for native fishes, including those involving mineral reclamation. This expanded projects into eastern Montana, an area with fewer projects completed. During the review process, the Panel considers the guidance and goals of the FFIP as well as other criteria including:

- Evaluation of the cause of degradation and resolution (if possible), including a watershed approach
- Benefit to the public, anglers, and/or native species
- Cost share, public participation, and demonstration value
- Planning and design that includes geomorphic, hydrologic, and biologic principles that promote natural function
- Magnitude of benefit to wild fisheries, including pre/post-treatment monitoring
- Landowner approval and participation

Funding Process and Public Participation

Any entity proposing a habitat project to benefit Montana's wild fish can be considered for funding.

Project applications can be submitted to FWP twice each year, due prior to November 15 (winter cycle), and May 15 (summer cycle).

Since the last biennial report, the Panel met to review project proposals four times: June 2024, December 2024, June 2025, and December 2025. After each meeting, funding recommendations formulated by the Panel were forwarded to the commission for final action during their regularly scheduled public meetings held in February and August for the winter and summer funding cycles, respectively.

For each individual funding cycle, there are several avenues for public comment prior to final approval by the commission. All submitted project applications are posted on the FWP website to provide opportunity for public review and comment. Additionally, environmental assessments (EAs) are prepared for all projects approved for funding and include a public comment period, except for projects that fall under categorical exclusion (ARM Rule 12.2.454) or other review. Additional opportunities for public involvement and comment include attending public meetings of the Panel, and the commission. press releases announce each upcoming grant cycle as well as the projects approved by the commission.

Staffing and Membership

Future Fisheries Citizen Review Panel

The Panel is a critical component of the FFIP, serving as an independent body to review applications and recommend funding. The 14-person Panel meets twice a year (mid-December and mid-June) to discuss proposed projects and is available throughout the year to provide Program guidance. The enabling legislation (MCA 87-1-272, MCA 87-1-283) called for the establishment of the Panel and identified specific categories of representation, including but not limited to the following:

- One member who is a representative of conservation districts
- One member with expertise in commercial agriculture
- One member with expertise in irrigated agriculture
- One member from the private sector who is a fisheries restoration professional
- Two members who are licensed Montana anglers
- One member of the House of Representatives, chosen by the speaker of the house
- One member of the Senate, chosen by the Committee on Committees
- One member with expertise in silviculture
- One member who is a Montana high school student
- One member with an expertise in mine reclamation techniques
- One member with expertise in fisheries
- One ex-officio member from the Montana Department of Transportation with experience in highway impact mitigation

An additional appointee was added to include a member with expertise in hydrology/geomorphology. Except for legislative appointments, Panel members are selected by the governor or a governor's designee. Members serve a voluntary, two-year term and may be re-appointed for additional terms. Members of the Panel serving during the period of this report are in Table 2.

TABLE 2. REVIEW PANEL MEMBERSHIP (2024-2026).

CATEGORY	NAME, LOCATION	TERM START	TERM END
Conservation District (CHAIR)	Clint Peck, Billings	Reappointed	7/1/2027
Commercial Agriculture	Bill Mytton, Absarokee	Reappointed	7/1/2026
Irrigated Agriculture	Bob Schroeder, Missoula	Reappointed	7/1/2026
Restoration Professional	Ron Pierce, Missoula	Reappointed	7/1/2027
Licensed Angler (1 of 2)	Debora Gay, Helena Michael Johns, Bozeman	7/1/2025 Reappointed	7/1/2027 7/1/2025
Licensed Angler (2 of 2)	David Cope, Ennis	Reappointed	7/1/2026
Silviculture/Forestry	Zachary Bashoor, Missoula	Reappointed	7/1/2027
High School Student	Avery Stevens, Hamilton Gabrielle Thorsen, Bigfork	7/1/2025 1/25/2024	7/1/2026 7/1/2025
Mine Reclamation	Nancy Winslow, Missoula	Reappointed	7/1/2026
Fisheries	Jon Hanson, Missoula Mike Newton, Glendive	7/1/2025 Reappointed	7/1/2027 7/1/2025
MDT ex-officio	Bill Semmens, Helena	Reappointed	7/1/2027
Hydrologist	Peter Skidmore, Bozeman	Reappointed	7/1/2027
House of Representatives	Rep. Jedediah Hinkle, Billings Rep. Wayne Rusk, Corvallis	1/1/2025 1/1/2023	1/1/2027 1/1/2025
Senate	Senator Denley Loge, St. Regis Sen. Tom McGillvray, Billings	1/1/2025 1/1/2023	1/1/2027 1/1/2025

FWP Employees

The enabling legislation for the FFIP (MCA 81-1-272) authorized the use of Program funds for up to two additional full-time employees. FWP transitioned to base license dollars to fund the positions (FTEs) and their operations, allowing more Program funds to be used for on-the-ground restoration. There is one FFIP staff member, Bailey Duxbury, who has been the future fisheries coordinator (FFC) since 2025. Michelle McGree was the FFC in prior to 2025. The FFC is responsible for compiling and distributing project applications, acting as FWP staff liaison for the Panel, communicating with the Panel, developing project agreements, processing and approving payments for completed work, monitoring project implementation, effectiveness, and compliance, and maintaining a comprehensive FFIP database. The FFIP also helps develop projects by coordinating with consultants and contractors, works with landowners and other citizens that need help developing project proposals, and assisting with fish screening and fish passage project review.

Native Species Enhancement Program Funding

MCA 87-1-283 states, “In order to implement (the Program), the department may expend revenue from the Bull Trout and Cutthroat Trout Enhancement Program for one additional FTE and one contractor to assist the review panel.” The NSEP operational funding covers only costs to support the Panel meetings and supplemental monitoring activities related to NSEP-funded projects. Operations expenditures associated with the NSEP over this report period equaled $28,745.77 and included four Panel meetings and contracted monitoring (see Current Expenditures). The use of base license dollars to support employees allows maximum Program dollars to be used for restoration.

Authority, Funding, & Expenditures

Program Authority

Authority is allocated by the Montana State Legislature in House Bill 5 (Table 3). Since inception of the FFIP, authority averaged $1.46 million per biennium with a cumulative total of over $23.38 million. In the 2025 legislative session, approved authority for the biennium was $2 million.

TABLE 3. LEGISLATIVE AUTHORITY, BY LEGISLATIVE SESSION. RIT = RESOURCE INDEMINITY TRUST FUND.

FISCAL YEARS	FUND AND SUBCLASS	AMOUNT
FY 1996, 1997	General License, 26306, E125 (earmarked)	$510,000.00
	River Restoration, 26301	$290,000.00
	General License, 02409, ET30	$220,000.00
	General License, 02409, ET2	$1,250,000.00
FY 1998, 1999	River Restoration, 02149, 28466	$70,000.00
	General License, 02409, E131	$1,310,000.00
FY 2000, 2001	River Restoration, 02149, E190	$300,000.00
	General License, 02409, E131	$1,170,000.00
	General License, 02409, 38011 (BT/CT)	$750,000.00
FY 2002, 2003	River Restoration, 02149, EI115	$260,000.00
	General License, 02409, EI115	$750,000.00
	RIT, 02022, EI115 (BT/CT)	$850,000.00
FY 2004, 2005	River Restoration, 02149, EI131	$210,000.00
	RIT, 02022, EI131 (BT/CT)	$700,000.00
FY 2006, 2007	River Restoration, 02149, EI150	$190,000.00
	RIT, 02022, EI150 (BT/CT)	$1,000,000.00
FY 2008, 2009	River Restoration, 02149, EI170	$314,000.00
	RIT, 02022, EI170 (BT/CT)	$1,000,000.00
FY 2010, 2011	River Restoration, 02149, EI109	$150,000.00
	RIT, 02022, EI109 (BT/CT)	$1,000,000.00
FY 2012, 2013	River Restoration, 02149, EI001	$274,000.00
	RIT, 02022, EI001 (BT/CT)	$1,000,000.00
FY 2014, 2015	River Restoration, 02149, EI003	$190,000.00
	RIT, 02022, EI003	$600,000.00
FY 2016, 2017	River Restoration, 02149, EI005	$277,000.00
	RIT, 02022, EI005	$1,000,000.00
FY 2018, 2019	River Restoration, 02149, EI007	$250,000.00
	RIT, 02022, EI007	$927,000.00
FY 2020, 2021	River Restoration, 02149, EI009	$250,000.00
	RIT, 02022, EI009	$1,000,000.00
FY 2022, 2023	River Restoration, 02149, EI301	$320,000.00
	RIT, 02022, EI301	$1,000,000.00
FY 2024, 2025	River Restoration, 02149, EI301	$350,000.00

FISCAL YEARS	FUND AND SUBCLASS	AMOUNT
	RIT, 02022, EI301	$1,650,000.00
FY 2026, 2027	River Restoration, 02149, EI301	$350,000.00
	RIT, 02022, EI301	$1,650,000.00
CUMULATIVE TOTALS	FFIP (License + River Restoration)	$9,255,000.00
	NSEP (RIT + BT/CT)	$14,127,000.00
		$23,382,000.00
AVERAGE (OVER 16 BIENNIA)	FFIP (License + River Restoration)	$578,437.50
	NSEP (RIT + BT/CT)	$1,009,071.43
		$1,461,375.00

Program Funding

The FFIP is funded using base license dollars and River Restoration funds (MCA 87-1-257-258), which are derived from a $0.50 earmark on resident fishing licenses and a $1 earmark on nonresident fishing licenses. The NSEP was historically funded with Resource Indemnity Trust (RIT) funds (MCA 15-38-202). However, due to sustained declines in the RIT fund, FWP base license dollars were used to backfill the Program. Additionally, the 2021 legislature passed HB637 to supplement the Program using fees from nonresident big game license preference points. These approaches ensure that the FFIP has funding to match the authority approved by the Legislature.

Current Expenditures

Table 4 lists all the FFIP projects that expended funds during the report period. A total of $2.1 million was expended on restoration projects and program operations. The operations expenditures were used for project monitoring and to facilitate Panel meetings. Most operations expenditures are absorbed by the FWP budget, allowing funding to be available for on-the-ground projects.

In the period of this report, nearly $2.6 million in grants was awarded through the FFIP over four grant cycles (Table 5). Together with matching funds, that will result in $4.7 million in restoration projects. On average, projects take two to three years from award to invoicing and completion, which creates a delay between grant award and expenditure. Program expenditures during the period of this report are typically for projects awarded between 2024 and 2026.

TABLE 4. PROGRAM EXPENDITURES FROM 4-01-2024 TO 03-31-2026, SEPARATED BY PROGRAM (02022, NATIVE SPECIES ENHANCEMENT, NSEP; AND 02149, RIVER RESTORATION / FUTURE FISHERIES IMPROVEMENT) AND SPENDING AUTHORITY SUBCLASS (EI007-EI301).

PROJECT NUMBER	PROJECT NAME	STATUS	SUBCLASS							Total
			02022 Native MT Fish Species Enhance				02149 River Restoration Account			
			EI301	EI303	EI305	EI007	EI301	EI303	EI305	
73643	Bull/Cut Trout Statewide Ops	NA	$15,947.32	$23,077.04						$39,024.36
FFI0022018	Deep Creek Instream Flow	Ongoing					$9,964.00			$9,964.00
FFI0042024	Cattail Creek spawning enhancement	Complete				$7,500.00	$108,405.50	$208.50		$116,114.00
FFI0052019	Hells Canyon Creek instream flow	Ongoing					$10,000.00			$10,000.00
FFI0052023	Little Boulder River restoration	Complete					$17,262.50			$17,262.50
FFI0142022	Bighorn River Side Channel Realignment	Complete					$12,367.65			$12,367.65
FFI0152023	Grasshopper Creek mine tailings bank stabilization	Complete					$22,500.00			$22,500.00
FFI0182024	Parsons Slough Willow Springs water lease	Ongoing						$50,000.00		$50,000.00
FFI0222022	Wilson Creek stream and floodplain restoration	Complete						$5,460.00		$5,460.00
FFI0262025	Poindexter Slough Riparian Restoration	Ongoing							$5,031.03	$5,031.03
RIT0012024	Albert Creek culvert replacement	Complete		$45,300.00						$45,300.00
RIT0022023	Bull River Riparian Function Restoration	Complete	$5,965.00	$8,378.72						$14,343.72

PROJECT NUMBER	PROJECT NAME	STATUS	SUBCLASS							Total
			02022 Native MT Fish Species Enhance				02149 River Restoration Account			
			EI301	EI303	EI305	EI007	EI301	EI303	EI305	
RIT0022024	Benedict Creek fish passage	Complete	$11,400.00							$11,400.00
RIT0032024	Blind Canyon Creek Fish Barrier	Complete	$20,000.00							$20,000.00
RIT0032025	Lee Creek Fish Passage	Complete		$50,000.00						$50,000.00
RIT0042025	Lolo Creek Tenant Meanders	Complete						$65,830.78		$65,830.78
RIT0062023	McKinley Lake dam removal	Complete	$29,500.00							$29,500.00
RIT0062024	First Chance Gulch habitat improvement	Complete	$5,080.00	$90,960.00						$96,040.00
RIT0062025	Nevada Creek Restoration Phase 8	Complete						$22,740.00		$22,740.00
RIT0072022	Mill Creek 5 Bar 6 Restoration	Complete	$22,502.20	$2,292.80						$24,795.00
RIT0072024	Flat Creek tailings removal and restoration	Complete		$53,310.00						$53,310.00
RIT0082023	North Burnt Fork Creek fish passage reconnection	Complete	$9,341.50	$30,628.50						$39,970.00
RIT0082024	Flathead Creek streambank restoration	Complete	$109,875.97	$536.03						$110,412.00
RIT0092024	Governor Creek streambank restoration	Complete		$16,400.00						$16,400.00
RIT0102024	Granite Creek Upper Alder restoration	Complete		$90,000.00						$90,000.00
RIT0102025	Tolan Creek Meadow Restoration	Complete		$3,400.00						$3,400.00
RIT0112024	Hellroaring Creek streambank restoration	Complete		$10,400.00						$10,400.00

PROJECT NUMBER	PROJECT NAME	STATUS	SUBCLASS							Total
			02022 Native MT Fish Species Enhance				02149 River Restoration Account			
			EI301	EI303	EI305	EI007	EI301	EI303	EI305	
RIT0112025	BRID Diversion Fish Screen	Complete			$80,000.00					$80,000.00
RIT0122022	CCR Pond Grayling Habitat	Complete	$3,986.54	$97,920.31						$101,906.85
RIT0122023	Brackett Creek streambank restoration	Ongoing	$6,785.00	$76,603.50						$83,388.50
RIT0132023	Browns Gulch fish screens	Complete	$20,915.00							$20,915.00
RIT0132024	Marshall Creek riparian fencing	Complete		$2,000.00						$2,000.00
RIT0132025	CCAA BH Spring Stockwater	Ongoing			$36,540.00					$36,540.00
RIT0142023	Chicken Creek fish screen	Ongoing	$23,174.50	$2,790.50						$25,965.00
RIT0142024	Miller Creek restoration Leik property	Complete		$69,790.00						$69,790.00
RIT0142025	CCAA Steel Creek Riparian Fencing	Ongoing			$10,500.00					$10,500.00
RIT0152025	CCAA Swamp Creek Riparian Fencing	Ongoing			$24,250.00					$24,250.00
RIT0162024	Nevada Creek restoration phase 7	Complete	$95,000.00	$55,000.00						$150,000.00
RIT0162025	CCAA Upper BH Dick Hirschy Stockwater	Ongoing			$53,483.21					$53,483.21
RIT0172023	Mount Haggin culvert removal	Complete	$29,788.50							$29,788.50
RIT0172024	North Burnt Fork Creek fish passage	Complete	$13,984.00	$41,206.00						$55,190.00
RIT0172025	CCAA Upper BH Jack Hirschy Stockwater	Complete			$12,727.00					$12,727.00
RIT0182023	Musselshell River Rowton bank restoration	Complete		$118,461.00						$118,461.00

PROJECT NUMBER	PROJECT NAME	STATUS	SUBCLASS							Total
			02022 Native MT Fish Species Enhance				02149 River Restoration Account			
			EI301	EI303	EI305	EI007	EI301	EI303	EI305	
RIT0192025	Gold Creek Tributaries	Complete			$43,585.00					$43,585.00
RIT0202024	Tin Cup Creek fish screen update	Complete	$13,255.44							$13,255.44
RIT0232024	Granite Creek Tributary Aquatic passage	Complete	$63,170.00							$63,170.00
RIT0252024	Threemile Reservoir Dam maintenance	Ongoing	$46,035.21	$12,000.00						$58,035.21
RIT0262024	Upper Clark Fork Sager Diversion	Complete		$55,000.00						$55,000.00
			$545,706.18	**$955,454.40**	**$261,085.21**	**$7,500.00**	**$180,499.65**	**$144,239.28**	**$5,031.03**	**$2,099,515.75**

Anticipated Expenses

Total program expenditures during the report period were similar to previous biennia: approximately $2.1 million (Table 5). Total grant awards were increased when compared to previous years due to a focused effort to spend authority that previously didn't have identified funding (i.e., see Program Funding). The FFIP has continued to grow, with approximately $400,000 more in awards since the last report cycle, and approximately $780,000 in additional expenditures. There have also been an additional 41 projects awarded between April 1, 2024 to March 31, 2026, demonstrating the need for the continuation of FFIP funding.

TABLE 5. GRANT AWARDS AND EXPENDITURES OF THE CURRENT AND PREVIOUS REPORTS. EXPENDITURES ARE TYPICALLY ASSOCIATED WITH PREVIOUS BIENNIUM AWARDS. *REPORT TIMING SHIFTED PERIOD TO SHORTER TIMEFRAME.

REPORT PERIOD	11/1/2018 – 10/31/2020	11/1/2020 – 3/31/2022*	4/1/2022 – 3/31/2024	**4/1/2024 – 3/31/2026**
AWARDS	$1.34 million	$878,875	$2.2 million	$2.6 Million
EXPENDITURES	$1.32 million	$841,552.75	$1.32 million	$2.1 Million

Awarded funds are often less than requested funds due to the competitive grant process and limited funding. Program authority and funding increased in 2023, which helped address the increased cost of restoration, but project costs continue to outpace the funding available – even when projects use a variety of matching sources. Project prioritization (ARM 12.7.1203) can be used to identify the top priority projects and cap spending to meet the limit of authority or funding. Using this method, the lowest-ranking applications are denied, even though they are recommended for funding by the Panel.

If funding was not limited the FFIP could spend, at a minimum, an amount comparable to what was awarded in this report period ($2.6 million), which is estimated to be $13 million in a 10-year period. Competition for funds is high, and project costs have increased rapidly due to inflation on materials and contractor estimates. With a 6:1 match (typical), the restoration impact of $13 million in 10 years would generate matching funds of $78 million and an overall expenditure of $91 million. These are valuable dollars for fisheries restoration, but also for Montana's recreation economy and the local contractors that complete the projects.

Approved, Ongoing & Completed Projects

Since 1996 the FFIP approved 1048 restoration projects (Table 6). Of these projects, 830 are completed or expired, are ongoing, and were cancelled. If a project is cancelled, funding is reallocated to future projects. The reasons for cancellations vary, but include:

- A project agreement was not signed. Funding contracts are required to ensure protection for the investment in restoration (typically 20 years).
- The applicant was unable to secure matching funds to complete the project.
- The project scope changed significantly, requiring a new application or new sources of funding.

TABLE 6. STATUS OF FUTURE FISHERIES IMPROVEMENT PROGRAM FUNDED PROJECTS, BY YEAR, THROUGH MARCH 31, 2026. EXPIRED PROJECTS ARE COMPLETED PROJECTS THAT HAVE EXCEEDED THEIR 20-YEAR MAINTENANCE CONTRACT.

Year	Cancelled	Complete	Ongoing	*Expired*	TOTAL
1996	6			*42*	48
1997	6			*39*	45
1998	10			*39*	49
1999	7			*43*	50
2000	8	2		*34*	44
2001	8	2		*25*	35
2002	7	3		*31*	41
2003	9	13		*19*	41
2004	7	15		*17*	39
2005	4	27			31
2006	13	27			40
2007	2	34			36
2008	9	17		*1*	27
2009	3	27		*1*	31
2010	3	28		*2*	33
2011	8	22			30
2012	1	17			18
2013		18		*1*	19
2014	2	17			19
2015	2	33			35
2016	4	19	1		24
2017	3	20			23
2018		25	1		26
2019		16	2		18
2020	1	18			19
2021		19	2		21
2022		12	7		19
2023		4	14		18
2024	4	13	19	*42*	78
2025 & 2026	2	19	43	*24*	91
Total					**1048**

Program Project Types, Since Inception

Program funds were used to complete many types of habitat enhancement. Riparian fencing and channel restoration were the most common treatments funded through FFIP and make up 14 percent and 17 percent of all completed projects (Figure 3). Additional restoration activities include fish passage improvement, riparian restoration, streambank stabilization, irrigation efficiency or instream flow, diversion modification, fish screens, barrier construction (native fish protection), instream habitat, lake spawning habitat, and spawning enhancement.

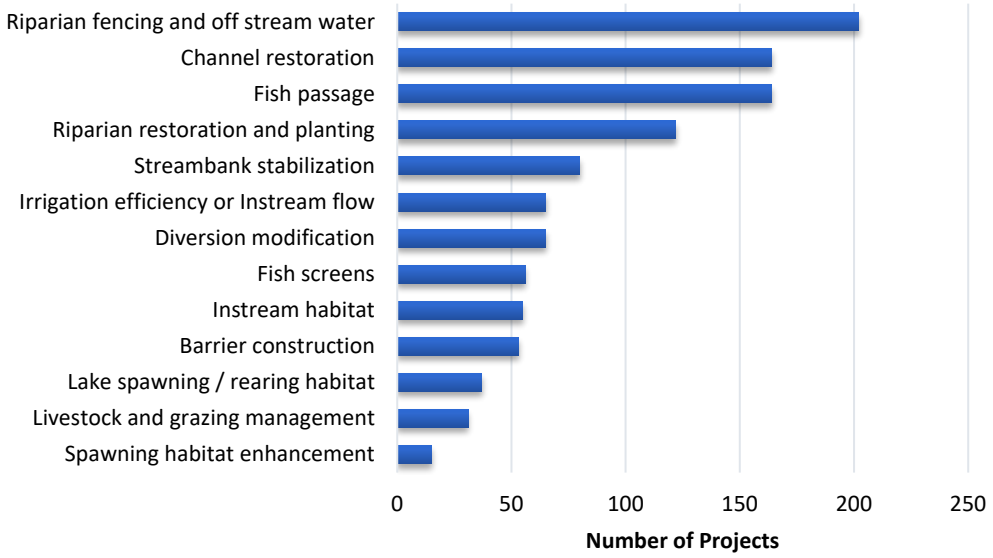


FIGURE 3. PROJECT TYPES, 1996-2026.

Project Status Updates

Approved & Funded Projects

During the period of this report, the commission approved funding or partial funding for 45 FFIP grant applications totaling $2.2 million (Table 7). These projects will use an additional $11.3 million in matching funds and in-kind services from outside sources and had a total value of approximately $13.5 million dollars. Narrative descriptions of individual projects can be found in Appendix 1: Newly Approved Project Descriptions.

Most of the approved projects involved channel restoration, fish passage, riparian restoration and planting, or fish screens (Figure 4). Other common project activities included fish barriers, streambank stabilization, and livestock and grazing management.

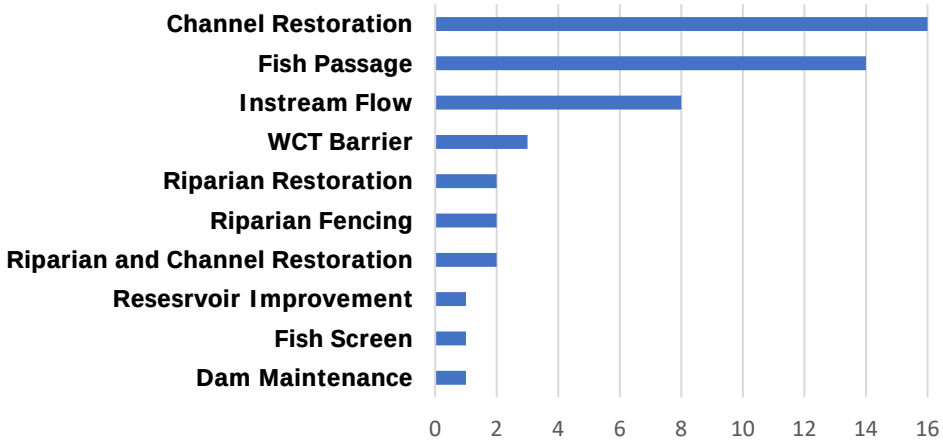


FIGURE 4. PRIMARY TREATMENT TYPE FOR PROJECTS FUNDED WITHIN THE REPORT PERIOD (LAST 4 GRANT CYCLES) *WESTSLOPE CUTTHROAT TROUT (WCT).

TABLE 7. APPROVED PROJECTS, BY NAME AND PROJECT NUMBER, FOR THE REPORT PERIOD (FUNDING CYCLES SUMMER 2024 [S2024]; WINTER 2025 [W2025]; SUMMER 2025 [S2025]; AND WINTER 2026 [W2026]).

#	PROJECT NUMBER	CYCLE	PROJECT NAME	FFIP GRANT	MATCHING FUNDS	TOTAL COMMITTED
1	022-2024	S2024	Flint Creek Phase 3A Riparian Restoration	$60,000.00	$218,700.00	$278,790.00
2	023-2024	S2024	Granite Creek Tributary Aquatic Passage	$63,170.00	$136,428.00	$199,598.00
3	024-2024	S2024	Kamperschroer Spring Creek Spawning Enhancement	$63,076.00	$43,800.00	$106,876.00
4	025-2024	S2024	Threemile Reservoir Dam Maintenance	$75,000.00	$257,051.00	$326,051.00
5	026-2024	S2024	Upper Clark Fork Sager Diversion	$55,000.00	$299,621.00	$349,621.00
6	027-2024	S2024	Upper Douglas Fish Passage	$75,000.00	$264,946.00	$339,946.00
7	001-2025	W2025	Blacktail Creek Restoration	$30,000.00	$1,201,668.00	$1,127,363.00
8	002-2025	W2025	Clearwater River fish passage	$48,000.00	$284,463.00	$326,963.00
9	003-2025	W2025	Lee Creek Fish Passage	$50,000.00	$185,123.00	$235,123.00
10	004-2025	W2025	Lolo Creek Tenant Meanders	$65,831.00	$355,000.00	$415,000.00
11	005-2025	W2025	Mill Creek Phase 2 - 5 bar 6	$60,000.00	$187,850.00	$274,770.00
12	006-2025	W2025	Nevada Creek Restoration Phase 8	$113,700.00	$396,159.00	$514,859.00
13	007-2025	W2025	Poorman Creek Restoration Phase 3	$33,000.00	$69,125.00	$107,125.00
14	008-2025	W2025	Ranch Creek Gratton Fish Passage	$60,000.00	$85,806.00	$158,806.00
15	009-2025	W2025	Tenmile Creek Bridge	$22,120.00	$337,740.00	$369,860.00
16	010-2025	W2025	Tolan Creek Meadow Restoration	$6,885.00	$44,045.00	$50,930.00
17	011-2025	S2025	BRID Diversion Fish Screen	$90,000.00	$1,243,125.00	$1,343,125.00
18	012-2025	S2025	CCAA Big Hole Sparrow Stockwater Wells	$18,000.00	$19,400.00	$37,400.00
19	013-2025	S2025	CCAA Big Hole Spring Development Stockwater	$19,420.00	$24,647.00	$44,067.00

#	PROJECT NUMBER	CYCLE	PROJECT NAME	FFIP GRANT	MATCHING FUNDS	TOTAL COMMITTED
20	014-2025	S2025	CCAA Steel Creek Riparian Fence	$10,500.00	$11,000.00	$21,000.00
21	015-2025	S2025	CCAA Swamp Creek Riparian Fence	$24,250.00	$24,250.00	$48,500.00
22	016-2025	S2025	CCAA Upper Big Hole Dick Hirschy Stockwater	$56,375.00	$56,375.00	$112,750.00
23	017-2025	S2025	CCAA Upper Big Hole Jack Hirschy Stockwater	$24,662.00	$24,663.00	$49,325.00
24	018-2025	S2025	Chamberlain Creek Fish Passage	$16,600.00	$59,381.00	$75,981.00
25	019-2025	S2025	Gold Creek Tributaries Aquatic Passage	$43,585.00	$233,860.00	$277,445.00
26	020-2025	S2025	Johnson Creek Tributary Reconnection	$85,000.00	$247,200.00	$357,840.00
27	021-2025	S2025	Kohrs Manning Diversion Fish Passage	$75,000.00	$1,649,195.00	$1,724,195.00
28	023-2025	S2025	Mono Creek Fish Barrier	$41,590.00	$17,318.00	$58,908.00
29	024-2025	S2025	Ninemile Creek Restoration Phase 7	$56,300.00	$665,798.00	$722,098.00
30	025-2025	S2025	North Polly Reservoir Improvement	$21,040.00	$7,150.00	$28,190.00
31	026-2025	S2025	Poindexter Slough Riparian Restoration	$6,950.00	$29,624.00	$36,574.00
32	027-2025	S2025	Pugsley Bridge Fishery and Riparian Enhancement	$55,000.00	$118,843.00	$177,868.00
33	029-2025	S2025	Upper Storm Lake Creek Diversion	$40,500.00	$57,348.00	$117,788.00
34	001-2026	W2026	Big Hole Tributary Reconnection, Phase 2 - Alder Creek	$ 107,425.00	$152,705.00	$260,130.00
35	002-2026	W2026	Lower Grant Creek Restoration	$ 12,930.00	$340,000.00	$390,000.00
36	003-2026	W2026	Madison River Side Channel Restoration - Hyde Creek	$ 44,222.00	$204,144.08	$304,144.00
37	004-2026	W2026	Marshall Creek Culvert Removal and Habitat Restoration	$ 75,000.00	$12,890.00	$25,820.00
38	005-2026	W2026	Upper O'Brien Creek Restoration Project	$ 23,420.00	$187,250.86	$231,473.00
39	006-2026	W2026	Lower Racetrack Creek Restoration Project	$ 23,420.00	$202,678.00	$277,678.00
40	007-2026	W2026	Tenmile Creek Fish Barrier	$ 55,000.00	$25,000.00	$48,420.00
41	008-2026	W2026	Christiansen Creek Fish Barrier	$ 100,000.00	$25,000.00	$48,420.00
TOTAL				$1,565,554.00	$10,006,370.00	$12,000,820.00

Completed Projects

Within the report period, 32 projects were completed and inspected by FWP staff (typically the FFC and/or local fisheries staff) to ensure they were completed as approved (Table 8). This *Implementation Monitoring* facilitated discussions about successes and lessons learned with applicants and landowners. Some projects were approved and completed during this report period (*). All projects were completed successfully. Project details are in Appendix 2: Newly Completed Project Descriptions.

TABLE 8. PROJECTS COMPLETED WITHIN THE REPORT PERIOD (APRIL 1, 2024 – MARCH 31, 2026) AND MONITORED FOR IMPLEMENTATION. *PROJECTS APPROVED AND COMPLETED WITHIN THE REPORT PERIOD.

PROJECT NUMBER	PROJECT NAME	REGION	COMPLETED
003-2016	Carpenter Creek fish barrier	4	2024
014-2022	Bighorn River side channel reactivation	5	2024
004-2022	Flint Creek riparian restoration phase 2	2	2024
017-2023	Mount Haggin culvert removal and replacement	3	2024
022-2022	Wilson Creek stream and floodplain restoration	3	2024
013-2023	Browns Gulch fish screens	2	2024
023-2024	Granite Creek Tributary Aquatic Passage*	2	2024
002-2024	Benedict Creek fish passage	2	2024
003-2024	Blind Canyon Creek fish barrier	3	2024
004-2024	Cattail Creek spawning enhancement	3	2024
003-2023	Flint Creek riparian restoration phase 2B	2	2024
005-2023	Little Boulder River restoration	3	2024
006-2023	McKinley Lake dam removal	2	2024
006-2024	First Chance Gulch habitat improvements	3	2024
012-2022	Upper Red Rock Lake overwinter habitat (Corral Creek)	3	2025
007-2022	Mill Creek 5 Bar 6 restoration project	3	2025
018-2023	Musselshell River Rowton bank restoration	4	2025
013-2024	Marshall Creek riparian fencing	2	2025
014-2024	Miller Creek restoration Leik property	2	2025
016-2024	Nevada Creek restoration phase 7	2	2025
017-2024	North Burnt Fork Creek fish passage supplement	2	2025
008-2023	North Burnt Fork Creek fish passage reconnection	2	2025
003-2025	Lee Creek Fish Passage*	2	2025
001-2024	Albert Creek culvert replacement	2	2025
009-2024	Governor Creek streambank restoration	3	2025
011-2024	Hellroaring Creek streambank restoration	3	2025
011-2024	Hellroaring Creek streambank restoration	3	2025
026-2024	Upper Clark Fork Sager Diversion*	2	2025
007-2024	Flat Creek tailings removal and restoration	2	2025
008-2024	Flathead Creek streambank restoration	3	2025
019-2025	Gold Creek Tributaries Aquatic Passage*	2	2025
023-2025	Mono Creek Fish Barrier	3	2024

Long Term Effectiveness Monitoring

Effectiveness monitoring addresses the success of each project after completion and through its contractual life. In the period of this report, 9 projects were monitored for long-term success (Table 9). In some cases, one project number covered multiple monitoring sites. The FFC performed effectiveness monitoring, and the Big Hole Watershed Committee was hired to complete monitoring in the Big Hole watershed. Detailed monitoring information is in Appendix 3: Effectiveness Monitoring.

TABLE 9. PROJECTS MONITORED FOR EFFECTIVENESS BETWEEN APRIL 1, 2022, AND MARCH 31, 2024. *PROJECT MONITORING COMPLETED BY BIG HOLE WATERSHED COMMITTEE.

PROJECT NUMBER	PROJECT NAME	REGION	MONITOR DATE
019-2021	Placid Lake outlet barrier improvement	2	28-Jun-24
029-2018	Ramshorn Creek fish barrier	3	09-Aug-24
012-2018	North Fork Keep Cool Creek fish passage	2	20-Aug-24
020-2014	Prickly Pear Spring Creek Bank Stabilization	4	21-Aug-24
009-2018	Moose Creek Gallatin restoration	3	28-Aug-24
033-2015	Poindexter Slough Channel Restoration	3	06-Sep-24
025-2018	Loneman Creek riparian fencing	1	05-Nov-24
011-2011	McVey Creek fish barrier	3	01-Mar-25
009-2009	Kalsta Spring Creek spawning habitat enhancement	3	12-Mar-25

Expired Projects

Project agreements are developed with an anticipated project life of 20 years. There can be exceptions, however, such as instream flow leases or lake habitat enhancement (e.g., Christmas trees begin to degrade upon installation). Unless a shorter duration agreement is approved, projects are expected to be maintained for 20 years, and the applicant or landowner must agree to those terms to receive funding.

The first FFIP projects were initiated in 1996; therefore, certain projects began to reach their 20-year commitment after 2016. Each year there are more projects that reach the end of their contractual life. Projects that expired within the report period are listed in Appendix 4. Expired Projects. Once a project is expired, the status is updated in the FFIP database, and the project file is kept for an additional five years. After five years has passed, the files are uploaded electronically, and the hard copy paperwork is destroyed, ensuring historical projects are archived.

Appendix 1: Newly Approved Project Descriptions

001-2025 Blacktail Creek Restoration (Silver Bow County). Blacktail Creek is a tributary to the Clark Fork River that contains westslope cutthroat trout. In the project area, the stream channel was manipulated and infrastructure was installed, leading to two problems: 1) diversion structure and irrigation improvement effects on fish passage and stream function, and 2) sewer line effects on fish passage. The diversion component would separate the Butte Country Club irrigation from the creek, constructing a new diversion and fish screen off of the creek and re-establishing unobstructed fish passage. A stormwater outfall would be altered to move discharge from the creek to an irrigation pond. The sewer line component would fix the head-cut and exposed infrastructure, creating fish passage with two rock weirs and step pools. The goals of this project are to improve fish passage, eliminate entrainment, improve water quality through the reconstruction of a floodplain, and shade the stream with riparian vegetation. **Status: Completed**

002-2025 Clearwater River fish passage (Missoula County). The Clearwater River is a tributary to the middle Blackfoot River that supports westslope cutthroat trout and bull trout, as well as many other fish species. The project location is near Clearwater Junction, and is tied to an irrigation diversion that consists of a rock dam and is identified as a partial fish barrier. This is considered an important site for bull trout migration as well as recreationists. This project would rebuild the existing diversion structure with a boulder cascade. Streambank would be restored with vegetative wood matrix structures to address bank erosion and an existing riparian road would be relocated. The goals of the project include restoration of fish passage, removing hazards for recreationists, addressing bank erosion and sediment inputs, and accommodating future irrigation needs. **Status: Ongoing**

003-2025 Lee Creek Fish Passage (Missoula County). Lee Creek is a tributary to Lolo Creek in the upper Lolo watershed. This area includes designated bull trout critical habitat and supports high densities of westslope cutthroat trout, as well as other trout species. It is considered important spawning and rearing habitat for all salmonid species present. In the project area, two tributaries of Lee Creek are seasonally disconnected by roads, leading to fish passage and water quality issues. This project would upsize three undersized culverts to 84-inch culverts that will incorporate stream simulation bed material and provide year-round fish passage and withstand a 100-year flood event. A fourth culvert will be upsized to 36 inches to allow for increase hydraulic capacity. This project would build upon other road decommissioning and fish passage projects in the upper Lolo Creek watershed. The goals of this project are to attain full fish passage and reduce chronic sedimentation, and therefore increase native fish populations. **Status: Completed**



004-2025 Lolo Creek Tenant Meanders (Missoula County). Lolo Creek is a tributary to the Bitterroot River, which contains brown trout and rainbow trout, as well as westslope cutthroat trout, bull trout, and mountain whitefish. In the project area, which is adjacent to Highway 12 west of Lolo (Earl Tenant campground), the stream was channelized and rip-rapped due to the highway construction. This project would realign 0.5 miles of the creek in a wide segment of valley bottom and relic channel. Wetland and instream habitat restoration and revegetation would be used to reduce flood energy, increase off-channel water storage, and improve fisheries and aquatic habitat. The stream, floodplain, and wetland areas would be reconnected and a buffer would be created between the stream and the road to allow for channel adjustments. The restoration would be completed in a publicly accessible area and is intended to be a demonstration project. **Status: Completed**



005-2025 Mill Creek Phase 2 – 5 Bar 6 (Park County). Mill Creek (Park County) is a tributary to the Yellowstone River in the Paradise Valley. It is one of the remaining Yellowstone cutthroat trout strongholds outside of Yellowstone National Park. Past land management included channelization that pushed the channel to the westernmost edge of the valley. Lack of large wood and instream habitat complexity indicates that wood was removed, and the channel became simplified. Despite the limitations, the project area is an important spawning and rearing area for migratory Yellowstone cutthroat trout as it is upstream of dewatering in lower Mill Creek. This project is phase 2 and would continue the restoration on Mill Creek (one mile section) by breaching a historical berm in strategic locations to restore floodplain connectivity, allow side channel formation, and restore natural meadow and stream function. Log jams will be built to create habitat complexity. Reconnection is expected to encourage riparian plant growth. The goal is to improve in-stream and spawning habitat for Yellowstone cutthroat trout and other fish species and to enhance fishing opportunities. **Status: Ongoing**

006-2025 Nevada Creek Restoration Phase 8 (Powell County). Nevada Creek is a tributary to the middle Blackfoot River near Helmville that supports populations of westslope cutthroat trout, rainbow trout, and brown trout. The project area had past channel manipulations and streamside vegetation removal that led to bank erosion issues. In 2010 and 2017-2024, nearby Future Fisheries channel restoration projects addressed extensive instream and riparian habitat and resulted in reduced sediment, increased stream complexity, improved riparian condition, and increased trout abundance. This project is phase 8 and would continue the restoration downstream. It intends to restore fish passage and natural stream and riparian function upgrading existing irrigation diversions, lowering channel width-to-depth ratios, increasing pool frequency and overhead cover, and implementing a grazing management plan. The goal is to improve fish passage while also improving instream, riparian, and upland habitat within a working landscape. The end result would be a benefit to aquatic species, particularly westslope cutthroat trout. **Status: Completed**

007-2025 Poorman Creek Restoration Phase 3 (Lewis and Clark County). Poorman Creek is a tributary to the Blackfoot River that flows through a mix of USFS and private land. It supports populations of pure westslope cutthroat trout and bull trout. Poorman Creek is a high priority tributary and listed as critical bull trout habitat. Several other Future Fisheries projects were completed in this stream, including fish passage, fish screening, stream restoration, placer mine restoration, and water conservation. This project would address an area with entrenchment, lack of instream and riparian habitat, channel instability, and bank erosion. Approximately 1200 feet of channel would be restored using channel reconstruction, instream habitat (step pools, vegetated wood matrix, large woody debris structures). Tailings piles would be removed from the floodplain, opening channel access. The goal is to reestablish floodplain connectivity and function, improve instream and riparian habitat, correct chronic bank erosion, and restore a self-maintaining stream system. **Status: Ongoing**

008-2025 Ranch Creek Gratton Fish Passage (Granite County). Ranch Creek is a tributary to Rock Creek, which is a native fish stronghold and core habitat area for bull trout. In the project area, an existing diversion structure is located immediately downstream of documented bull trout redds and entrains several fish species, including bull trout, westslope cutthroat trout, rainbow trout, brown trout, and brook trout. Maintenance of the structure resulted in streambank erosion, sedimentation, and an over widened channel. This project would replace the existing irrigation diversion infrastructure and install a Farmer's fish screen with a return pipe. The goals are to eliminate fish entrainment and provide fish passage, provide improved water management for the water users, reconnect 1.5 miles of spawning habitat, and improve fish populations and recruitment to Rock Creek and the Clark Fork River. **Status: Ongoing**

009-2025 Tenmile Creek Bridge (Ravalli County). Tenmile Creek is a tributary to Lost Horse Creek in the Bitterroot. Tenmile Creek supports westslope cutthroat trout, and Lost Horse Creek supports bull trout and westslope cutthroat trout, as well as wild populations of non-native species. Lost Horse Creek is considered a priority watershed to improve road-stream interactions and benefit native species. In the project area, Forest Road 429 is affecting the stream. Tenmile Creek splits into two channels above the road, where water flows under a timber bridge and a pair of culverts. The low capacity of the culverts and debris causes the stream to wash out the road, providing sediment to Lost Horse Creek, and it impedes fish passage. The project would replace the existing culverts with a bridge, leaving the timber bridge in place. The goal is to address habitat quality and connectivity for fish species. **Status: Ongoing**





010-2025 Tolan Creek Meadow Restoration (Ravalli County). Tolan Creek is a tributary to the East Fork Bitterroot River. It supports native westslope cutthroat trout and bull trout. The Tolan drainage was severely burned in the 2022 Trail Ridge fire. As a result, debris flows caused severe habitat degradation through loss of pool habitat, floodplain disconnection, loss of riparian vegetation, and destabilizing streambanks. Temperature drastically increased. Native species have been negatively affected, but especially bull trout. This project would reestablish the former ecological and watershed processes in the meadow using low-tech processed based restoration techniques, including beaver dam analogue (BDA) structures and large wood structures (LWS). Hand crews will complete the work, and plantings will occur on an as-needed basis. Approximately 50 BDAs will be installed and 3,500 riparian shrubs will be planted. The goals are to restore aquatic habitat and improve populations of native species. **Status: Ongoing**

011-2025 BRID Diversion Fish Screen (Ravalli County). The Bitterroot River Irrigation District (BRID) manages water in Lost Horse Creek and the Bitterroot River. This project is focused on a fish screen on Lost Horse Creek, which is critical habitat for bull trout and westslope cutthroat trout. The diversion has been entraining thousands of fish, and this project would address the issue by installing a fish screen. A 150 cfs Corrugated Water Screen (CWS) would be installed in conjunction with replacement of a failing headgate. With this project, more than 34 miles of essential fish habitat would be reconnected. Habitat fragmentation, dewatering, high water temperatures, and isolation of local populations have severely impacted bull trout in Lost Horse Creek, making connectivity and habitat restoration essential for their recovery. The project builds upon past successful restoration work, including the installation of a siphon, which separated diverted water from Lost Horse Creek, keeping water in the creek and eliminating the loss of an estimated 14,000 fish per year in the lower reaches of Lost Horse Creek. **Status: Completed**



012-2025 CCAA Big Hole Sparrow Stock Water Wells (Beaverhead County). Pintlar Creek and Howell Creek, within the Big Hole River watershed, are north of Wisdom and are important streams for spawning and rearing of Arctic grayling. In the project area, the Sparrow Ranch Grazing Association is enrolled in the Candidate Conservation Agreement with Assurances for Arctic Grayling in the Big Hole Program (CCAA). In cooperation with the CCAA, the grazing association will manage and improve riparian corridors. Seven new stock water systems will be developed to improve grazing distribution and reduce reliance on the creeks for stock water. Additionally, two new wells will be drilled and installed in conjunction with pipeline to provide reliable yearlong stock water. The improvements to livestock management are intended to benefit the streams and riparian areas through improved bank stability, water quality, temperature, and instream flows. This project is part of an ongoing, large-scale habitat improvement program in the Big Hole which has positively influenced grayling population levels since its inception. Improved riparian health of Big Hole River equates to improved spawning and rearing conditions for grayling that migrate large distances within the Big Hole River. **Status: Ongoing**

013-2025 CCAA Big Hole Spring Development Stock Water (Beaverhead County). Warm Springs Creek, within the Big Hole River watershed, is south of Wisdom and a conservation area for Arctic grayling. In the project area, Lapham Ranch Company and Vaquero LLC are enrolled in the Candidate Conservation Agreement with Assurances for Arctic Grayling in the Big Hole Program (CCAA). In cooperation with the CCAA program, Lapham Ranch Company and Vaquero LLC have agreed to manage and improve riparian corridors. Two new stock water systems will be installed to improve grazing distribution and reduce reliance on Warm Springs Creek for stock water. Two existing springs will be developed and will tie into a pipeline and stock tanks, to provide reliable yearlong stock water. This project is part of an ongoing, large-scale habitat improvement program in the Big Hole which has positively influenced grayling population levels since its inception. This project is anticipated to improve riparian health, increase overhead cover, reduce sediment inputs, and keep water in the Big Hole River. This is expected maintain or improve adequate stream temperatures and benefit the larger Big Hole River. **Status: Ongoing**

014-2025 CCAA Steel Creek Riparian Fence (Beaverhead County). Steel Creek is a tributary to the Big Hole River near Wisdom within the Arctic Grayling Big Hole CCAA. It is in an important tributary for Arctic grayling spawning and rearing. Steel Creek is one of the most important spawning and rearing tributaries for Arctic grayling in the upper Big Hole River. Since monitoring for the CCAA program began in 2006, Steel Creek has been the second highest producer of young of year (YOY) grayling out of thirteen sites sampled. The location is home to a historical Future Fisheries project. This project intends to repair and improve 4.1 miles of riparian fence along 5.27 stream miles of Steel Creek, with the goal of improving riparian health, by allowing the landowner to better manage grazing distribution. Improved riparian health of Steel Creek enhances grayling habitat by increasing vegetative cover and reducing sediment inputs into the stream. Cover helps to maintain cold water for Steel Creek and benefits the Big Hole River drainage. **Status: Ongoing**

015-2025 CCAA Swamp Creek Riparian Fence (Beaverhead County). Swamp Creek is a tributary to the Big Hole River, north of Wisdom, within the Arctic Grayling Big Hole CCAA. 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 location is home to a historical Future Fisheries project and would reconstruct 1.07 miles of riparian fence along 1.15 stream miles of Swamp Creek, Creek, with the goal of improving riparian health. The landowner could then better manage grazing distribution. Improved riparian health of Swamp Creek enhances grayling habitat by increasing vegetative cover and reducing sediment inputs into the stream. Cover helps to maintain cold water for Swamp Creek and benefits the Big Hole River drainage. **Status: Ongoing**

016-2025 CCAA Upper Big Hole Dick Hirschy Stock Water (Beaverhead County). This project is located property that includes the Big Hole River and its tributaries, Ruby Creek, Moose Creek, Swamp Creek, and Big Lake Creek, within the Arctic Grayling Big Hole CCAA. In the project area, landowner determined that the current water sources are inadequate in upland pastures. Stock water systems will allow longer grazing in upland pastures which allows longer rest in riparian pastures. One

well will be drilled, two pumps will be installed for stock tank systems, and four stock tanks with pipeline will be installed. The purpose of this project is to increase healthy riparian habitat along the Big Hole River within the Arctic Grayling Big Hole CCAA. This project will drill one well and install two stock tank systems to improve riparian health and instream flows by increasing overhead cover, reducing sediment inputs, and keeping water in the Big Hole River. This is expected maintain or improve adequate stream temperatures and stream flows, benefiting the larger Big Hole River watershed. **Status: Ongoing**

017-2025 CCAA Upper Big Hole Jack Hirschy Stock water (Beaverhead County). The Big Hole River, within the Arctic Grayling Big Hole CCAA, is an important conservation area for Arctic Grayling. The project area is located near the North Branch of Big Swamp Creek and Moose Creek, southeast of Wisdom. In 2023, the enrolled landowner determined that current water sources are inadequate in upland pastures. Stock water systems will provide the enrolled landowner to graze longer in upland pastures which allows longer rest in riparian pastures. Following the stock tank projects, the enrolled landowners will be able to better manage grazing distribution so riparian areas become resilient to short, intense grazing periods during the fall and winter (streambanks stable) rather than continuous grazing. This project will drill one well (Home Place) and install a stock tank system (Highlands 2) to improve riparian health and improve streamflows. Improved riparian health along the Big Hole River enhances grayling habitat by increasing vegetative cover and reducing sediment inputs into the stream. Additionally, cover helps to maintain cold water in the Big Hole River. Reduced withdrawals from other area tributaries will also benefit flows in this highly utilized area of the Big Hole River near Wisdom, MT. **Status: Ongoing**

018-2025 Chamberlain Creek Fish Passage (Powell County). Chamberlain Creek is a tributary to the middle Blackfoot River and is one of the most productive westslope cutthroat trout streams in the watershed. This project would build on past restoration projects in the stream and upgrade an existing irrigation diversion that is a concrete pin-and-plank dam acting as a partial fish passage barrier, particularly during the westslope cutthroat trout migratory season. A denil fish ladder is also present, but plugs easily, thereby becoming unusable. This project would remove the diversion and rebuild it with a rock weir step-pool structure. The streambank will be restored with vegetated wood matrix structures to provide bank stability along with transplants. The goals are to restore fish passage for all salmonids and aquatic species, to restore stream function and sediment transport capacity, and accommodate future irrigation needs. **Status: Ongoing**



019-2025 Gold Creek Tributaries Aquatic Passage (Missoula County). Gold Creek is an important tributary to the Blackfoot River and is designated bull trout critical habitat. The creek westslope cutthroat trout, as well as brown trout and brook trout. Gold Creek provides thermal refuge

for the lower Blackfoot River bull trout during periods of river warming. This project addresses three tributaries of Gold Creek that are seasonally disconnected due to Forest Service roads, creating problems with fish passage and sedimentation. The three undersized culverts (24-inch) would be upsized to larger, 102-inch culverts with stream simulation bed material (Spring Creek, unnamed tributary). At two road crossings with limited aquatic habitat upstream, two additional hydraulic stream crossing culvert upgrades and two overflow culverts will be completed to increase flood capacity, reduce chronic stream sedimentation, and reduce risk of catastrophic failure. The goal of this project is to allow for year-round fish and aquatic organism passage. By increasing passage, native fish populations are expected to increase, water quality would improve, and recreational fishing would be improved both in the Gold Creek watershed and the Lower Blackfoot River. **Status: Completed**

020-2025 Johnson Creek Tributary Reconnection (Silver Bow County). Johnson Creek is a tributary to the Big Hole River upstream of Wise River. The Upper Big Hole River is home to the last aboriginal population of fluvial Arctic grayling. In the project area, the Big Hole suffers from chronic dewatering and high temperatures. Although there is cold water in Johnson Creek, Arctic grayling and other fish species could not use the tributary, as fish passage is blocked during the irrigation season. An active irrigation diversion 35 feet upstream of the Big Hole River captures the entirety of Johnson Creek, and two ditches deliver water to a flood-irrigated hay meadow. A flume would be constructed to carry Big Hole-sourced irrigation water over Johnson Creek and a trash rack, sluice gate, and overflow structure will be installed. A series of three step pools will be constructed between the restored area of Johnson Creek confluence and the area upstream of the flume to enable fish passage. A hardened ford will be installed to maintain ranch access. A headgate and two step pools will replace the point of diversion on Johnson Creek. Aquatic life would benefit from the addition of cooler water to this reach of the Big Hole, access to Johnson Creek thermal refugia, and additional spawning and rearing habitat. **Status: Ongoing**

021-2025 Kohrs Manning Diversion Fish Passage (Powell County). The Kohrs Manning Diversion is located on the Clark Fork River between Deer Lodge and Warm Springs. The diversion is located on the Clark Fork River and the Kohrs Manning Ditch intersects Cottonwood Creek. The Clark Fork River diversion is a rock push up dam that can be a seasonal fish and recreation barrier. The Cottonwood Creek diversion is a full-spanning pin-and-plank style timber weir dam that blocks all upstream passage when in use (May-October). In this section of the Clark Fork River, westslope cutthroat trout and brown trout are present. The area is listed as critical habitat for bull trout, but their abundance is low, and they have not been detected in Cottonwood Creek recently. The Clark Fork River supplies most of the irrigation water and presents a risk to fish entrainment. The project would replace the Clark Fork Diversion with a rock ramp diversion, paired with an ISI cone screen at the diversion intake. The ditch crossing at Cottonwood Creek would be replaced by a metal pipe or flume installed over the creek and the diversion would be rebuilt to allow fish passage. The purpose of the project is to restore fish and recreational passage and prevent entrainment. This project is part of a larger effort to address recreational passage at 8 locations in this area of the Clark Fork River; 5 diversions upstream have been addressed so far; this project would be the 6th and open 12 miles of upstream passage. Cottonwood Creek is a consistent recruitment source for westslope cutthroat trout and is a priority for restoration. **Status: Ongoing**



022-2025 Lower Grant Creek Restoration (Missoula County). Grant Creek is a tributary to the Clark Fork River at Missoula. In this location, near the confluence, it serves as a migratory corridor for westslope trout, nonnative salmonids, and potentially some bull trout. Historical land use practices and hydrological alterations led to channel straightening, removal of vegetation, and decreased beaver activity. This caused a reduction in habitat complexity, erosion, bank instability, loss of cover, and entrenchment. The proposed project would reintroduce native vegetation, treat streambanks, incorporate large wood structures, and reconnect the floodplain, with the goal of improving habitat complexity. Riparian fencing and hardened stream crossings will be constructed to manage livestock. Lower Grant creek is divided into four reaches, with restoration occurring in Reach 2 and Reach 4. In Reach 2, the property is owned by Missoula County Airport Authority, and activities include construction of a bankfull channel, floodplain reconnection, installation of streambank structures, and large wood and willow placement. In Reach 4, the property is owned by several private landowners. Proposed treatments include construction of a stream channel, floodplain connection, installation of streambank structures, large wood and willow, off-channel wetlands, and a grazing management plan. **Status: Ongoing**

023-2025 Mono Creek Fish Barrier (Beaverhead County). Mono Creek is a tributary to Wise River and contains a core (99% pure) population of westslope cutthroat trout. This population is threatened by hybridization with rainbow trout and Yellowstone cutthroat trout, and therefore it is a priority to isolate these fish. A wooden barrier would be installed to isolate nearly five miles of habitat

for westslope cutthroat trout and prevent hybridization. After installation of the barrier, fish would be removed using rotenone and then repopulated with salvaged fish from Mono Creek and adjacent populations. Once completed, this population would be considered protected and contribute to the goal of secure westslope cutthroat trout populations in 20% of their historical distribution. **Status: Ongoing**

024-2025 Ninemile Creek Restoration Phase 7 (Missoula County). Ninemile Creek is a tributary to the Clark Fork River West of Missoula. It contains westslope cutthroat trout, brook trout, rainbow trout, and brown trout. This project would focus on the seventh (final) phase of Ninemile Creek restoration, approximately 17 miles upstream of the confluence with the Clark Fork River. Historic mining activity in the Ninemile Creek watershed led to large placer mine tailing piles (12 to 40 ft tall), a lack of floodplain connectivity, and excessive erosion. Previous phases of restoration involved removal of placer piles, reconstruction of the stream and floodplain, and planting of woody vegetation. This project will improve wild fish habitat through revegetation, re-sloping of site topography, and reconstruction of the stream channel. Reclaiming the placer mining spoil piles will help decrease sediment sources in the system and establish a functional floodplain. Reconstructing the stream channel to proper slope and width/depth ratios will help improve sediment transport. Ultimately, the project is intended to address a lack of pools, gravels, large woody debris, and vegetation, improving spawning and rearing habitat and fish populations. Future Fisheries grants supported several Ninemile Creek watershed projects in the past. **Status: Ongoing**

025-2025 North Polly Reservoir Improvement (Blaine County). North Polly Reservoir is located north of Chinook, containing species including black crappie and fathead minnow. The reservoir has sustained a healthy black crappie population for over 20 years, providing an important angler opportunity and a supplemental source of wild black crappie to other waterbodies with fishing access. In 2024, high spring runoff filled the reservoir to capacity and the aging 24" corrugated metal trickle tube (overflow pipe) was severely damaged and collapsed. The tube jeopardized the integrity of the dam and resulted in a loss of 5 feet of storage elevation. The water storage loss eliminated quality habitat (depths) needed to sustain black crappie during critical time periods and severely reduced or eliminated productive, nearshore littoral spawning habitat. This project would remove the damaged 24" pipe and replace it with a 36" plastic pipe and 90-degree elbow. The replacement would increase pipe capacity and minimize impacts from future high-water events. Additional rock riprap will be used to protect the tube inlet and outlet, and a trash rack will limit ice damage. The goal is to improve capacity of the reservoir and directly improve black crappie habitat to benefit spawning, rearing, and survival. **Status: Ongoing**





026-2025 Poindexter Slough Riparian Restoration (Beaverhead County). Poindexter Slough is a side channel of the Beaverhead River at Dillon. It is important habitat for brown trout, but also contains rainbow trout, mountain whitefish, longnose suckers and sculpin species. It is one of the largest and most popular fisheries of the Beaverhead tributaries. Currently, degraded streambanks along the slough are a source of sediment that degrades fish and macroinvertebrate habitat. Historical overgrazing, irrigation practices, and a lack of riparian vegetation contributed to degradation. This project would address the sediment by stabilizing 300 feet of streambank and replanting riparian vegetation, at four locations. Techniques used will include lowering streambanks and connecting them to the floodplain, revegetation, use of brush matrices, and willow trenches. The goal is to reduce sediment and thermal pollution while improving fish habitat. Pondexter Slough was the site of a Future Fisheries restoration project in 2015. **Status: Ongoing**

027-2025 Pugsley Bridge Fishery and Riparian Enhancement (Liberty County). Pugsley Bridge, on the Marias River, is located downstream of Tiber Dam south of Chester. It contains many species, including shovelnose sturgeon, blue sucker, bigmouth buffalo, smallmouth buffalo, channel catfish, sauger, sturgeon chub, mountain whitefish, brown trout, and rainbow trout. However, the focus is native, endangered pallid sturgeon. At the project location, an outside bend experienced erosion and accelerated down-valley meander bend migration. Previous work completed in 2014 involved riprap, which led to accelerated erosion. Due to the erosion present, spring flow pulses are not able to be executed, which are intended to benefit pallid sturgeon. This project would address the erosion at Pugsley Bridge using bank enhancement and stabilization techniques, including a vegetated wood matrix, large wood structures, and a low terrace bench. The goal is to move the area toward natural stream and riparian function, which is intended to provide valuable fish habitat and enable flushing flows. **Status: Ongoing**

028-2025 Smith River Riparian Restoration (Meagher County). The Smith River, a tributary to the Missouri River in central Montana, is important to both recreation and angling. It contains many fish species, including rainbow trout, brown trout, sculpin, and dace. In the project area, habitat degradation occurred due to historical grazing impacts and the loss of riparian woody vegetation, as well as stream channel changes caused by beaver dam activity. This project would install riparian exclusion fencing and off-stream water development, with the goal of restoring native vegetation. Approximately 0.75 miles of wildlife-friendly riparian fencing and a solar powered off-stream water tank would be used. The project would protect willow plantings completed in 2024, and additional woody vegetation may be planted. The project is intended to increase riparian function, water quality, and channel resilience. By supporting riparian areas, water quality and fish habitat are expected to improve through overhanging cover, increased spawning/recruitment potential, and reduced summer water temperatures. **Status: Ongoing**

029-2025 Upper Storm Lake Creek Diversion (Deer Lodge County). Storm Lake Creek and Silver Lake are tributaries to Cable and Warm Springs Creeks, located near Georgetown Lake and Anaconda. Bull trout and westslope cutthroat trout are present, as well as other non-game species. The area is considered critical bull trout habitat. Storm Lake Creek has been diverted into Silver Lake since the early 1900s, to support industrial operations in the Anaconda-Butte area. The natural Storm Lake Creek channel was abandoned, and all flow is routed through a ditch system. This project would rebuild the diversion structure to allow native fish that have been entrained in the overflow channel to return to the main creek. A defunct wooden pin-and-plank diversion structure between Storm Lake Creek and Silver Lake would be reconstructed and replaced with a fixed, 8-inch concrete overflow weir and a series of step pools in the overflow channel to facilitate fish movement and eliminate entrainment. **Status: Ongoing**



001-2026 Big Hole Tributary Reconnection, Phase 2 - Alder Creek (Beaverhead County). Alder Creek is a cold water tributary that enters the Big Hole River upstream of Wise River, MT. Currently, Alder Creek is entirely diverted during irrigation season. The purpose of this project is: 1) to reconnect Alder Creek to the Big Hole river, and 2) create a siphon that will help a water rights change that would use Big Hole water for irrigation instead of Alder Creek. The reconnection of this river will provide cold water input into the Big Hole and potentially provide thermal refuge for Artic grayling, mountain whitefish, brown trout, rainbow trout, westslope cutthroat trout, and sculpin species. The project will consist of 90 feet of channel construction to reconnect Alder Creek and the Big Hole, with channel designed to pass 100-year flood events as well as accommodate fish passage at base flow. **Status: Ongoing**

002-2026 Lower Grant Creek Restoration (Missoula County). Grant Creek is a cold water tributary to the Clark Fork River. The confluence of this river is just west of Missoula. Its upper reaches support a population of federally listed bull trout, and the lower reaches receive seasonal pulses of rainbow and westslope cutthroat trout in the spring, and brown trout in the fall. In the project area, overgrazing and land management led to a disconnected floodplain, diminished riparian vegetation, and deterioration of the main channel. The project will specifically focus on lower Grant Creek near Kelly Island with the goal of restoring floodplain connectivity, improving riparian vegetation, and increasing channel complexity. The project will include 2,534 feet of bank treatment, 4,609 feet of fencing, constructed wetlands, and a grazing management plan to protect the newly improved riparian habitat. The improved riparian habitat will also shade the river and help provide thermal refugia for fish species. Much of the project will involve restoring riparian habitat in what is currently an agricultural corridor. **Status: Ongoing**

003-2026 Madison River Side Channel Restoration - Hyde Creek (Beaverhead County). Hyde Creek is a historical side channel that lost consistent connection to the Madison River, as it is located below Hebgen Reservoir and experienced altered flow regimes. This project aims to restore and enhance approximately 5,300 feet of Hyde Creek. This project will include reestablishment of floodplain, excavating multiple 6-10 foot wide channels. Native gravels and boulders will be placed to create riffle-pool sequence and maintain a flow velocity of 1-2ft/s and a gradient of ≤0.3% to promote spawning and rearing habitat for wild trout and improving forage opportunities. FWP monitoring will include spring and fall redd counts, PIT tagging, electrofishing mark-recapture surveys, and vegetation establishment surveys. **Status: Ongoing**



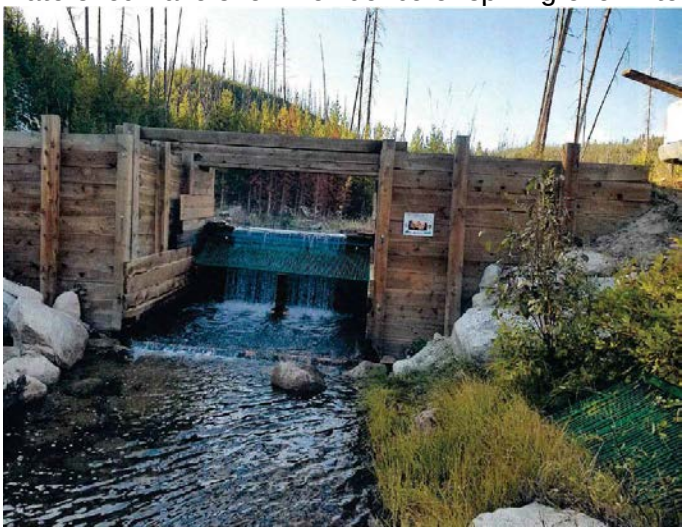
004-2026 Marshall Creek Culvert Removal and Habitat Restoration (Missoula County). Marshall Creek is a second order tributary of the Clark Fork River in Missoula County and supports a healthy population of westslope cutthroat trout (WCT) with high genetic purity. In the project area, a series of culverts are affecting fish passage. The goal of this project is to remove one of three undersized culverts, and to restore 1/4th mile of instream fisheries habitat through the addition of large and small woody debris. The project will take place on public land located on Missoula County property (formerly Marshall Mountain Park, acquired in 2023.) Sections both upstream and downstream of the culvert will be reconstructed with a slope of ~6% maintained by a grade control step pools. Work also includes reconnection of the floodplain with a bankfull width of 8 feet and a bankfull depth of 1.5 feet. **Status: Ongoing**

005-2026 Upper O'Brien Creek Restoration Project (Missoula County). O'Brien Creek is a tributary to the Bitterroot River that supports a cold-water fishery including both native westslope cutthroat trout (WCT) in its upper reaches, and non-native WCT hybrids, brook trout, and brown trout in its middle and lower reaches. In the project area, the historic alterations to the watershed have resulted in heavily degraded stream which was heavily incised, lacked woody debris, and lacked connection to the floodplain. The goals of this project are to 1) improve in-stream aquatic habitat, 2) reduce sediment loading, and 3) restore floodplain connectivity/processes. Woody debris will be added into the system to enhance habitat complexity. The road will be moved away from the stream the stream will be re-contoured to address the sedimentation issues. This site is also part of a long term monitoring project in collaboration with the University of Montana. **Status: Ongoing**

006-2026 Lower Racetrack Creek Restoration Project (Powell County). Racetrack Creek is a tributary to the Clark Fork River, with brown trout spawning reported in the lower reaches of the river. Currently, a pin and plank irrigation structure is a likely barrier to fish swimming upstream. The associated irrigation ditch is unscreened. Along the lower 0.5 miles of Racetrack Creek, the plan is to

install over 4,000 ft of fencing along the creek and 2 off-stream stock tanks to remove cattle grazing from the lower 0.5 miles of Racetrack Creek. Habitat improvement plans include installing 12 wood habitat enhancements, 800 feet of streambank treatments, and floodplain grading. Three rock weirs will be used to replace the diversion and non-functional fish ladder, and a corrugated fish screen will be placed into the irrigation channel to eliminate potential fish entrainment. **Status: Ongoing**

007-2026 Tenmile Creek Barrier (Deerlodge County). Tenmile Creek is a tributary to Deep Creek in the upper Missouri and is one of 47 remaining westslope cutthroat trout (WCT) populations left in the Big Hole drainage. Located 10 Miles SW of Anaconda, this stream has a high genetic purity population of WCT. Tenmile creek currently has brook trout negatively affecting WCT populations. Non-native rainbow trout located in two lakes in the watershed have shown evidence of spilling over into Tenmile Creek. The goal of this project is to conserve native cutthroat trout though construction of a fish barrier on the Mount Haggin Wildlife Management area. This barrier will be built of treated lumber like many other barriers installed throughout SW Montana, and through the Future Fisheries program. After the barrier is completed, WCT would be salvaged from the stream, and non-native fish (stream and lakes) will be treated with rotenone. After the removal of non-native trout, WCT will be restocked back into the stream. Additionally, Artic grayling and WCT will be introduced into the two nearby lakes. **Status: Ongoing**



008-2026 Christiansen Creek Fish Barrier (Beaverhead Country). Christiansen Creek is located 11 Miles NE of Wisdom, MT, in the Big Hole drainage. This stream is home to a population of westslope cutthroat trout (WCT) with high genetic purity. Currently, brook trout are also in the stream and have eliminated WCT everywhere but the headwaters of Christiansen Creek. As brook trout expand, WCT decline. The goal of this project would be to create a treated lumber barrier to exclude non-native fish. This barrier will be similar to many other wooden barriers installed throughout SW Montana that are inexpensive and easier to install, protecting populations more quickly. After the barrier is placed, WCT would be salvaged from the stream, and non-native fish will be treated with rotenone. After the removal of non-native trout, WCT will be restocked back into the stream. **Status: Ongoing**

Appendix 2: Newly Completed Project Descriptions

Photos provided by FWP staff or project applicants. Projects also listed in Appendix 1 are denoted by.*

001-2024 Albert Creek culvert replacement (Missoula County). Albert Creek is a tributary to the Middle Clark Fork River near Frenchtown that primarily supports a resident bull trout population as well as westslope cutthroat trout. Two culvert barriers exist on roads in the lower two miles of Albert Creek, which are considered partial barriers to adult, fluvial fish and full barriers to smaller fish. By increasing fish passage, this stream could potentially support more fluvial fish. The project would replace the upper barrier with a 12-foot wide bottomless arch culvert. The second barrier, located two miles downstream of the project, ensures that non-native species do not migrate up Albert Creek from the Clark Fork River.



002-2024 Benedict Creek fish passage (Missoula County). Benedict Creek is a tributary to the Clearwater river near Seeley Lake that primarily supports populations of westslope cutthroat trout. An existing irrigation diversion is impacting the stream by restricting upstream fish passage, limiting channel function, and potentially entraining trout and aquatic species. The project would upgrade an existing irrigation diversion with a headgate, valve, and a Zinvent fish screen. An 80-foot pipeline would also be installed to transport diverted flows into the existing water storage tank. Diversion infrastructure would be replaced by a channel step-pool with wood and rock. The goal is to upgrade the diversion point with a fish screen and step-pool to improve fish passage, prevent entrainment, and to better regulate flows.

001-2019 Big Creek instream flow lease. Big Creek (Park County) is a tributary to the upper Yellowstone River and supports substantial recruitment of Yellowstone cutthroat trout to the river. Big Creek is considered critical Yellowstone cutthroat trout spawning habitat within the upper Yellowstone River drainage. Lower Big Creek was dewatered often during the irrigation season prior to a significant water conservation project and several associated water leases. The current instream flow leases have been in place for 20 years and are set to expire prior to the 2019 irrigation season. The total instream flow lease would be 10 cubic feet per second (cfs), with the water split between two ownerships:

a. John L. Lake, Jr. and Yellowstone State Stop Estates Water User's and Homeowners Association; 2.8 cfs. [renewal for 10 years]
b. Mountain Sky Guest Ranch; 7.2 cfs. [renewal up to 5 years, 1 year requested in this application, due to anticipated changes to its irrigation rights]. Providing in-kind water lease value.

The lease with Montana Land Reliance for 1-16 cfs is also being renewed for 10 years, not funded through this proposal. This project would continue providing water for 95% of the redds in Big Creek, allowing for successful emergence and outmigration to the Yellowstone River. The goal is to preserve

the streamflow obtained from the leases and continue achieving successful recruitment of Yellowstone cutthroat trout.

014-2022 Bighorn River side channel reactivation (Bighorn County). The Bighorn River is one of Montana's premier trout fisheries. The river supports populations of warmwater species (longnose and white suckers, longnose dace, channel catfish) but trout are the focus of this project (brown trout, rainbow trout). The Bighorn was dammed in 1966 (Yellowtail Dam built at Fort Smith), which affected sediment transport and reduced side channel habitat due to sediment deposition at channel heads and vegetative encroachment. This project would build on a pilot side channel reconnection project by completing 12 side channel reconnections with the intention of achieving stream function at the lower flows produced by the dam. Habitat complexity would also be improved in areas with oversimplified bedform features. The goals are to improve stream and ecological function, enhance habitat, and increase angling opportunities by improving trout populations.

003-2024 Blind Canyon Creek fish barrier (Beaverhead County). Blind Canyon Creek is a tributary to the Big Hole River south of Jackson that supports a population of aboriginal, genetically unaltered westslope cutthroat trout. This project is intended to support the FWP goal of increasing secured westslope cutthroat trout habitat to 20% across its native range in the Upper Missouri watershed. A perched culvert and periodic drying of the streambed has prevented brook trout expansion upstream of Skinner Meadows Road. The culvert is deteriorating, is undersized, and only has a 2-foot drop (not the 6-foot drop recommended to protect a population from invasion). This project would replace the culvert with a larger, squash pipe culvert that would have a 6-foot drop and a splash pad to prevent a jump pool from forming below the culvert. No fish removal (i.e., rotenone treatment) is needed as part of this project. The goal is to prevent brook trout invasion in upper Blind Canyon Creek and maintain a conservation population of westslope cutthroat trout.





013-2023 Browns Gulch fish screens (Silver Bow County). Browns Gulch is a tributary to Silver Bow Creek and contains populations of brook trout and genetically pure cutthroat trout. Westslope cutthroat trout are present throughout the drainage but most prevalent in the upper reaches. Expansion of westslope cutthroat trout is a goal in Browns Gulch, and this project builds upon previous work in the drainage that includes improving fish passage, restoring the stream channel, and improving riparian areas. The current project would rebuild four rustic diversions and install fish screens. The

largest ditch, (diversion 5), was funded with a 2022 FFIP grant. For this project, the applicant would address three upper diversions and install three small, corrugated water fish screens (diversions 6, 7, and 8). The goal is to provide upstream fish passage and prevent entrainment of trout. Within the watershed, the goal is to improve the westslope cutthroat trout fishery in Browns Gulch and downstream in Silver Bow Creek.

003-2016 Carpenter Creek fish barrier (Cascade County). Carpenter Creek is a tributary to Belt Creek near the town of Neihart that currently supports two non-hybridized populations of westslope cutthroat trout. These genetically distinct populations were isolated from Belt Creek over 60 years ago when mining activities produced a stream reach with poor enough water quality that fish did not survive. The cutthroat trout have persisted above the chemical barrier, and nonnative fish have been restricted to Belt Creek. Current and future efforts to clean up the mine will remove the chemical barrier and the cutthroat trout will not be protected from nonnative fish in Belt Creek. Monitoring efforts already have found rainbow trout in lower Carpenter Creek where they had not been observed from 2011 to 2013. The applicant proposes to build a concrete barrier to maintain isolation of the non-hybridized populations of westslope cutthroat trout. It would also expand habitat to the area once devoid of fish due to poor water quality. The applicant requests funds for structure construction.

006-2024 First Chance Gulch habitat improvements (Anaconda-Deer Lodge County). First Chance Gulch is a placer-mined stream within the French Creek watershed and the Mount Haggin Wildlife Management Area. It is a tributary to French Creek and contains Arctic grayling and westslope cutthroat trout, as part of the larger French Creek restoration effort. The area was extensively placer mined during the period of 1864-1911 and the stream was straightened and became severely incised. Current conditions are a channelized and homogenous stream system with very little instream habitat (including pools and suitable spawning substrate). This project would construct 50-80 simple log structures within a 1.5 mile reach. The goal is to improve tributary habitat for native species in an important conservation area. This watershed includes a critical population of Arctic grayling. Future Fisheries supported many projects in the watershed, including restoration in French Creek and French Gulch, culvert removals and replacements, and a fish barrier

007-2024 Flat Creek tailings removal and restoration (Mineral County). Flat Creek is a tributary to the Clark Fork River near Superior that contains westslope cutthroat trout and brook trout. The project area has been affected by extensive mining, which led to heavy metal contamination, tailings piles, and loss of stream/floodplain function. In 2022 and 2023, work was done to remove tailings and rehabilitate the floodplain. However, the volume of tailings discovered exceeded estimates and additional work is needed to complete the restoration. The proposed work includes additional repository cell construction, tailings removal, floodplain grading and restoration, and revegetation. The goal of the project is to enhance fish habitat through floodplain creation and revegetation. Recruitment of spawning gravels is expected to increase due to floodplain creation and a functional stream.



004-2024 Cattail Creek spawning enhancement (Madison County). Cattail Creek is a tributary to the Ruby River near Alder that is predominantly composed of brown trout. The project area has an artificial stream channel and pond system that was created in the 1990s. Over time, the existing system became over-widened, shallower, and slower, which resulted in fine sediment accumulation and degraded fish habitat. This project would retire the existing channel-and-pond system and create a new channel to increase spawning and rearing habitat. Activities include removal of three existing fish barriers, channel restoration, and the addition of spawning substrate and instream habitat. This is intended to improve recruitment and abundance in the Ruby River. The new channel would create 2,475 feet of enhanced spawning and rearing habitat that would be connected to the Ruby River. The goal is to improve habitat and enhance the brown trout population, as well as other aquatic species. Public access is granted through a managed access program at the Woodson Ranch.

008-2024 Flathead Creek streambank restoration (Gallatin County). Flathead Creek is a tributary to the Shields River west of Wilsall that supports a population of Yellowstone cutthroat trout with high conservation value. It also contains brown trout, longnose suckers, mountain suckers, mountain whitefish, white suckers and brook trout. In the project area, the stream was degraded due to past grazing activities and encroachment of agricultural activities. The stream became channelized and incised, the riparian area was diminished, channel length was reduced, and banks were instable and erosive with excess sediment entering the stream. The proposed project would install composite-wood treatments, construct bankfull benches, and revegetate to increase stability and natural stream and floodplain function. The landowner will fund fencing setbacks to limit livestock access to the creek. The goals are to increase stream-floodplain connectivity, increase overhanging cover, increase instream habitat complexity, and improve water quality.

019-2025 Gold Creek Tributaries Aquatic Passage (Missoula County). Gold Creek is an important tributary to the Blackfoot River and is designated bull trout critical habitat. The creek westslope cutthroat trout, as well as brown trout and brook trout. Gold Creek provides thermal refuge for the lower Blackfoot River bull trout during periods of river warming. This project addresses three tributaries of Gold Creek that are seasonally disconnected due to Forest Service roads, creating problems with fish passage and sedimentation. The three undersized culverts (24-inch) would be upsized to larger, 102-inch culverts with stream simulation bed material (Spring Creek, unnamed tributary). At two road crossings with limited aquatic habitat upstream, two additional hydraulic stream crossing culvert upgrades and two overflow culverts will be completed to increase flood capacity,
reduce chronic stream sedimentation, and reduce risk of catastrophic failure. The goal of this project is to allow for year-round fish and aquatic organism passage. By increasing passage, native fish populations are expected to increase, water quality would improve, and recreational fishing would be improved both in the Gold Creek watershed and the Lower Blackfoot River.





009-2024 Governor Creek streambank restoration (Beaverhead County). Governor Creek is a tributary to the Big Hole River near Jackson that supports Arctic grayling, within the Big Hole Candidate Conservation Agreements with Assurances (CCAA). In the project area, high flow events and grazing-related vegetation disturbances caused five outside streambanks to become unstable with a high risk of channel avulsion. Instream habitat was also negatively affected and the channel became overwidened. This project would repair five unstable streambanks along Governor Creek and install willow stakes and sod mats. The goals are to improve bank stability, reconnect the floodplain to the stream, improve cover with deep rooting vegetation, and improve water quality and temperature. A functional stream and floodplain would promote natural function and needed habitat in an area that has been the focus of a watershed scale restoration effort for Arctic grayling.

023-2024 Granite Creek Tributary Aquatic Passage (Missoula County). Granite Creek is a tributary to Lolo Creek, which includes bull trout critical habitat. The stream also supports westslope cutthroat trout, brook trout, and brown trout. This project would improve passage in a large tributary of Granite Creek that is seasonally disconnected while also reducing chronic stream sedimentation by upsizing a 42”x24” culvert to a 11’ bottomless arch culvert. The project would build upon long-term restoration efforts in Lolo Creek that included addressing fish passage barriers and undersized culverts,

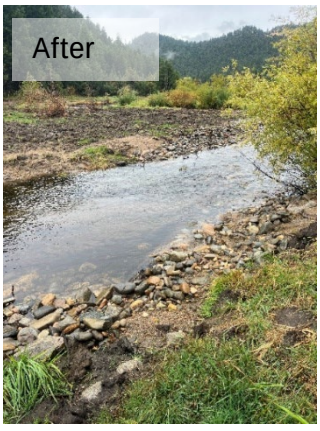
decommissioning certain forest roads, and installing large wood jams in certain stream sections. Since 2006, these projects reduced overall sediment inputs and improved instream habitat.

011-2024 Hellroaring Creek streambank restoration (Madison County). Hellroaring Creek is a tributary to Red Rock Creek, within the Arctic Grayling Centennial Valley Candidate Conservation Agreements with Assurances (CCAA), that contains Arctic grayling. In the project area, historical livestock and wildlife overgrazing contributed to reduced deep-rooted vegetation. This caused poor streambank stability and high risk for a channel avulsion. Healthy riparian areas enhance grayling habitat by increasing cover and reducing sediment inputs into the stream, which helps to maintain cold water habitat and contribute to cleaner, colder water and productive spawning areas. The purpose of this project is to increase healthy riparian habitat along Hellroaring Creek by stabilizing two outside streambanks through bank sloping, planting of mature *Salix* and *Carex* sod mats, and transplanting willows. The goal is to improve Arctic grayling habitat by improving bank stability, reconnecting the floodplain to the stream, maintaining and improving overhead cover and riparian vegetation, and improving water quality and temperature.

003-2025 Lee Creek Fish Passage (Missoula County). Lee Creek is a tributary to Lolo Creek in the upper Lolo watershed. This area includes designated bull trout critical habitat and supports high densities of westslope cutthroat trout, as well as other trout species. It is considered important spawning and rearing habitat for all salmonid species present. In the project area, two tributaries of Lee Creek are seasonally disconnected by roads, leading to fish passage and water quality issues. This project would upsize three undersized culverts to 84-inch culverts that will incorporate stream simulation bed material and provide year-round fish passage and withstand a 100-year flood event. A fourth culvert will be upsized to 36 inches to allow for increase hydraulic capacity. This project would build upon other road decommissioning and fish passage projects in the upper Lolo Creek watershed. The goals of this project are to attain full fish passage and reduce chronic sedimentation, and therefore increase native fish populations.

005-2023 Little Boulder River restoration (Jefferson County). The Little Boulder River is a tributary to the Boulder River near Boulder that supports populations of brown trout and rainbow trout. Westslope cutthroat trout are located upstream, separated from downstream waters by a fish barrier. The applicant proposes to increase trout numbers in the Little Boulder River by improving fish passage, reconnecting the stream to its floodplain, and enhancing aquatic and terrestrial habitats. Treatments include grade control and aggradation riffles, rootwad/soil/gravel matrix bank treatments, wet sod lifts, riffles with log keyways, and log vanes.





013-2024 Marshall Creek riparian fencing (Missoula County). Marshall Creek is a tributary to the Clark Fork River, east of Missoula, that contains westslope cutthroat trout with over 90% genetic

purity in the upper reaches. It also provides trout recruitment to the Clark Fork. The project area, which is the location of a former Future Fisheries fencing project that met its 20-year maintenance obligation, has experienced normal wear and tear on the riparian fence and water gaps. The Future Fisheries project was considered a success, with vegetation and stream habitat improved during the project life. The landowner intends to repair the fence and water gaps and continue protecting the stream and riparian area along 2,500 feet of Marshall Creek. The goal is to maintain quality stream habitat and riparian habitat in an important stream.

006-2023 McKinley Lake Dam Removal (Missoula County). McKinley Lake is a headwater storage lake in the Rattlesnake Wilderness Area outside of Missoula. It is connected to Rattlesnake Creek, a tributary to the Clark Fork River that is a high priority fisheries area due to the presence of native fish (westslope cutthroat trout, bull trout, mountain whitefish). This applicant proposes to remove the obsolete dam and outlet infrastructure, construct additional stream channel that will connect to the existing outlet channel, and revegetate the newly-exposed littoral zone to support riparian and wetland vegetation. The overall goal is to eliminate a significant hazard that has the potential to cause non-recoverable environmental damage downstream. Specifically, this project would eliminate an imminent threat to downstream native fisheries (sediment from erosion) and a source of non-native fish in the Rattlesnake Creek watershed (rainbow trout) while enhancing the stream and riparian and wetland areas. The Rattlesnake Creek watershed is home to many fish habitat improvements, including fish screen and irrigation improvements (2002, 2015, 2016, 2017), removal of Rattlesnake Dam (2019), and stream restoration (2001).

007-2022 Mill Creek 5 Bar 6 restoration project (Park County). Mill Creek is a tributary to the Yellowstone River in the Paradise Valley. Of the remaining Yellowstone cutthroat trout strongholds, Mill Creek is one of the largest watersheds outside of Yellowstone National Park. Past land management degraded lower Mill Creek, leading to channelization and dikes that cut the stream off from its side channels and floodplain. Lack of large wood and instream habitat complexity indicates that wood was removed, and the channel became simplified. Despite the limitations, the project area is an important spawning and rearing area for migratory Yellowstone cutthroat trout as it is upstream of detwatering in lower Mill Creek. This project would begin restoration on Mill Creek in the upstream section by installing 10-15 engineered log jams and breaching two berms. The goal is to improve spawning, rearing, and overwintering habitat for Yellowstone cutthroat trout and other fish species.



014-2024 Miller Creek restoration Leik property (Missoula County). Miller Creek is a tributary to the Bitterroot River near Lolo that contains brook trout and hybridized westslope cutthroat trout, with conservation populations of westslope cutthroat trout in an adjacent tributary. In the project area, past land management and channel manipulation are believed to have resulted in a modified stream and riparian environment that resulted in reduced trout densities, simplified habitat, increased sediment loads, and elevated stream temperatures. Changes in land management resulted in

opportunities to improve stream and riparian conditions. This project would build upon 2 miles of stream restoration in Miller Creek and diversify the channel plan form and realign it away from eroding banks, add grade and elevation controls to increase floodplain connectivity, use large wood/debris matrix structures to increase instream habitat complexity, and employ large scale riparian planting to facilitate recovery of the riparian community. The goals are to reduce sediment delivery to the stream, promote riparian recovery, increase floodplain connectivity, and increase habitat complexity to improve fish habitat.



023-2025 Mono Creek Fish Barrier (Beaverhead County). Mono Creek is a tributary to Wise River and contains a core (99% pure) population of westslope cutthroat trout. This population is threatened by hybridization with rainbow trout and Yellowstone cutthroat trout, and therefore it is a priority to isolate these fish. A wooden barrier would be installed to isolate nearly five miles of habitat for westslope cutthroat trout and prevent hybridization. After installation of the barrier, fish would be removed using rotenone and then repopulated with salvaged fish from Mono Creek and adjacent populations. Once completed, this population would be considered protected and contribute to the goal of secure westslope cutthroat trout populations in 20% of their historical distribution.

017-2023 Mount Haggin Culvert Removal and Replacement (Deer Lodge County). Within the Mount Haggin Wildlife Management Unit, Sixmile Creek, Little California Creek, and Julius Gulch are tributaries to California Creek and the French Creek watershed. This area has been affected by 19th century mining activities and has been the focus of large-scale restoration of French Creek and French Gulch (including past FFIP projects) and the reintroduction of Arctic grayling and westslope cutthroat trout. The project would address four undersized, perched culverts that restrict upstream movement by native fish. Two culverts would be removed (Little California Creek 1 and Julius Gulch) and two culverts would be replaced (Sixmile Creek and Little California Creek) to facilitate fish passage and stream connectivity to 8.4 miles of upstream habitat. The goal is to continue to restore native fish habitat in an area that contains of the largest interconnected population of westslope cutthroat trout in the upper Missouri River drainage and the only population of fluvial Arctic grayling in the absence of non-native species. With this project, occupied stream length would increase to nearly 48.4 miles.

018-2023 Musselshell River Rowton Bank Restoration (Petroleum County). The Musselshell River is a tributary to the Missouri River and contains many native fish, including blue sucker, sauger, Northern redbelly dace, sicklefin chub, and sturgeon chub. All of these species are Species of Greatest Conservation Need or Species of Concern. In the project area (Rowton property), historic flood events and extreme drought affected past land use practices and led to alteration of the river and its riparian areas. High rates of erosion occurred. This project would use a soft bank erosion approach to limit future erosion issues and spark habitat





enhancement. Approximately 1,050 feet of streambank would be restored and 10 acres of riparian habitat would be enhanced by installing a brush matrix along the riverbank. The project is expected to increase local habitat complexity and benefit aquatic species and also to prevent additional erosion that negatively affects the landowner's infrastructure and agricultural property. The goal is to improve river function and fish habitat for important native fish species, potentially increasing woody vegetation, shade (and decreasing temperatures), and reducing sedimentation. The needs of the private landowner would also be addressed.

016-2024 Nevada Creek restoration phase 7 (Powell County). Nevada Creek is a tributary to the middle Blackfoot River near Helmville that supports populations of westslope cutthroat trout, rainbow trout, and brown trout. The project area had past channel manipulations and streamside vegetation removal that led to bank erosion issues. In 2010 and 2017-2023, nearby Future Fisheries channel restoration projects addressed extensive instream and riparian habitat and resulted in reduced sediment, increased stream complexity, improved riparian condition, and increased trout abundance. This project is phase 7 and would continue the restoration downstream; it intends to restore natural stream and riparian function by reducing sediment loading and improving trout habitat with channel restoration, bank treatments, floodplain connectivity, wetland restoration, and aquatic habitat complexity. Specifically, the project would incorporate side channel and meander activation, bank treatments to address eroding banks, and floodplain grading. The goal is to improve instream, riparian, and upland habitat within a working landscape to benefit aquatic species.

008-2023 North Burnt Fork Creek Fish Passage Reconnection (Ravalli County). North Burnt Fork Creek is a tributary to the Bitterroot River near Stevensville that currently supports bull trout, westslope cutthroat trout, brown trout, rainbow trout, brook trout, and other non-game species. It was a historical major spawning tributary to the Bitterroot River but a relic water control structure has been

a barrier to fish for over 50 years. This applicant proposes to replace the barrier with a bridge, opening fish passage and retaining connection to the trail on the Lee Metcalf National Wildlife Refuge. The overall goals are to fully reconnect fish passage between the Bitterroot River and 2.5 miles of spawning habitat in North Burnt Fork Creek and to improve 0.5 mile of riparian habitat. Outreach and education will also be a component of this project.

017-2024 North Burnt Fork Creek fish passage supplement (Ravalli County). North Burnt Fork Creek is a tributary to the Bitterroot River near Stevensville that currently supports bull trout, westslope cutthroat trout, brown trout, rainbow trout, brook trout, and other non-game species. It was once a major spawning tributary to the Bitterroot River but a relic water control structure has been a fish barrier for over 50 years. This applicant is seeking supplemental funding for a project that was approved in Winter 2023, which would open fish passage and retain connection to the trail on the Lee Metcalf National Wildlife Refuge. In addition to some minor design changes, contractor and material expenses exceeded original budget estimates. The current project would replace the barrier with a 32-foot span, prefabricated aluminum box culvert that will allow full conveyance of bankfull flows. The project goals are to fully reconnect fish passage between the Bitterroot River and 2.5 miles of spawning habitat in North Burnt Fork Creek and to improve 0.5 mile of riparian habitat. Outreach and education will also be a component of this project.

026-2024 Upper Clark Fork Sager Diversion (Powell County). In the project area, on the Upper Clark Fork River, westslope cutthroat trout and brown trout are present. It is also critical habitat for bull trout, but their abundance is low. The Sager Lane Diversion is located on the Upper Clark Fork River approximately 6 miles south of Deer Lodge, upstream of the Sager Lane bridge. It spans the entire river and is a pin-and-plank type of concrete and timber weir structure. Metal supports are raised seasonally (July-September) to support check boards that form a dam approximately 3 feet high. The structure also includes a concrete apron and abutments, as well as tarps to seal the dam during periods of low water. It is a complete seasonal fish passage barrier. Pump irrigation is also a component of the site, in conjunction with a ditch that sends excess water down Dempsey Creek before returning to the Clark Fork. This project is part of a larger effort to address fish passage on the Upper Clark Fork River, and is considered #5 of 8 diversions to address. This project would replace the existing diversion structure with four rock weirs, as well as relocate and upgrade the pump station so it is closer to the diversion and has a bypass channel back to the river (eliminating the need to divert water through Dempsey Creek). A rotating drum screen will be incorporated into the new pump intake system to reduce fish entrainment. The goals of the project are to improve fish passage, prevent entrainment, and enhance streamflows with a focus on both native and non-native fisheries.



012-2022 Upper Red Rock Lake overwinter habitat (Beaverhead County). Upper Red Rock Lake is located within Red Rock Lakes National Wildlife Refuge in the Centennial Valley and is home to one of the last aboriginal Arctic grayling populations in the lower 48 states. The majority of the grayling population migrates into and occupies Upper Red Rock Lake for the majority of the winter, but available habitat is limited due to water depth and oxygen. To address a main limiting factor for Arctic grayling, the applicants propose to increase available overwinter habitat. Several alternatives were considered, and a pipeline to deliver oxygenated water to deeper portions of the lake was chosen as the only feasible option. A pipe will deliver oxygenated water from a nearby tributary (Shambow Pond & East Shambow Creek) and deliver it to deeper portions of the lake, and an aeration structure will be installed to increase the dissolved oxygen of water in the pipe. The goal is to improve the population of Arctic grayling by addressing the primary factor driving survival and population dynamics. Yellowstone cutthroat trout will also benefit from this project.



022-2022 Wilson Creek stream and floodplain restoration (Gallatin County). Wilson Creek is a tributary to the Gallatin River. It contains populations of rainbow trout, brown trout, and Rocky Mountain sculpin. At the project location, south of Gallatin Gateway, Wilson Creek was ditched for agriculture, creating a straightened, widened channel. It was also impacted by dewatering during peak irrigation season and a loss of vegetation. This created poor habitat for salmonid reproduction or rearing and reduced the overall health of the stream. The project would restore the incised stream channel and connect it to the floodplain, create in-stream habitat complexity, and partially relocate the stream channel. The goals are to enhance spawning and rearing habitat for resident and migratory salmonids and to recontour the stream channel to increase floodplain connectivity and increase the potential for water storage that can contribute to late season flows in Wilson Creek and the Gallatin River.

Appendix 3: Effectiveness Monitoring

Effectiveness monitoring addresses the success of each project after completion. The future fisheries coordinator (FFC) performed effectiveness monitoring, and the Big Hole Watershed Committee (BHWC) was hired to complete monitoring in the Big Hole watershed (denoted by *). Detailed monitoring information is below. For projects monitored by BHWC (*), excerpts are included here, and additional information can be found in a separate monitoring report, available upon request.

- 019-2021 Placid Lake outlet barrier improvement
- 029-2018 Ramshorn Creek fish barrier
- 012-2018 North Fork Keep Cool Creek fish passage
- 020-2014 Prickly Pear Spring Creek Bank Stabilization
- 009-2018 Moose Creek Gallatin restoration
- 033-2015 Poindexter Slough Channel Restoration
- 025-2018 Loneman Creek riparian fencing
- 011-2011 McVey Creek fish barrier
- 009-2009 Kalsta Spring Creek Spawning habitat enhancement

019-2021 Placid Lake outlet barrier improvement (Missoula County). Placid Lake is a waterbody in the Blackfoot River drainage that is located between Placid Creek and Owl Creek. It is a highly productive natural glacial lake that supports westslope cutthroat trout, bull trout, kokanee, introduced brown trout and largemouth bass, and several other aquatic species. The lake has a massive biomass of prey species as well. Invasive species like Northern pike are found below Placid Lake, but the outlet dam served as a barrier until recently. Northern pike are located downstream and have been documented below the Placid Lake outlet and one adult was captured by FWP in Placid Lake above the outlet, likely due to a high flow event that allowed upstream passage. If Northern pike were to become established in Placid Lake, they would undoubtedly explode in number and the current fish assemblage would be decimated. This project would enhance the current fish passage barrier by increasing the vertical height of the barrier, increasing the vertical drop height of the overflow spillway, and enhancing scour protection and stability of the dam. The goal is to protect the quality and integrity of existing fish populations and fisheries, which includes conservation populations of migratory bull trout and westslope cutthroat trout, important sport fisheries (e.g. kokanee), and nongame fish. **Monitoring notes:** Project looks great, revegetation came in nicely, operation by homeowners looks good. They came up with some creative solutions on the operation to deal with beaver and add more security to exclude pike. Appears that overflow bypass has not been activated since project (since fish barrier installed).



029-2018 Ramshorn Creek fish barrier (Madison County). Ramshorn Creek is a tributary to the Ruby River and would support populations of Westslope Cutthroat Trout (WCT) and Rocky Mountain Sculpin above the barrier and Brook Trout, Brown Trout, and Rainbow Trout below the proposed barrier. As part of the project, a fish passage barrier would be installed in conjunction with an irrigation delivery structure that will ensure delivery of water and reduce maintenance and avoid channel manipulation. This project is in the Ruby watershed and is an essential component in implementing native fish restoration in Ramshorn Creek and its tributaries. The goal is to conserve an important population of Westslope Cutthroat Trout in the Ruby watershed. **Monitoring notes:** We followed up on a couple of eDNA hits for brook trout this year and removed one large adult with electrofishing. It was probably missed during the treatment. No other nonnative fish were observed so the barrier is doing its job. Repopulation of the stream with WCT from two additional Ruby River populations occurred in 2022. During sampling this year, multiple size classes were observed. The project is successful although it will take a few more years to fully seed the 13.8 miles of habitat available.



012-2018 North Fork Keep Cool fish passage (Lewis & Clark County). North Fork Keep Cool Creek is a tributary to Keep Cool Creek and the Blackfoot River and supports fluvial, genetically pure Westslope Cutthroat Trout. This project would address the existing stream crossing near stream mile 10.1 on US Forest Service property that is undersized, a barrier at most flows, and creates impairments to the stream channel. A bottomless steel plate pipe arch would be installed with grade control step pools, which would allow uninhibited aquatic organism passage and replicate the streambed throughout the crossing. The goal of this project is to improve connectivity and support migratory life histories of native species. Additionally, the stream crossing would promote natural morphology, correct road drainage problems, and eliminate delivery of sediment. The culvert would accommodate bankfull and an appropriate floodplain, as well as a 100-year flood event. **Monitoring Notes:** Culvert in place and looks good. Channel was dry, which happens in some years. The project was intended to reconnect ~ 1.3 miles of instream habitat upstream of the crossing. The stream reaches up and downstream remain perennial.





020-2014: Prickly Pear Spring Creek Bank Stabilization (Lewis & Clark County). This unnamed spring creek enters Prickly Pear Creek approximately 6.5 miles upstream from the latter's confluence with Lake Helena. It supports brown and rainbow trout. Habitat in the spring creek has been degraded by livestock grazing, and undersized culvert at a road crossing, and intrusion by Prickly Pear Creek. The latter has channel alignment and debris issues. The project calls for improving pool and riffle habitat in selected meander bends of the spring creek, replacing the culvert with a bridge, and reconnecting the original confluence with Prickly Pear Creek. Prickly Pear would receive some realignment, juniper/willow/rock revetments, and debris cleanup. **Monitoring Notes:** The project site was visited in August 2024. It was notable how much the side channel has improved in riparian vegetative growth. The channel is established and many plant species are present. It looks very healthy. It is unclear if there is habitat for spawning, but there should be habitat for rearing. Some algae growth was seen, but the stream width is maintaining. The main channel is making adjustments and narrowing in spots. It is clear that many revetments failed and there are still some highly erosive banks. Weeds are a minor issue. May take some time to rebuild the stream banks and get to a channel equilibrium. Habitat improvements may be limited due to lack of overhead and bank habitat.





009-2018 Moose Creek Gallatin restoration (Gallatin County). The Gallatin River is a tributary to the Missouri River that primarily supports populations of Rainbow trout and Brown trout. This project is located on US Forest Service property in the Gallatin Canyon. This project would enhance streamside vegetation, add riparian fencing, improve trail systems, stabilize streambanks, and develop designated access sites for all user types. This includes 145 feet of streambank stabilization with bioengineering techniques, almost 11,000 square feet of riparian plantings, 1,460 feet of riparian fencing, 1,000 feet of

trails, a stairway to the river, boat ramp, kayak launch, and interpretive signs. Wild fish habitat is expected to be enhanced by rebuilding streambanks, enhancing streamside vegetation, installing riparian fencing, and focusing river access in specific locations. The goal is to reduce fine sediment and enhance riparian areas while providing safer and more directed access to the river **Monitoring Notes:** Willows are establishing, and it was noted as being a success. While the photos show improvement, a fish habitat improvement has not been described. Overhead cover is not yet established and instream habitat was not part of the design.



033-2015 Poindexter Slough Channel Restoration (Beaverhead County). Poindexter Slough is 4.7-mile-long channel of the Beaverhead River, located near Dillon, fed by a combination of groundwater and water diverted from the river. The project area supports a very popular fishery for rainbow trout and brown trout. FWP surveys on this slough have documented a steady decline in trout numbers over the last 12 years. This decline has been attributed to impaired riparian conditions and the loss of instream habitat, primarily as a result of stream flow management that has restricted high spring flushing flows. The slough was traditionally fed by groundwater returning from flood irrigation. As landowners converted from flood to sprinkler irrigation, groundwater inputs decreased and the slough was supplemented with more water from the Beaverhead River to meet water rights. The diverted water deposited sediment into the slough, which filled pools and inundated riffle habitat. To effectively mobilize and transport these fine sediment deposits, a larger head gate at the top of the slough was installed. Appropriately sized channel dimensions were achieved and backwatered reaches were eliminated in most of the project area. However, the lower 2.1 miles of the slough still need to be narrowed, which will allow maintenance of riffle and pool habitat with sediment-flushing flows. The work will occur entirely on FWP fishing access site property. **Monitoring Notes:**. For comparison the upper Beaverhead had about 1100 brown trout per mile and 25% of them are over 18 inches (2024). Poindexter is pretty similar!





025-2018 Loneman Creek riparian fencing (Sanders County). Loneman Creek is a tributary to the Little Thompson River and contains Westslope Cutthroat Trout. The Little Thompson River is impacted by sediment, nutrients, and water temperature, and monitoring indicates that Loneman Creek has elevated temperature when compared to a nearby reference stream. The project area is negatively impacted by cattle, which have unrestricted access to the creek. This project proposes to install exclusion fencing to allow the stream to recover and improve habitat, shade, and reduce temperatures, nutrients, and sediment. The goal is to encourage recovery of the stream and riparian areas, improve water quality, and enhance aquatic habitat. **Monitoring Notes:** This enclosure is quite larger (several acres, or so it seems.) The fencing is in good shape and I saw no evidence of cows getting into the enclosure. The well beaten path along the fence is evident. Riparian and stream condition were enclosure within the enclosure were excellent, it did its job. Riparian conditions just above the enclosure on the other hand and unsurprisingly were quite degraded. I hope in the future we can do more of this work in the Thompson, as each stream with a grazing lease has similar degradation. I did not see the habitat conditions before it was built, but a great project/progress in my opinion.



011-2011 McVey Creek fish barrier (Beaverhead County) is a tributary to the Big Hole River located near the town of Wisdom that supports a population of genetically pure westslope cutthroat trout – one of only a few non-hybridized populations in the drainage. The stream also supports an abundant brook trout population. This project proposes to secure the westslope cutthroat trout population by constructing a temporary fish passage barrier at the existing Highway 43 culvert, followed by removal of the brook trout population using a chemical piscicide. The project also calls for installing a fish ladder on an existing irrigation diversion located approximately 1 mile upstream from the highway culvert to enhance fish passage and help ensure in-stream flows are maintained. **Monitoring Notes:** Brook trout were found in 2020, probably as a result of fish being beyond treatment area in 2011. Additional treatment in 2024 & 2025.

009-2009 Kalsta Spring Creek (Madison County), a tributary to the Big Hole River near Melrose, has the potential to provide spawning and rearing habitat for rainbow trout and brown trout. However, the spring creek complex has been degraded from past overgrazing by livestock and high water events in the Big Hole River. This project calls for constructing a new 1,650-foot spawning channel that bypasses existing pond areas and flows directly into the river. The project also involves reconfiguring existing slough areas into a series of interconnected ponds. The landowner recently has fenced the riparian areas. **Monitoring Notes:** Big Hole Watershed Committee monitored this reach, and

indicated improvements could be made. The channel from the pond to the river is pretty short and it sounds like that is what the beavers are plugging up. Considering beaver control.

Appendix 4. Expired Projects

TABLE 10. THE 25 PROJECTS THAT EXPIRED IN 2025 OR 2026.

PROJECT NUMBER	PROJECT NAME	APPLICATION YEAR	COMPLETED	EXPIRED
016-2001	Shields River	2001	2005	2025
035-2001	Big Otter Creek corral relocation	2001	2005	2025
024-2002	Sappington Spring Creek	2002	2005	2025
013-2003	Marshall Creek	2003	2005	2025
029-2003	Upper Willow Creek	2003	2005	2025
039-2003	Solo Joe Creek	2003	2005	2025
042-2003	Lost Creek	2003	2005	2025
047-2003	Fridley Creek	2003	2005	2025
053-2003	Tenmile Creek	2003	2005	2025
005-2004	Clear Creek	2004	2005	2025
008-2004	Duck Creek	2004	2005	2025
019-2004	Meadow Creek	2004	2005	2025
024-2004	Pattee Creek	2004	2005	2025
034-2004	Willow Springs Creek	2004	2005	2025
048-2004	Soda Butte Creek	2004	2005	2025
035-2000	Virginia Creek channel restoration	2000	2005	2025
027-2003	South Fork Judith River	2003	2006	2026
037-2003	Deep Creek	2003	2006	2026
048-2003	North Fork Horse Creek	2003	2006	2026
051-2003	Shields River	2003	2006	2026
022-2004	North Fork Horse Creek	2004	2006	2026
033-2004	Willow Creek	2004	2006	2026
035-2004	Boulder River	2004	2006	2026
045-2004	North Fork Horse Creek	2004	2006	2026
017-2000	Lost Creek headgate repair and channel restoration	2000	2006	2026