



# Montana Chapter of the American Fisheries Society

## *Resource Action Fund Grant Application*



The executive committee (past-president, president, president-elect, and secretary-treasurer; EXCOM) of the Montana Chapter of the American Fisheries Society (MTAFS) will review this grant request on behalf of the Chapter. All applications, regardless of the amount requested will need to be submitted to the Chapter President by January 15<sup>th</sup>.

For more details please see the MTAFS web page at <https://units.fisheries.org/montana/grants/resource-action-fund> or contact an EXCOM member. Please fill out each section of the RAF grant application completely, providing adequate background for your project, a description of the benefits to Montana fisheries, and what the requested funds would be used for.

**I. APPLICANT INFORMATION**

- a. **Applicant Name** Missouri River Flyfishers (Tracy Wendt, President)  
**Mailing Address** PO Box 6876  
**City** Great Falls **State** MT **Zip** 59406  
**Telephone** 406 214 2868  
**E-mail address** MRFTU406@gmail.com
- b. **Is the applicant also the contact person for this grant?**  Yes  No  
**If not, please provide the following:**
- c. **Contact Name** \_\_\_\_\_  
**Mailing Address** \_\_\_\_\_  
**City** \_\_\_\_\_ **State** \_\_\_\_\_ **Zip** \_\_\_\_\_  
**Telephone** \_\_\_\_\_  
**E-mail address** \_\_\_\_\_

**II. PROJECT INFORMATION (use additional space/pages as needed).**

- a. **Project Title:** Lower Hound Creek Restoration – Phase I
- b. **Purpose of Project:**  
 In September 2024, as part of the Smith River basin-wide assessment and at the request of the McKamey Ranch landowner, the assessment team visited then drone-surveyed this property along Hound Creek to look at concerns regarding stream erosion into hay fields. Conceptual restoration projects were identified for three sites on the McKamey Ranch that would address landowner concerns and provide natural resource benefits.  
 Restoration actions identified for Hound Creek in the Smith River Assessment include:
  - grazing management, including development of off-site water and alternatives to concentrated livestock use along the stream;
  - create riparian buffers and increase woody riparian vegetation cover;
  - floodplain reconnection and passive water storage projects;
  - nutrient management through reducing streambank erosion, increasing floodplain connectivity and floodplain wetland area, and reducing livestock overwintering on the stream and concentrated livestock use areas;
  - irrigation efficiency projects;
  - streambank restoration to reduce accelerated erosion and increase woody riparian vegetation cover;
  - channel restoration to improve habitat for Smith River spawning brown trout population; and
  - protect conservation populations of westslope cutthroat trout in Tyrell Creek and Hound Creek Reservoir.

Potential projects on Hound Creek were split into three phases. Phase 1 (this proposal; shown in pink in Concept Overview, attached): Hound Creek Realignment and Floodplain Reconnection; Phase 2: Hound Creek/Smith River Floodplain Reconnection; and, Phase 3: Hound Creek Aquatic Habitat and Floodplain Enhancement.

- Restoration objectives for Phase 1 include:
- reduce accelerated lateral erosion into hayfield and fine sediment inputs to Hound Creek;
  - increase floodplain connectivity;
  - restore woody riparian vegetation;
  - increase spawning habitat; and
  - restore aquatic habitat diversity.

**b. Project Description:**

Phase 1 of the Lower Hound Creek Restoration Project includes realigning Hound Creek away from an actively eroding bank encroaching on a hayfield, increasing floodplain connectivity, improving aquatic habitat diversity, and expanding woody riparian and wetland vegetation. The streambank is approximately 6 to 8 feet in height (see Figure 20) and is dominated by introduced pasture grasses such as smooth brome. The streambank has eroded approximately 70 feet since 2005 at this location, resulting in approximately 9,000 cubic yards of entrained soil and fine sediment to Hound Creek. As lateral erosion has occurred, new floodplain surfaces have deposited, creating surfaces for willows and cottonwoods to colonize (Figure 21). The low elevation of these floodplain surfaces creates an area where a new channel can be constructed with a much larger connected floodplain area, gravel available to mobilize and support spawning habitat development, and more diverse aquatic habitat.

Restoration treatments to achieve Phase 1 restoration objectives are as follows:

- relocate Hound Creek away from a long, actively eroding streambank that removes hayfield area each year;
- construct new channel that is deeper and narrower than upstream and downstream reaches to enhance aquatic habitat and promote spawning gravel sorting;
- construct connected floodplain along relocated channel with low surfaces to support natural colonization of cottonwood and willow while preserving areas of existing colonizing woody vegetation;
- install streambank structures, including large wood habitat structures with rootwads and wood, and wood and willow streambank treatments to increase woody riparian vegetation cover, provide overhanging cover, and increase overall channel resiliency; and
- lay back vertical eroding bank and place material in abandoned channel to create connected floodplain that can support riparian and wetland vegetation and provide energy relief for high flows.

The information in this proposal is from the Lower Hound Creek Restoration Feasibility Assessment memo created by Geum Environmental Consulting. Full memo is available upon request.

**d. Describe how this project supports the objectives of the MTAFS as listed in the Chapter Bylaws.**

From the AFS Constitution: promote the conservation, development, and wise use of fisheries.  
From the MTAFS Bylaws, objective B: informing members of activities that threaten fishery resource.

This proposal informs the MTAFS membership about habitat degradation on Hound Creek and this project will take steps to begin mediating that degradation and improving habitat. By addressing this degradation, this project promotes the conservation and development of the Hound Creek / Smith River fishery.

**e. Describe how you have (or will) coordinated this work with all applicable local, state, or federal agency personnel, including the procurement of all necessary licenses and permits.**

This project is being coordinated by Amy Sacry at Geum Consulting, Jason Mullen at FWP, and Tenlee Atchison at High Plains Conservation District. This team has extensive experience with stream restoration, including procurement of necessary licenses and permits. This team includes local and state agency representatives and they will work closely with federal agencies, such as the Army Corps of Engineers, and any others required for project approval and/or permits.

**f. Project Start and Completion**

Dates 2/28/2026 / 10/31/2026

Construction will begin as soon as funds are fully acquired and will take just a couple months. If it takes longer to fund construction, this timeline will be pushed out longer to accommodate that.

- g. Does this project have the support of an appropriate MTAFS Committee?**    X            Yes            No  
**If so, which Committee?**            Resource Management Concerns Committee

**III. PROJECT BUDGET**

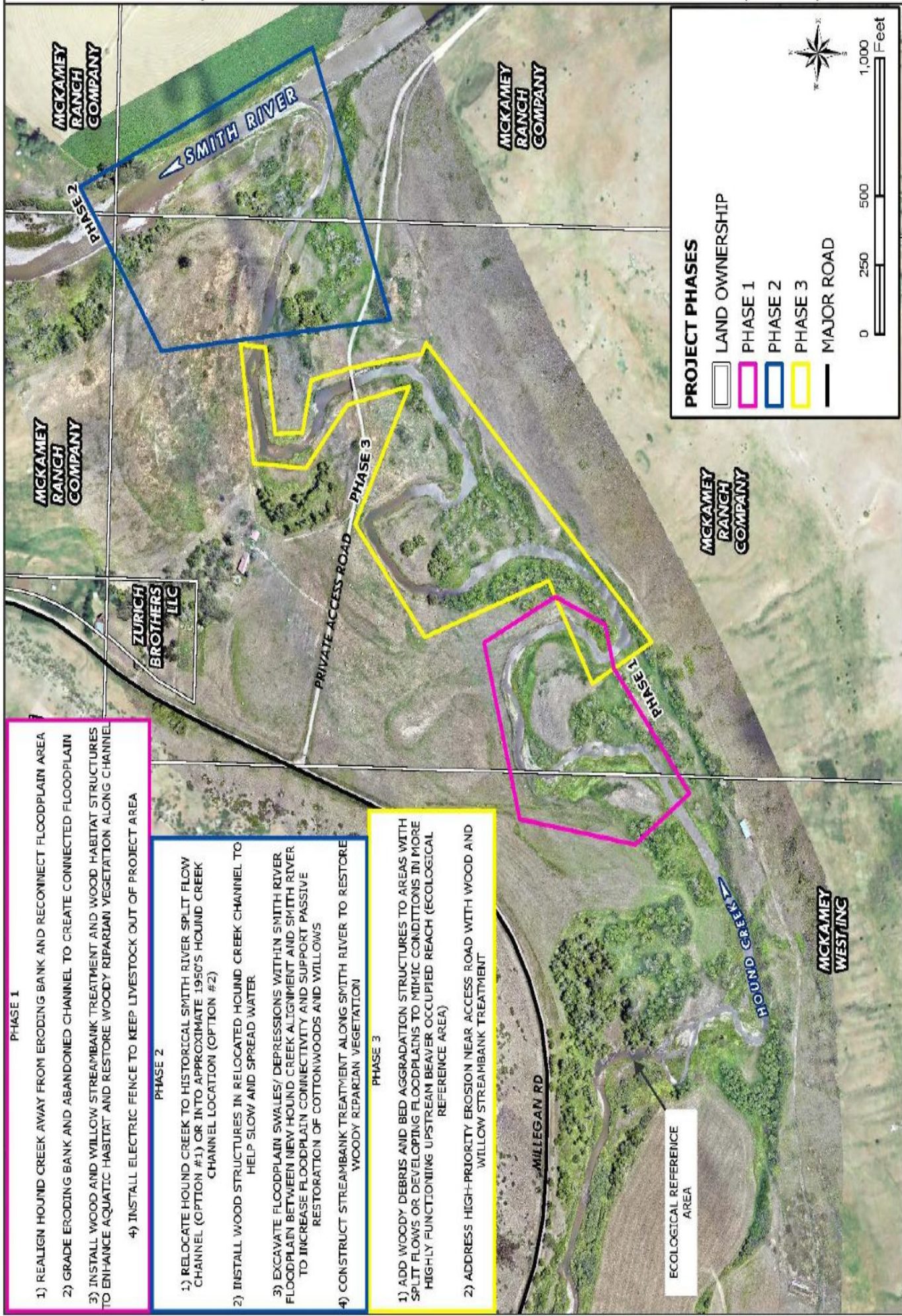
- a. **Total Estimated Project Cost**      \$203,500 (design portion \$30,000)
- b. **RAF Grant Request**                      \$10,000 (lesser amount would help, if full funding isn't available)
- c. **Total Actual and Requested Contributions from Other Sources**      \_\_\_\_\_  
*Please provide a list of other organizations and partners that you have received money from or solicited for additional funds. Provide funding or grant request amounts and clearly state whether you have received the funds (firm funds) or whether your grant application/funding request is outstanding (pending funds).*

CONTRIBUTOR	Status	TOTAL
Montana Trout Unlimited	Committed	\$10,000
American Rivers	Committed	\$20,000
MCAFS RAF	This request	\$10,000
Misc other (Northwestern Energy, DEQ 319 funds)	Will be requested this spring	\$163,500
<b>Total</b>		<b>\$203,500</b>

**IV. PROJECT BENEFITS (use additional space/pages as needed)**

- a. **Do you expect this project to have direct or indirect benefits for a Montana fish Species of Special Concern (see <http://mtnhp.org/SpeciesOfConcern>)? If so, describe which species and how they would benefit.**  
 No expected impacts to Montana fish Species of Special Concern.
- b. **Do you expect this project to have direct or indirect benefits to any other native species not listed as a species of concern above? If so, describe which species, and how they would benefit.**  
 This project is expected to improve fish habitat, water quality, and water quantity which would directly benefit several native Montana fish species including mountain whitefish (*Prosopium williamsoni*), white sucker (*Catostomus commersonii*), longnose sucker (*Catostomus catostomus*), plains sucker (*Pantosteus jordani*), longnose dace (*Rhinichthys cataractae*), Rocky Mountain sculpin (*Cottus bondi*), and stonecat (*Noturus flavus*).
- c. **Describe the short and/or long-term benefits of this project to the fisheries resource.**  
 This project is expected to improve trout spawning habitat by reducing sediment input to the stream through bank restoration, narrowing the stream channel to increase flow velocity and expose spawning gravels, and creating a more natural stream profile to reduce temperature extremes. A restored stream section would also make trout spawning migration movements through the section easier by providing more refugia from predation. Improvements to water quality and habitat are also expected to increase the presence of forage species.





**PHASE 1**

- 1) REALIGN HOUND CREEK AWAY FROM ERODING BANK AND RECONNECT FLOODPLAIN AREA
- 2) GRADE ERODING BANK AND ABANDONED CHANNEL TO CREATE CONNECTED FLOODPLAIN
- 3) INSTALL WOOD AND WILLOW STREAMBANK TREATMENT AND WOOD HABITAT STRUCTURES TO ENHANCE AQUATIC HABITAT AND RESTORE WOODY RIPARIAN VEGETATION ALONG CHANNEL
- 4) INSTALL ELECTRIC FENCE TO KEEP LIVESTOCK OUT OF PROJECT AREA

**PHASE 2**

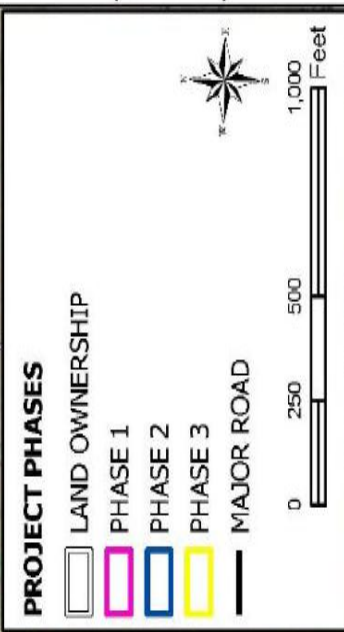
- 1) RELOCATE HOUND CREEK TO HISTORICAL SMITH RIVER SPLIT FLOW CHANNEL (OPTION #1) OR INTO APPROXIMATE 1950'S HOUND CREEK CHANNEL LOCATION (OPTION #2)
- 2) INSTALL WOOD STRUCTURES IN RELOCATED HOUND CREEK CHANNEL TO HELP SLOW AND SPREAD WATER
- 3) EXCAVATE FLOODPLAIN SWALES/ DEPRESSIONS WITHIN SMITH RIVER FLOODPLAIN BETWEEN NEW HOUND CREEK ALIGNMENT AND SMITH RIVER TO INCREASE FLOODPLAIN CONNECTIVITY AND SUPPORT PASSIVE RESTORATION OF COTTONWOODS AND WILLOWS
- 4) CONSTRUCT STREAMBANK TREATMENT ALONG SMITH RIVER TO RESTORE WOODY RIPARIAN VEGETATION

**PHASE 3**

- 1) ADD WOODY DEBRIS AND BED AGGRADATION STRUCTURES TO AREAS WITH SPLIT FLOWS OR DEVELOPING FLOODPLAINS TO MIMIC CONDITIONS IN MORE HIGHLY FUNCTIONING UPSTREAM BEAVER OCCUPIED REACH (ECOLOGICAL REFERENCE AREA)
- 2) ADDRESS HIGH-PRIORITY EROSION NEAR ACCESS ROAD WITH WOOD AND WILLOW STREAMBANK TREATMENT

**PROJECT PHASES**

- LAND OWNERSHIP
- PHASE 1
- PHASE 2
- PHASE 3
- MAJOR ROAD

0 250 500 1,000 Feet  




Above: eroding stream bank in Phase 1 project area

Below: new floodplain surface developing across from Phase 1 eroding bank. This low surface increases feasibility of moving the channel away from its current location and into an area with larger connected floodplain surfaces.

