



319 Nonpoint Source Final Application

FY2017 Final Applications are due Monday, September 26, 2016 by 2:00 pm

Section I: General Information

Project Title Middle & Upper Blackfoot Stream Restoration

Project Sponsor Information

Sponsor Name Blackfoot Challenge

Registered with the Secretary of State? Yes

Registered with SAM? Yes

County Powell

Website www.blackfootchallenge.org

Tax Identification # 81-0488863

DUNS # 090160578

Primary Contact Jennifer Schoonen

Signatory Gary Burnett

Title Blackfoot Water Steward

Title Executive Director

Address PO Box 103

Address PO Box 103

City Ovando State Montana Zip Code 59854

City Ovando State Montana Zip Code 59854

Phone Number 407-793-3900

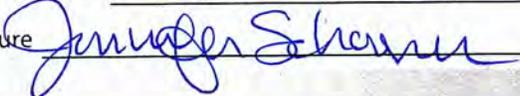
Phone Number 406-793-3900

Fax Number _____

Fax Number _____

E-mail Address jennifer@blackfootchallenge.org

E-mail Address gary@blackfootchallenge.org

Signature 

Signature 

Project Location

12 Digit HUC #(s) 170102030407; 170102030302; 170102030412

(1) Waterbody Name from 2016 List of Impaired Waters Nevada Creek

(1) Probable cause(s) of impairment to be addressed (ex. metals) Sediment, Nutrients

(2) Waterbody Name from 2016 List of Impaired Waters Poorman Creek

(2) Probable cause(s) of impairment to be addressed (ex. metals) Sediment, Metals

(3) Waterbody Name from 2016 List of Impaired Waters Chimney Creek (tributary to Douglas Creek)

(3) Probable cause(s) of impairment to be addressed (ex. metals) Sediment (in Douglas)

Activity 1 Name Nevada Creek Stream Restoration Latitude (1) 46.482476 Longitude (1) -112.492661

Activity 2 Name Poorman Creek Stream Restoration Latitude (2) 46.523720 Longitude (2) -112.350200

Activity 3 Name Chimney Creek Stream Restoration Latitude (3) 46.7378444 Longitude (3) -112.9892028

Nonpoint Source (NPS) Information

Which WRP does the project implement? Blackfoot WRP What is the WRP status? DEQ-Accepted

Does the project address impairments identified in a TMDL? Yes Waterbody Type River/Stream

Functional Category Erosion Control Projects

1st Pollution Category Hydromodification (Streambank or Shoreline Modification/Destabilization) Percent of Total (%) 30

2nd Pollution Category Resource Extraction (Placer Mining) Percent of Total (%) 30

3rd Pollution Category Agriculture (Grazing Related Sources) Percent of Total (%) 30

4th Pollution Category Hydromodification (Removal of Riparian Vegetation) Percent of Total (%) 10

Project Funding

319 Funds Requested

Does the project sponsor have any open 319 contracts?

Matching Funds

Project Title _____

State Cash Match

DEQ Contract Number _____

Local Cash Match

319 Award _____

In-Kind Match

Projected Closing Date _____

Total Match

Project Title _____

Other Federal Funds

DEQ Contract Number _____

Total Project Budget

319 Award _____

Administrative Fee

Projected Closing Date _____

Section II: Project Description

Goal and Objectives: Describe the overall goal and specific objectives for this project.

The goal of this project is to address water quality impairments -- primarily sediment -- on three Blackfoot streams through in-stream and riparian zone restoration projects. The objectives on Nevada Creek are to reduce streambank erosion, restore floodplain connectivity, improve habitat for native fish, and restore woody vegetation in the riparian corridor. The Poorman Creek restoration project aims to remove historic mine tailings, restore floodplain connectivity, and increase habitat complexity for native westslope cutthroat trout and bull trout. The objective of the passive restoration on Chimney Creek is to trap sediment, enhance riparian regrowth, and increase late season flows. All three projects will be supported by pre- and post-project monitoring and community outreach and education.

Methods: Describe the approach selected to address/correct the problem(s), e.g. types of BMPs to be installed, and other important activities.

On Nevada Creek, streambank stability will be improved by installing native materials of small toe-wood, transplants, and willow cuttings on the 3,700-foot restoration reach. Proper channel dimensions, profile and pattern will be restored and sinuosity will be increased where feasible through the use of finger bars. The Blackfoot land steward will design a grazing management plan for the project reach, and fencing will be used to protect riparian areas. The Poorman Creek project will remove historic placer mine tailings from 1,200 feet of streambank. The project will use natural channel design principles to restore floodplain connectivity. Revegetation techniques will set the stage for natural recruitment of riparian vegetation including using swales, slash, seeding, and site-adapted plants. Instream complexity will be restored using wood treatments emulating reference reach step-pool structures and an undersized stream crossing will be upgraded following stream simulation principles. Beaver dam mimicry structures will be installed on Chimney Creek, with fencing used to protect the project area from livestock grazing.

Summary: Provide a brief summary of the project.

The Big Blackfoot Chapter of Trout Unlimited, Blackfoot Challenge, state and federal partners, and private landowners are proposing to work together in the Middle & Upper Blackfoot Watershed to improve water quality through a series of complementary and connected projects that support goals within the Blackfoot Subbasin Plan and Blackfoot Watershed Restoration Plan. The proposed work includes:

- * Restoration of 3,700 feet of Nevada Creek, expanding upon a recently completed 4,400-foot restoration project. The project will address significant sediment inputs by restoring streambank stability and riparian vegetation. Partners will also work with the landowner on a grazing management plan.
- * Restoration of 1,200 feet of Poorman Creek, which has been heavily disturbed by historic placer mining. The project will restore floodplain connectivity, instream habitat complexity, and a functioning riparian area.
- * Passive restoration through beaver mimicry along a 1,000-foot stretch of Chimney Creek (a tributary of Douglas Creek) working with a local homeowners association. Grazing management will also be a component of project implementation.
- * Pre- and post-project monitoring of water quality in each project stream.
- * Community education and outreach regarding water quality, including public tours, educational materials, media outreach and student field days.

Section III: Background Information

Statement of Project Need and Intent

For more than 20 years, the Blackfoot Challenge and Big Blackfoot Chapter of Trout Unlimited have worked with Blackfoot communities to restore and steward the watershed. These projects build upon those efforts by bringing together water quality, water quantity and fisheries habitat priorities. The proposed projects fulfill the prioritization strategy of the Blackfoot Watershed Restoration plan by: addressing multiple TMDLs, improving high-priority fish habitat, involving multiple public and private partners, working in areas of imminent threat to water quality and aquatic habitat, and working with willing landowners. Montana Fish, Wildlife and Parks has identified the Nevada Creek watershed as increasingly productive native fish habitat, thanks to conservation and restoration work over the last decade. Both the Nevada Creek and Chimney Creek projects will support that improving fishery. The Poorman Creek project addresses critical habitat for threatened bull trout while dealing with the Blackfoot's legacy of stream impacts from placer mining. These restoration strategies, as well as associated BMPs for grazing, are specifically recommended in the Blackfoot WRP (p.13-19). These projects also provide new opportunities to educate communities about water quality and encourage new projects and partnerships.

Describe the pre-project planning that has already occurred.

Both projects are now in the design stage, with project design documents expected by November 2016. Project walkthroughs were completed in 2015 to identify project goals and objectives among partners. Request for Design Proposals were sent to several consulting firms in the spring of 2016. River Design Group was selected to design the Nevada Creek project, and Restoration Engineering was selected for Poorman Creek. Pre-project data has been collected and analyzed, including LiDAR data sets, channel bathymetry, and an inventory of existing streambank stability conditions using a Bank Erosion Hazard Index and field mapping. Wetland delineation and riparian assessments have also been completed. Montana Fish, Wildlife and Parks, who will be involved with issuing the 310 permit on Nevada Creek and 124 permit on Poorman, supports both projects. A pre-application walk-through is planned with the Army Corps of Engineers this fall. BBCTU has also already discussed terms of the landowner agreement with the Nevada Creek landowner. This spring, Challenge staff visited the Chimney Creek site with members of the area homeowners association and with staff from Great West Engineering. Great West has provided initial project plans and budget for the restoration work.

Collaborative Effort: Describe the collaborative effort you have engaged in to ensure support from all appropriate partners.

Together, the Blackfoot Challenge and BBCTU coordinate a watershed-wide partners restoration group that meets regularly throughout the year. This proposed work has been discussed with that group, followed by several smaller meetings among the partners involved – including on-site tours of the project areas. Based on those meetings and coordination, all of the partners listed below are fully on board. In addition, the private landowners involved have been in contact with the project implementation partners for many months and are anxious to see this work proceed. The Boards of both BBCTU and the Challenge, whose members represent diverse community and partner organization interests, are in full support of this proposal.

Partners and Roles: Identify the project partners and their roles.

Partner	Role
Blackfoot Challenge	The BC will manage the overall 319 contract, lead project planning and implementation for the Chimney Creek project, help coordinate monitoring, and conduct outreach and education with local communities related to these projects and overall water quality in the Blackfoot.
Big Blackfoot Chapter of Trout Unlimited	BBCTU will lead project planning, implementation and monitoring for the Nevada Creek and Poorman Creek restoration projects. They will also facilitate landowner meetings, help coordinate volunteers and raise matching funds.
Montana Fish, Wildlife & Parks	MT FWP will do project design review, assist with project oversight, and establish relevant permit conditions. They will also lead the monitoring of fisheries response.
US Fish & Wildlife Service	The USFWS will provide financial support and technical review for the Nevada Creek and Poorman Creek projects.
U.S. Forest Service	For the Poorman Project, the USFS fisheries biologist will do project design review, assist with project oversight, obtain permits and facilitate NEPA analysis.

Technical and Administrative Qualifications

The Blackfoot Challenge and Big Blackfoot Chapter of Trout Unlimited have each been developing public-private partnerships for more than 20 years in the Blackfoot Watershed. The Challenge's water program has been coordinated by Jennifer Schoonen for the last three years. She has managed conservation, fundraising and outreach programs for conservation nonprofits for more than 20 years. Her experience at the Challenge includes managing the Blackfoot Drought Committee, irrigation efficiency program and watershed education for local schools and the general public. She is also the author of the Blackfoot Watershed Restoration Plan. With 15 years of experience working in the Blackfoot Watershed, Ryen Neudecker leads BBCTU, where she has implemented stream restoration projects to improve more than 100 miles of instream habitat and 88 miles of riparian habitat. Ryen has completed the series of classes on river restoration under Wildland Hydrology. Both Ryen and Jennifer have many years of experience managing grants and contracts in support of conservation projects, including working together on a 319 grant that was completed in 2014. Land stewardship and grazing management plans will be developed by Blackfoot Challenge Land Steward Brad Weltzien. Brad began working in the Blackfoot in 1995 with the North Powell Conservation District. For the last several years, he has assisted Blackfoot landowners with resource assessments and inventories, conservation project planning, and EQIP and CSP contracts. He works closely with partner groups and agencies, lending his technical expertise related to grazing, forestry and land management to BBCTU, USFWS and the NRCS in particular.

Past and Current Projects

Funding Organization	Award Amount	Project Description	Project Status	Contact Information
Bureau of Reclamation	\$52,488.00	For community coordination and education related to drought response and TMDLs	To be complete by Sept. 30, 2016	Richard Cornett US Bureau of Reclamation rcornett@usbr.gov
Wildlife Conservation Society (Doris Duke Charitable Foundation) Climate Change Adaptation Program	\$47950.00	For drought response coordination in the Blackfoot and drought response education in the Upper Clark Fork; for irrigation water management and irrigation efficiency programs in the Blackfoot	To be complete by Nov. 1, 2016	Anne Carlson The Wilderness Society anne_carlson@tws.com 406-548-7964
Montana DNRC Watershed Management Grants	\$10,000.00	To update and improve drought coordination process and to develop a soil health program of work.	60% complete; to be complete 12/31/16	Lyndsay Volpe MT DNRC lvolpe@mt.gov 406-444-9766
Montana DEQ 319 program	121,320	To restore segments of Ashby Creek, South Fork Poorman Creek and Cottonwood Creek; to complete Blackfoot WRP; and to conduct associated monitoring, outreach and education.	Completed in December 2014	Katie Eiring Steele MT DEQ 406-444-0549 ksteel2@mt.gov
Coca Cola Foundation	\$58000.00	To expand irrigation efficiency program and drought planning work with private landowners.	Completed in January 2014.	Carlos Pagoaga Coca Cola Community Affairs cpagoaga@coca-cola.com 404-676-4877

Section IV: Scope of Work

Task 1 Title Nevada Creek Stream Restoration Phase II

Description

Nevada Creek is a large third-order tributary to the middle Blackfoot River and supports populations of westslope cutthroat trout, rainbow trout, brown trout and many other fish species. Nevada Creek is also listed on the total maximum daily load (TMDL) 303(d) list for nutrients, siltation, suspended solids and thermal modifications. In 2010, a 4,400 foot stretch of channel downstream of the Nevada Creek reservoir that suffered from eroding banks, lacked instream complexity and was deficient of riparian vegetation was restored. With this proposed phase 2 project, we will continue focus on reducing sources of sediment loading while setting the stage for recovery of riparian areas and aquatic habitat. With 3,700 additional feet of restoration, this project will build on phase 1, improving habitat for a rebounding trout population. The project will minimize streambed treatments; utilize native material for channel shaping; incorporate vegetated wood and brush fascine matrices and limit use of large wood, rock and vegetated soil lifts; increase sinuosity through finger bars, alcoves and backwater bays; identify opportunities to establish proper channel dimensions; investigate opportunities to expand the floodplain by lowering high banks to create surfaces that will support emergent and scrub-shrub wetlands. A grazing management plan also will be established.

Deliverables

1. Project design provided to Montana DEQ for review and approval.
2. Copies of all required project permits.
3. Copies of landowner, management and partnership agreements.
4. Restoration of 3,700 feet of channel along Nevada Creek.
5. Grazing management plan with private landowner.
6. A written project report that includes photos and a summary of restoration activities.

Task 1 Funding

319 Funds	\$74,000.00
Non-Federal Match	\$90,000.00
Other Federal Funds	\$20,000.00
Total Cost	\$184,000.00
Is Match Secured?	No

Timeline July-November 2017

Match Source MTFWP, Private Landowner, BBCTU, USFWS

Task 2 Title Chimney Creek Beaver Mimicry Restoration Project

Description

Chimney Creek is a tributary to Douglas Creek, which is a TMDL-listed stream for sediment, nutrients and temperature. The Garnet Mountain Homeowners Association owns a 60-acre area bordering the stream channel that was historically inhabited by beavers. Homeowners have seen changes in the stream as the beavers were trapped out in the last decade, including the loss of meanders and ponds along the channel. They are interested in restoring historic conditions and are working with the Blackfoot Challenge to implement a passive restoration project through beaver mimicry. Small natural post and branch structures will be installed in-stream to restore historic beaver ponds, benefit natural water storage to enhance drought resiliency, and enhance riparian areas. These structures would also trap sediment and slow run-off. The homeowners currently generate income through grazing leases, which they would like to continue. Therefore, the Blackfoot Challenge land steward will develop a grazing management and fencing will be employed to protect riparian vegetation and the restored stream area. In addition, the homeowners are pursuing deed restrictions to ensure long-term protection of shared park property bordering Chimney Creek.

Deliverables

1. Project design submitted to DEQ for review.
2. Copies of all required permits.
3. Copies of landowner, management, & partnership agreements.
4. Installation of BDA structures along 2,000 feet of Chimney Creek.
5. Fencing to protect project and plants from livestock & wildlife.
6. Grazing management plan for lessees of Homeowners Association.
7. A written project report that will include photos and summary of project activities.

Task 2 Funding

319 Funds	\$4,250.00
Non-Federal Match	\$4,750.00
Other Federal Funds	
Total Cost	\$9,000.00
Is Match Secured?	No

Timeline July - September 2017

Match Source Garnet Mtn Homeowners, Volunteers, Blackfoot Challenge

Task 3 Title Poorman Creek Restoration Project

Description

Poorman Creek flows 14 miles through USFS and private land and supports populations of pure westslope cutthroat trout and bull trout. Poorman Creek is also listed for sediment and metals. The 1,200-foot stream segment of Poorman Creek that is the focus of this project has a history of placer mining and sections are confined by tailings piles, lack floodplain connectivity, and lack a functioning riparian area. Instream habitat complexity is also very limited. This project will restore a heavily disturbed reach of Poorman Creek and ensure connectivity with a functioning floodplain following natural channel design principles. Specific objectives include: reestablish floodplain connectivity and function; promote natural recruitment of riparian vegetation; evaluate channel dimensions through impaired reaches; evaluate pool quality and quantity; calculate quantities of material impacting riparian and floodplain function for stockpile evaluation; improve existing instream and riparian habitat for native trout by emulating reference reach. Once tailings have been removed and floodplain connectivity reestablished, the floodplains will be restored using swales, slash, site-adapted plant material, and seeding. Wood treatments will be used to restore instream complexity, pool habitat and energy dissipation. An undersized stream crossing will also be upgraded.

Deliverables

1. Project design submitted to DEQ for review.
2. Copies of all required permits.
3. Copies of landowner, management, & partnership agreements.
4. Restoration of approximately 1,200 feet of placer-mine impacted stream.
5. A written project report that will include photos and summary of project activities.

Task 3 Funding

319 Funds	\$15,000.00
Non-Federal Match	\$50,000.00
Other Federal Funds	\$65,000.00
Total Cost	\$130,000.00
Is Match Secured?	Yes

Timeline July-November 2017

Match Source Lewis & Clark County, MTFWP, BBCTU, USFS

Task 4 Title Project Effectiveness Monitoring

Description

The Blackfoot Challenge and Big Blackfoot Chapter of Trout Unlimited will work in collaboration with the DEQ project manager to develop a plan and methods for evaluating, monitoring and reporting on the effectiveness of the proposed projects toward addressing water quality issues. The partners plan to collect and analyze water quality and aquatic habitat data to assess the long-term benefits of these projects on water quality. To support this monitoring, partners will develop a SAP, through which we will address the following:

- * Create SAP in accordance with most current guidance from the Water Quality Planning Bureau's Quality Assurance Program web page.
- * Submit all water quality data to DEQ using current upload process. We plan to follow guidance provided in DEQ's MT-eWQX guidance manual.
- * Partners will ensure that the SAP includes all necessary signature lines.

Monitoring will then follow the accepted SAP and partners will also write and submit a summary of all monitoring data and results. Should volunteers be engaged in monitoring, the Blackfoot Challenge will ensure they are properly trained. For the proposed restoration project elements, we plan to monitor sediment load reductions, as well as project sustainability through vegetation and photo-point monitoring. Outreach efforts will be tracked through numbers of individuals reached through tours, meetings, and mailings/email newsletters.

Deliverables

1. Sampling and Analysis Plans for each restoration project provided to DEQ for review and approval.
2. Monitoring reports for each restoration project. The reports will summarize data collection, analyze data, and assess results.
3. Photos of projects sites (before & after) and of tours / educational events.
4. All data collected uploaded to the MT-eWQX database.
5. Report on types and impacts of outreach and education, including numbers of individuals reached.
6. Sediment load reduction estimates.

Task 4 Funding

319 Funds	\$6,000.00
Non-Federal Match	\$3,500.00
Other Federal Funds	\$1,500.00
Total Cost	\$11,000.00
Is Match Secured?	Yes

Timeline Upon contract execution through July 2019

Match Source Blkft Challenge inkind, USFS, BBCTU, private foundations

Task 5 Title Watershed Outreach & Education

Description

The Blackfoot Challenge and Big Blackfoot Chapter of Trout Unlimited will host at least public meeting or tour to share project progress with community members. The benefits of these projects and information about Blackfoot water quality and fisheries habitat needs will also be promoted through each organization's web site, social media and electronic newsletters. In addition, the partners will host at least two field trips for local schools, working with students to measure stream flows, turbidity, and temperature, while also teaching them to assess riparian and in-stream habitat health.

Deliverables

1. Print and electronic outreach to community members to share project progress and results.
2. At least two school-based events to assess stream conditions and teach students about water quality and fish habitat.
3. Photos and written reports on each educational event.
4. Copies of community outreach (newsletters, blogs, tour announcements, etc.).

Task 5 Funding

319 Funds	<input type="text" value="\$800.00"/>
Non-Federal Match	<input type="text" value="\$800.00"/>
Other Federal Funds	<input type="text"/>
Total Cost	<input type="text" value="\$1,600.00"/>
Is Match Secured?	<input type="text" value="Yes"/>

Timeline July 2017 - June 2019

Match Source Blackfoot Challenge Education Program

Task 6 Title Landowner Agreements, Operation & Maintenance

Description

The Blackfoot Challenge and the Big Blackfoot Chapter of Trout Unlimited will establish landowner agreements to ensure the maintenance and monitoring of all on-the-ground projects. The partners will submit a copy of these agreements to DEQ for review and comment prior to signature, then will provide final signed agreements to DEQ. Partners will ensure that landowner agreements address who shall be responsible for operating and maintaining all structures, vegetation, management measures, and water quality benefits associated with the projects. The partners will also monitor and ensure this operation and maintenance for the life of the projects. During the project lifetime, partners will identify and ensure procedures are in place for project coordinators and DEQ to access the project site.

Deliverables

1. Draft landowner agreements for DEQ review.
2. Final landowner agreements.

Task 6 Funding

319 Funds	<input type="text" value="\$500.00"/>
Non-Federal Match	<input type="text" value="\$500.00"/>
Other Federal Funds	<input type="text"/>
Total Cost	<input type="text" value="\$1,000.00"/>
Is Match Secured?	<input type="text" value="Yes"/>

Timeline July 2017 - August 2017

Match Source BBCU & Blackfoot Challenge Operations

Task 7 Title Project Administration

Description

The Blackfoot Challenge will provide contract accounting, record keeping and administration for this group of projects, with support from the Big Blackfoot Chapter of Trout Unlimited, ensuring that all activities remain on time and within budget. Administrative duties will include preparing and submitting billing statements, providing status reports and annual reports, and fulfilling the final report requirements. Project staff will remain in regular contact with the DEQ project manager.
(Project administration request is for 10% of total grant budget.)

Deliverables

1. Quarterly status and financial reports submitted to DEQ.
2. Annual progress reports submitted to DEQ.
3. Final project report including all required attachments submitted to DEQ.

Task 7 Funding

319 Funds	<input type="text" value="\$10,055.00"/>
Non-Federal Match	<input type="text" value="\$7,500.00"/>
Other Federal Funds	<input type="text"/>
Total Cost	<input type="text" value="\$17,555.00"/>
Is Match Secured?	<input type="text" value="Yes"/>

Timeline July 2017-June 2019

Match Source Blackfoot Challenge operations; BBCTU operations

Task 8 Title _____

Description

Deliverables

Task 8 Funding

319 Funds	<input type="text"/>
Non-Federal Match	<input type="text"/>
Other Federal Funds	<input type="text"/>
Total Cost	<input type="text"/>
Is Match Secured?	<input type="text"/>

Timeline _____

Match Source _____

Project Milestone Table: Complete the following Project Milestone Table by entering task numbers and titles in the left hand column, then check the box(es) for the appropriate quarter(s) and years(s) in which you will be working on the task.

Milestone	Spring 2017	Summer 2017	Fall 2017	Winter 2017	Spring 2018	Summer 2018	Fall 2018	Winter 2018	Spring 2019	Summer 2019	Fall 2019
Task 1 -- Nevada Creek Restoration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Task 2 -- Chimney Creek Restoration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Task 3 -- Poorman Creek Restoration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Task 4 -- Monitoring	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Task 5 -- Outreach & Education	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Task 6 -- Operation & Maintenance (landowner agreements)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
Task 7 -- Contract Administration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Submit **project map(s)** and **letters of support (at least 3)** along with the Final Project Proposal form. If your organization is not the author of the WRP you hope to implement, you must request a letter of support from the original authoring entity. If the authoring entity refuses to provide a letter of support, use the additional space at the end of the application to describe their response. If design drawings are available, provide those as well. For on-the-ground work, include copies of applicable permits if available.

- Project Map
- Letters of Support
- Design Drawings
- Applicable Permits
- Draft of amended WRP (if applicable)
- Photos
- Landowner Agreements

Use the space provided for any additional information that may not have been captured elsewhere in this Final Project Proposal

1. This request has been reduced from the original pre-proposal as the partners have agreed to narrow down the number of proposed projects per DEQ's feedback.
2. The committee asked about ensuring the success of woody vegetation based on the previous Nevada Creek restoration. To compare the Phase 1 restoration area to the reach above the county road is misleading since management of those 2 segments has varied significantly. The reach above the road has been restricted from livestock grazing, while the private land below did not have any such exclusion until after the restoration project in 2010. Since then, a grazing management plan has been implemented which includes fencing and a water gap. Monitoring of the revegetation shows hundreds of young willows and other shrubs colonizing throughout the riparian area. Streambanks have healed and wetland acres of increased. Looking ahead to alter project strategies in Phase 2, we did identify that many of the Phase 1 willow cuttings were installed too low on the banks and drowned out the following year when flows exceeded bankfull conditions for nearly 60 days. For Phase 2, willow cuttings will be placed at a more appropriate elevation to ensure quicker response with woody vegetation.



**Montana Fish,
Wildlife & Parks**

Montana Fish, Wildlife & Parks
3201 Spurgin Road
Missoula, MT 59804

September 23, 2016

Montana Department of Environmental Quality
319 Non Point Source Funding Program
1520 E. 6th Ave
Helena, MT 59620

RE: Blackfoot River Watershed 319 Non Point Source Funding Request

Dear 319 Program Review Members:

This letter is written in support of the 319 grant application submitted by the Blackfoot Challenge and partners. The two streams (Poorman Creek and Nevada Creek) mentioned in this grant application support important fisheries and both are TMDL impaired. These important projects detailed within the application are also collaborative effort between many partners including private landowners, the Big Blackfoot Chapter of Trout Unlimited, Montana Fish, Wildlife & Parks (MTFWP), USFS, Blackfoot Challenge and the USFWS Partners for Fish and Wildlife Program.

The proposed projects will correct severe erosion problem on streams native trout, including westslope cutthroat trout and bull trout as well as sport fisheries. If funded, the work will complement numerous efforts in the Blackfoot Watershed during the past 29 years and this watershed wide, community-based conservation and restoration effort.

Montana Fish, Wildlife and Parks has been involved with guiding the restoration effort in the Blackfoot since its inception and we support these projects in that they will address sediment and other aquatic impairment impacting native trout populations. Furthermore both projects plan to employ restoration methods consistent with natural channel design.

I encourage your strong consideration of this proposal and please don't hesitate to contact me if you have questions or need additional information.

Thank you for your consideration.

Ron Pierce
Fisheries Biologist
542-5532
rpierce@mt.gov



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Montana Partners for Fish & Wildlife
POB 66
Ovando, MT 59854
September 21, 2016

Montana Department of Environmental Quality
319 Non Point Source Funding Program
1520 E. 6th Ave
Helena, MT 59620

RE: Blackfoot River Watershed 319 Non Point Source Funding Request

Dear 319 Program Review Members:

This letter is written in support of the 319 grant application submitted by the Blackfoot Challenge and partners. The projects detailed within the application are a collaborative effort between many partners including private landowners, BBCTU, Montana Fish, Wildlife & Parks (MTFWP), USFS, Blackfoot Challenge and the USFWS Partners for Fish and Wildlife Program.

The proposed projects will complement the many efforts in the Blackfoot Watershed over the past 29 years and this watershed wide, community based conservation and restoration effort has resulted in population increases of almost 800% for westslope cutthroat and bull trout in comparison to baseline numbers, the strongest indicator we have for the health of our watershed.

The Partners for Fish and Wildlife has a long history of working with private landowners and other partners collaborating to restore the cold water fishery of the important tributaries feeding the Blackfoot River. We support the proposed projects in that we will be able to continue our efforts of restoring native trout by addressing limiting factors within the watershed by working with committed landowners.

I encourage your strong consideration of this proposal and please don't hesitate to contact me if you have questions or need additional information.

Thanks for your consideration.

Sincerely,

Greg Neudecker, State Coordinator

Garnet Mountains Property Owners Association



PO Box 122
Helmville, MT 59843
<http://gmpoa.net>
board@gmpoa.net

September 25, 2016

Ms. Jennifer Schoonen
Water Steward
Blackfoot Challenge
Ovando, MT

Dear Jennifer,

The Garnet Mountains Homeowners Association is ready to proceed with the restoration of beaver ponds along Chimney Creek as it passes through our 9000-acre tract. The former owner, Marvin Brown of Billings, has donated the "park" along the creek and its tributaries to the homeowners association. We are excited and hope to begin the construction of dams next spring or summer.

Thank you so much for your guidance and assistance as we begin to engage in this project.

Sincerely,

Virginia Causey, Board Member
Garnet Mountains Homeowners Association



Date: September 23, 2016

Mr. Robert Ray and the 319 Agency Review Panel
Montana Department of Environmental Quality
Nonpoint Source Program
P.O. Box 200901
1520 6th Avenue
Helena, Montana 59620-0901

Dear Mr. Ray and Panel Review Members,

RE: Poorman Creek Placer Restoration Project 319 Proposal

The Helena National Forest has been working with The Big Blackfoot Chapter of Trout Unlimited and Montana Fish, Wildlife and Parks in a comprehensive effort to improve native fish habitat, correct connectivity issues, and reduce anthropomorphic sediment delivery to streams and rivers in the upper Blackfoot drainage. One of the current projects that I would like to offer support for that we are working with our partners above as well as Lewis and Clark County and DNRC is a project approximately 1,000 feet in length on Poorman Creek. Restoration on this reach of Poorman Creek and the adjacent floodplain and riparian area focuses on a reach severely impaired from placer mining operations. The large piles of placer rock that incise the stream channel would be moved to a repository off the floodplain, in-channel, riparian habitat and floodplain function would be restored or enhanced, and large woody debris is proposed to be added to the area. The goal is to provide for a dynamically stable stream channel configuration in the project area. This reach is particularly important in that it represents a stronghold in Poorman for native bull and westslope cutthroat trout.

As mentioned above, habitat conditions would be improved by the project using large woody debris made available from the removal and recontouring of placer piles would be incorporated into instream habitat used to enhance a key bull trout habitat component. Placement of log complexes simulating those in nearby reference reaches would create complex habitat, increase pool habitat and natural channel dynamics. Additionally the creation of a floodplain through removal of placer waste rock, currently nonexistent in places, will benefit the drainage's hydrology, downstream landowners, and the transportation system in the area.

We also plan to address all impairments in the project area including an undersized culverts acting as a barrier for fish passage. Substantial work on a major tributary partnering with BBCTU has been completed in the South Fork Poorman drainage that removed the road from the riparian area, which eliminated fords and major sediment sources. Other on-going and planned work in the area that compliment this project includes obtaining instream water reservations on tributaries of Poorman as well as Poorman Creek itself and the Helena-Lewis and Clark Forest has placed the Poorman Creek drainage on the priority list for decommissioning and storage of roads identified through Travel Planning. These efforts combined with this proposed project address the most significant sources of nonpoint source pollution within the Poorman Creek watershed as identified in the 2004 Blackfoot Headwaters Planning Area Water Quality and Habitat Restoration Plan and TMDL for Sediment, including flow and habitat alterations, riparian degradation, siltation, in-stream flows, removal of fish passage barriers and the restoration of placer mined reaches of the stream in a cost effective manner.



Thank you for your consideration and support of this proposed project that will help increase the quality, quantity, and security of habitat available to native fish and will help towards removing Poorman Creek from the Impaired Waters List. If you have questions about the elements of this project that benefits resources in the Blackfoot River drainage, please contact Ryen Neudecker of BBCTU at 406.240.4824, Dave Callery, Forest Hydrologist at 406.495.3710 or myself at 406.362.4034.

Sincerely,



GEORGE LIKNES
Aquatic Program Leader
Helena – Lewis and Clark National Forest

cc: Ryen. Neudecker, Big Blackfoot Chapter Trout Unlimited

-----Original Message-----

From: hlm5761 [<mailto:hlm5761@blackfoot.net>]

Sent: Monday, September 26, 2016 10:30 AM

To: Ryen Neudecker

Subject: Re: Support for the Nevada Creek project

Wade and Diana Stitt are greatly appreciative of all efforts involved in the Nevada Creek Restoration project. We support the restoration of Nevada Creek on our property in S10, T12 N, R10 W.

On 2016-09-23 07:27, Ryen Neudecker wrote:

> Hi Wade & Diana-

>

> Thanks for working with us on restoring Nevada Creek. We are looking
> forward to completing phase 2 and appreciate all the time you have
> spent with us already developing that project. As I mentioned, a
> potential funding source is requesting a letter stating that the
> landowner is supportive of restoring Nevada Creek so if you could
> reply back verifying your interest, that would be appreciated.

>

> Thanks again! Always great to work with you.

>

> Sincerely,

>

> Ryen

>

> Ryen Neudecker

> Big Blackfoot Chapter of Trout Unlimited

> 406.240.4824

> <http://bbctu.org>

> ryen@montanatu.org

2017 NEVADA CREEK RESTORATION PROJECT

PROPOSED GRAZING MANAGEMENT PLAN

A detailed grazing management plan will be developed with the landowner that meet the overall goals of the project including water quality, bank stability, fish habitat, and agricultural production. Resource concerns associated with livestock will be addressed through a variety of facilitating practices such as a riparian buffer, exclusion fence, and alternative stockwater system. Phase I of the plan will include complete grazing exclusion to allow riparian vegetation to establish and streambanks to stabilize (~10 yrs). Phase II of the plan would allow for periodic, short-duration grazing to manage noxious weeds and maintain plant vigor. Phase II requires consultation with all partners to clarify project objectives, grazing triggers, and desired conditions. The grazing plan will focus primarily on the riparian corridor, however partners will strive to work with the landowner on grazing management alternatives in the uplands.

GRAZING OBJECTIVES

Implement a sustainable grazing management plan to maintain and enhance riparian functions on Nevada Creek including water quality, fish habitat, channel stability and temperature.

- *Provide alternative water sources and utilize fencing to minimize livestock dependence/access to the stream channel.*
- *Manage for the establishment of shrubs along the streambanks to increase summer shade, winter thermal cover, habitat, and channel stability, as well as provide a wind break for adjacent pastures.*
- *Manage for dense vegetation within the riparian corridor to filter nutrients and sediment from the uplands before entering the stream.*
- *Exclude livestock from the stream corridor until shrubs establish and banks stabilize.*
- *Maintain or decrease the width/depth ratio of the restored stream channel over time.*

APPENDIX A
NEVADA CREEK - GRAZING MANAGEMENT PLAN

Landowner:	Wade Stitt	Date:	October 1, 2010
Partners:	Big Blackfoot Chapter of Trout Unlimited (BBCTU) Blackfoot Challenge (BC) US Fish and Wildlife Service (USFWS) Montana Fish, Wildlife and Parks (MTFWP) Montana Department of Environmental Quality (DEQ) North Powell Conservation District (NPCD)	Assisted by:	Brad Weltzien

INTRODUCTION:

This plan is Appendix A to the overall agreement between the Landowner and BBCTU dated **September 15, 2010**. The overall project is based on the improvement of fisheries values and water quality on about 4,400 feet of stream channel, while maintaining agricultural production on the property. This grazing plan outlines the facilitating practices and management actions necessary to achieve the overall project objectives within the riparian corridor. *The Landowner is strongly encouraged to work with partners on a property-wide grazing management plan in the future.*

BACKGROUND:

Due to the historic loss of riparian shrubs, the stream banks were extremely unstable resulting in significant annual soil loss, an over-widened stream channel, reduced fish habitat, elevated stream temperatures, and a disconnect between the stream and floodplain. The overall project is designed to address each of these elements. In the past, Nevada Creek was located within one grazing unit. Approximately, 60 animal units grazed the field up to three times per year from spring to fall. Primary water sources were Nevada Creek and open irrigation ditches. Presently, the Landowner grazes about 50-60 pairs annually. The alfalfa field to the north of the stream is grazed in the fall after haying, while the small fields adjacent to Braziel Creek are used for calving and feeding during the winter. In order to achieve project objectives, the Landowner has agreed to exclude the stream project reach for the life of the project. *It is the hope of Partners that the Landowner will continue to maintain this narrow riparian corridor beyond the life of the agreement, however that will be the decision of the landowner at that time.*

PROJECT OBJECTIVES:

Implement a sustainable grazing management plan to enhance and maintain riparian functions on Nevada Creek including fish habitat, water quality, temperature, and channel stability.

- Provide alternative water sources and utilize fencing to minimize livestock dependence/access to the stream channel.*
- Manage for the establishment of shrubs along the streambanks to increase summer shade, winter thermal cover, habitat, and channel stability, as well as provide a wind break for adjacent pastures.*
- Manage for dense vegetation within the riparian corridor to filter nutrients and sediment from the uplands before entering the stream.*
- Exclude livestock from the stream corridor until shrubs establish and banks stabilize.*
- Maintain or decrease the width/depth ratio of the restored stream channel over time.*

FACILITATING PRACTICES:

Management Unit - Riparian Buffer

This grazing plan focuses on the riparian corridor totaling approximately 5 acres. Due to the limited acreage available for the Landowner's livestock operation a relatively small riparian buffer was negotiated. This unit extends approximately 30 feet from the high water mark on the north of the stream and approximately 20 feet from the high water mark on the south of the stream.

Stockwater

Surface Water – It was determined that a developed stockwater system was not needed in adjacent pastures at this time. Water sources include open irrigation ditches and surface water in numerous depressions south of the stream. Chicken Creek is available to the north of the stream.

Riparian Fence

The Landowner shall install a functional fence of his choice on both sides of the stream in order to exclude livestock from the project area during Phase 1.

North Fence: The fence will be located at least 30 feet from the high water mark.

South Fence: The fence will be located at least 20 feet from the high water mark.

MANAGEMENT:

Grazing Prescription

Phase 1:

- Allow riparian shrubs to establish and stream banks to stabilize following restoration work.
- Exclude livestock from the project area for a minimum of 5 years or until stream channel can sustain light grazing.
- Landowner and Partner Agencies will jointly evaluate the site after 5 years to determine if the stream channel is stable and riparian shrubs have established successfully enough to withstand light grazing. If the stream channel and vegetation targets have not been met, Phase I will continue for an agreed upon time.
- Partners will establish monitoring cross-sections and/or photo-points at permanent stations to determine the overall recovery of the stream and riparian corridor over time.

Phase 2:

- Continue to allow stream banks to stabilize and riparian vegetation to establish and expand.
- Utilize short duration and light grazing to control weeds and maintain plant vigor without significantly compromising channel dimensions and riparian health.
- During light grazing, the hoof sheer threshold along banks shall be *less than 15%* and the browse threshold on shrubs shall be *less than 15%*. Livestock shall be removed from the riparian corridor before thresholds are met.
- The Landowner and Partners will work closely to monitor grazing and estimate hoof sheer and browse levels within the riparian corridor.
- The Landowner and Partners will assess the first year of grazing by comparing existing conditions to baseline monitoring data. Adjustments will be made to thresholds as needed to continue to achieve the overall project goals.

Contingency Plan

In cases where stockwater is not available in adjacent pastures, the livestock crossing on the west end of the stream reach may be utilized as a water gap with appropriate fencing to manage livestock access. This point is not intended to be a permanent water source, but may be used during emergencies if needed. In such cases, the Landowner shall communicate with Partners about the situation.

Maintenance

- The landowner shall be responsible for maintaining the project including the fences and management system for a period of 20 years.
- Over the course of the agreement it is likely a cow or two will get through the riparian fence. In such a case, it is the responsibility of the Landowner to remove the animal(s) as soon as possible.

Any amendments to this plan shall be documented in writing, signed by all parties, and attached.

Blackfoot Challenge 2017
319 Proposal – Project Photos & Maps

NEVADA CREEK PROJECT AREA



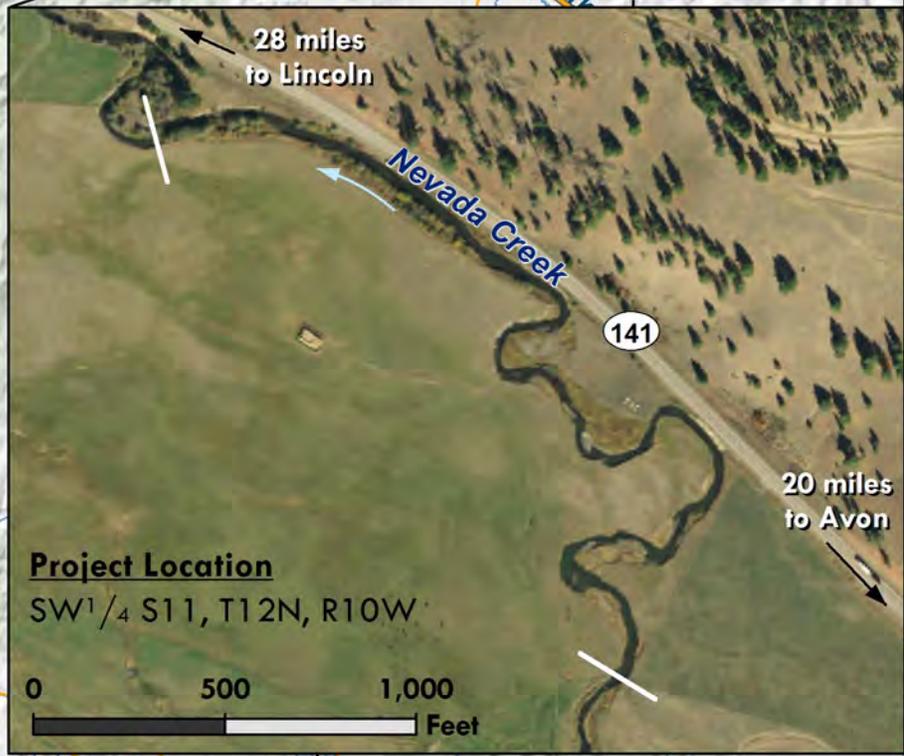
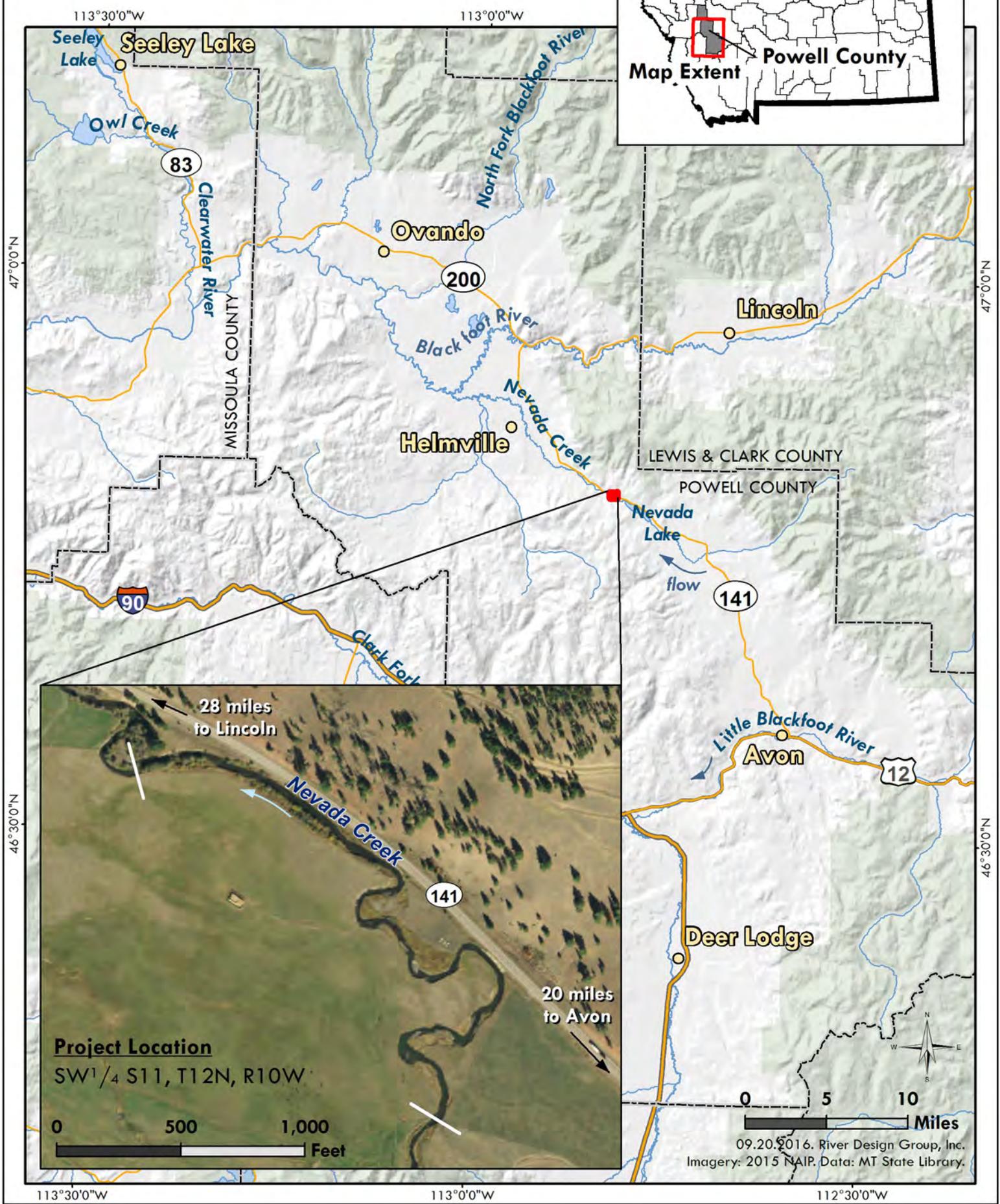
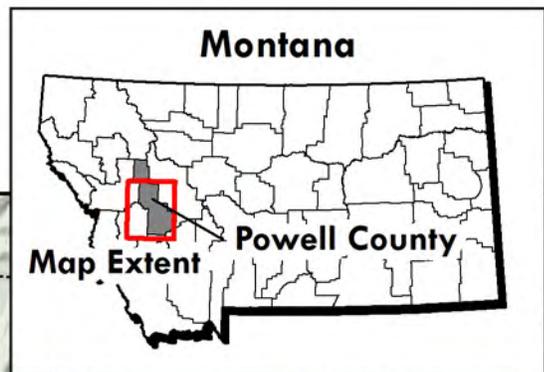
POORMAN CREEK PROJECT AREA



CHIMNEY CREEK PROJECT AREA



Nevada Creek Phase 2 Restoration Project Vicinity Map



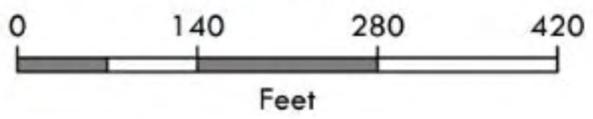
09.20.2016. River Design Group, Inc.
Imagery: 2015 NAIP. Data: MT State Library.



Nevada Creek Phase 2

BEHI Map

- Rip-Rap
- Low
- Medium
- High
- Very High



08.01.2016.
River Design Group, Inc.
2015 NAIP Imagery.

Project Start

Project End

