



# Section 319 Grant - Project Proposal Form <sup>7/25/13</sup>

FY2014 Project Proposals are due Friday July 26, 2013

Project Title California Creek Restoration, Big Hole River Watershed

### Project Sponsor Information

Name <u>Big Hole Watershed Committee (BHWC)</u>	Tax Identification Number <u>11-3737644</u>
Address <u>PO Box 21</u>	Website _____
City <u>Divide</u> State <u>Montana</u> Zip Code <u>59762</u> County <u>Anaconda-Deer Lodge</u>	
Primary Contact <u>Jennifer Downing</u>	Signatory <u>Jennifer Downing</u>
Title <u>Executive Director</u>	Title <u>Executive Director</u>
Phone Number <u>406-960-4855</u>	Phone Number <u>406-960-4855</u>
Fax Number <u>na</u>	Fax Number <u>na</u>
E-mail Address <u>jtitus@bhwc.org</u>	E-mail Address <u>jtitus@bhwc.org</u>
Signature <u>Jennifer Downing</u>	Signature <u>Jennifer Downing</u>

### Project Funding

319 Funds Requested	\$156,200.00
Matching Funds	
State Match	\$64,134.00
State In-Kind Match	\$20,000.00
Local Match	\$20,000.00
Other Match	
Total Matching Funds	\$104,134.00
Other Federal Funds	
Total Project Budget	\$260,334.00
Administrative Fee	\$14,200.00

Does the project sponsor have any open 319 contracts?  Yes

Project Title Big Hole Watershed Restoration

DEQ Contract Number 211081

319 Award \$83,500.00

Projected Closing Date July 31, 2013

Project Title \_\_\_\_\_

DEQ Contract Number \_\_\_\_\_

319 Award \_\_\_\_\_

Projected Closing Date \_\_\_\_\_

### Nonpoint Source (NPS) Information

Functional Category	Riparian Projects
1st Pollution Category	Historical Pollutants (Contaminated Sed
2nd Pollution Category	Hydromodification (Streambank or Shor
3rd Pollution Category	
Waterbody Type	River/Stream

### Project Location

Which WRP does this project implement?

What is the status of the WRP?

Does the project implement a TMDL?

Watershed Name or HUC # California/French/Deep Creeks

(1) Waterbody Name from 2012 List of Impaired Waters  
California Creek (headwaters to confluence with French Creek)

(1) Probable Cause(s) of Impairment  
Sediment/Siltation, Turbidity, Cu, Fe, As, Alt. Streamside, etc.

(2) Waterbody Name from 2012 List of Impaired Waters  
French Creek (headwaters to confluence with Deep Creek)

(2) Probable Cause(s) of Impairment  
Sediment/Siltation, Copper (Cu)

Activity 1 Name California Creek Restoration

Latitude (1) 46.009674 Longitude (1) -112.977344

Activity 2 Name \_\_\_\_\_

Latitude (2) \_\_\_\_\_ Longitude (2) \_\_\_\_\_

## Project Description

**Methods:** Please describe the specific activities of this project.

Capture and prevent sediment influx into California Creek and prevent movement of sediment downstream into French Creek and Deep Creek. Project will capture eroding upland sediment from large gullies using check dams, and enhance natural revegetation on unvegetated upland slopes, and protect streambanks. The project will then expand and repair the riparian buffer in the upper 6 miles of California Creek where needed to capture sediment, restore vegetation, manage livestock, and enhance wetlands.

**Objectives:** Please describe the specific/measurable objectives that will ensure the achievement of the project goal(s).

Install upland sediment check dams to collect eroding upland sediments in gullies.  
 Restore and/or enhance riparian buffer in upper 6 miles of California Creek.  
 Restore native wetlands to the riparian buffer for increased sediment capture by reconnecting the stream with the floodplain.  
 Reduce sediment inputs into California Creek and downstream as a result of upland sediment erosion.  
 Provide potential secondary benefit to metals contamination (copper, arsenic, iron) in California Creek.  
 Increase vegetation density in the riparian buffer.

**Overview:** Please provide a brief background of the proposed project.

California Creek is a headwater tributary on the continental divide [Big Hole River < Deep Creek < French Creek < California Creek] and within the state owned Mt. Haggin Wildlife Management Area. The area has extensive history of mining related disturbance, logging and livestock grazing. Sediment and metals (copper, arsenic, iron) flush through a damaged system in both uplands and riparian areas. The Mt. Haggin Uplands soil is highly erodible volcanic tuff material, was logged extensively, accumulated contaminated Anaconda smelter fallout, and is dry, high elevation. As a result, it is difficult for vegetation to reestablish. Today, huge eroded gullies and dry, unvegetated uplands wash contaminated plumes of fine white sediment directly into California Creek each spring. That sediment travels downstream into French Creek, Deep Creek and Big Hole River. The following are critical points for this project:

- 2012 303(d) lists California Creek for metals (Iron, Copper, Arsenic) contamination
- 2012 List of Impaired Waters lists the entire drainage [California Creek > French Creek > Deep Creek > Big Hole River] with impairments in sediment/siltation, physical habitat alterations, metals, etc.
- Middle-Lower Big Hole River TMDL lists Deep, French, California with high sediment and metals
- Middle-Lower Big Hole WRP lists the project area (Deep Creek/French Creek and headwaters) as a high priority for fish, wetlands, WQ
- Project meets DEQ NPS action plan numbers R13, R18, and EO3
- NRDP allocated a portion of Mt. Haggin Uplands restoration funds to east of the Continental Divide in 2013 and considers California Creek a top priority. EPA's Charlie Coleman fully backs NRDP's decision to seek sediment restoration in California Creek.
- Watershed Consulting is under contract with NRDP and leads the technical aspects of this project. This includes site assessment and project design. Note that some design/planning work will be completed in 2013. Our 319 request is final design and implementation.
- French Creek (downstream of California Creek) is undergoing restoration of placer mining to benefit westslope cutthroat trout (led by BHWC and MFWP). MFWP is hesitant to move forward with fish reconnection until the sediment source in California Creek is repaired.
- MDT has plans to relocate the Mill Creek Road (crosses California Creek and is also a sediment source) out of the floodplain pending funding in 2014.

**Monitoring:** Please briefly describe the monitoring component of this proposal.

The improvements made to the system as a result of this project will cause significant improvements to sediment influx and potentially metals contamination over the next decade or more. MFWP is committed to establishing photo points and monitoring changes over this longer time scale. However, for this contract, we anticipate creating short-term monitoring schemes that can show changes before and after the project. This could include change in riparian buffer area, volume of sediment capture established, number/species of newly established vegetation, etc. We are interested in working with DEQ on creating a scheme that fits for a project of this scope.

**Education and Outreach:** Please briefly describe the education and outreach component of this proposal and the target audience.

The E&O portion of this project will keep partners and community members informed on the project progress and results. The outreach will be two fold - 1. inform the BHWC audience (board, donors, participants) and 2. inform other interests. The BHWC will disseminate information via BHWC website, public media outlets, social media, newsletter, and public presentation(s). A tour will be offered targeting both BHWC audience and those interested in utilizing similar methods on other sites both in Mt. Haggin and in other watersheds.

**Collaborative Effort:** Please briefly describe project partners. Include other agencies, organizations and private citizens and their role in this project.

Partner	Role
Big Hole Watershed Committee	Administration, E&O, coordination
NRDP / Watershed Consulting/Work Group	Uplands sediment remedy, technical support, funder
MFWP: J. Olsen (Fish) / V. Boccadori (Wild.)	French Creek restoration lead, state lands representative, monitoring, in-kind support
DEQ: Wetlands, Water Quality	Wetlands support, water quality improvement support, funder

**Scope of Work- Outline**

**Task 1 Title** California Creek Restoration

319 Funds	\$100,000.00
Non-Federal Match	\$84,124.00
Other Federal Funds	\$0.00
<b>Total Cost</b>	<b>\$184,124.00</b>

**Description**  
 Restore upper 6 miles of California Creek by remediating upland sediment sources and restoring the riparian corridor. Check dams made of natural structures will be installed to stop upland sediment from washing into stream. Upland slope natural revegetation will be enhanced through aerial liming and fertilization. Riparian corridor restoration will include temporary enclosures, stream bank repair and revegetation, wetland establishment, and removal of contaminated sediment from streamside. Match is provided by NRDP upland sediment repair and MFWP. 319 funds are requested for riparian corridor work. This task will support on the ground project work and oversight.

**Timeline** Fall 2014 (Spring '15 is backup)

**Task 2 Title** California Creek Coordination and Design

319 Funds	\$30,000.00
Non-Federal Match	\$10,000.00
Other Federal Funds	\$0.00
<b>Total Cost</b>	<b>\$40,000.00</b>

**Description**  
 This task will support the coordination of efforts in California Creek with NRDP, Watershed Consulting, MFWP, the Mt. Haggin Uplands Technical Working Group, DEQ, MDT, Anaconda-Deer Lodge County, and others to ensure project work is leveraged and fits well with other simultaneous efforts (meetings, sharing information via e-mail and phone, and site visits). This task will include staff time and mileage for BHWC and/or Watershed Consulting. This task will also support the meshing of riparian project plan with the upland project plan by creating a design for riparian restoration to be used in Task 1 (some of which be completed by other sources prior to this contract's start).

**Timeline** Full Contract Term

**Task 3 Title** California Creek Education and Outreach

319 Funds	\$5,000.00
Non-Federal Match	\$8,000.00
Other Federal Funds	\$0.00
<b>Total Cost</b>	<b>\$13,000.00</b>

**Description**  
 BHWC will publish content related to the project goals and scope, progress and results on the BHWC website, social media, and public media outlets. BHWC will include project in a BHWC newsletter. Project will be presented at a BHWC monthly meeting by Watershed Consulting. A stakeholder tour of the project site will be offered. This task includes staff time and mileage, facility rental for meetings, publishing costs and Watershed Consulting involvement.

**Timeline** Full Contract Term

**Task 4 Title** California Creek Monitoring

319 Funds	\$7,000.00
Non-Federal Match	\$2,000.00
Other Federal Funds	\$0.00
<b>Total Cost</b>	<b>\$9,000.00</b>

**Description**  
 MFWP is committed to establishing photo points and monitoring changes over long-term. We anticipate creating short-term monitoring schemes that can show changes before and after the project. This could include change in riparian buffer area, volume of sediment capture in check structures, number/species of newly established vegetation, etc. We are interested in working with DEQ on creating a scheme that fits for a project of this scope while providing quantitative, measurable improvements in water quality.

**Timeline** Before & After Construction

**Task 5 Title** Administration

319 Funds	\$14,200.00
Non-Federal Match	\$0.00
Other Federal Funds	\$0.00
<b>Total Cost</b>	<b>\$14,200.00</b>

**Description**  
 BHWC will hold the 319 contract and provide administration duties for the contract. This includes tracking of work to contracted tasks to meet contract requirements, providing quarter and final reports, working with DEQ staff, and documenting expenses and match for the project.

**Timeline**

Task 6 Title \_\_\_\_\_

319 Funds

Non-Federal Match

Other Federal Funds

Total Cost

Description

Timeline \_\_\_\_\_

Task 7 Title \_\_\_\_\_

319 Funds

Non-Federal Match

Other Federal Funds

Total Cost

Description

Timeline \_\_\_\_\_

Task 8 Title \_\_\_\_\_

319 Funds

Non-Federal Match

Other Federal Funds

Total Cost

Description

Timeline \_\_\_\_\_

Task 9 Title \_\_\_\_\_

319 Funds

Non-Federal Match

Other Federal Funds

Total Cost

Description

Timeline \_\_\_\_\_

Comments: Please use the space provided for any additional information that may not have been captured by this application form.

The BHWC, established 1995, seeks understanding and agreement among individuals with diverse viewpoints on water use and management in the Big Hole watershed. Our education, planning, restoration, and partnerships work in Land Use Planning, Weeds, Wildlife, and Water Quality. We have implemented four DEQ contracts successfully since 2010, three of which were 319 contracts. We are experienced at operating state, federal, and private grants. Improving water quality is a top priority of the BHWC. We have two approved watershed restoration plans, operate an active drought management plan to maintain river flows and water temperatures, and have implemented many projects in education and outreach, on-the-ground restoration, and partnerships.

Pedro Marques is a Restoration Ecologist/Project Manager with Watershed Consulting based out of Missoula, Montana and sits on the Mt. Haggin Work Group. Pedro is contracted by NRDP and provides technical support and design for this project and has worked in the Anaconda Smelter clean-up on similar projects for 4 years. Together with NRDP and the Technical Working Group, Watershed Consulting has been pioneering erosion control and revegetation techniques in these extremely difficult conditions for over 4 years.