2021 319 Application Form

General Information

Project Name: Basin Wide Restoration Upper Lolo Watershed

Sponsor Name: Clark Fork Coalition

Registered with the Secretary of State? Y

Registered with SAM? Y

Duns #: 840737332

Does your organization have liability insurance? Y

Primary Contact: Jed Whiteley

Title: Project Manager

Address: 140 S 4th St W #1

City: Missoula State: MT Zip Code: 59801

Phone Number: 406-531-0256

Email Address: jed@clarkfork.org

Signature: Jed Whiteley Digitally signed by Jed Whiteley Date: 2020.11.13 13:12:30 -07'00'

Signatory: Karen Knudsen

Title: Executive Director

Address: 140 S 4th St W #1

City: Missoula State: MT Zip Code: 59801

Phone Number: 406-542-0539 ext 203

Email Address: karen@clarkfork.org

Signature: Karen Knudsen Digitally signed by Karen Knudsen Date: 2020.11.13 13:10:22 -07'00'

Technical and Administrative Qualifications

CFC brings an experienced technical and grant management team to these projects and a proven track record of performance on government funded projects during its 33 year history. The projects will be led by CFC's PM Jed Whiteley. Jed has completed over $1.5 million dollars of road decommisioning work in Western Montana and the Idaho Panhandle. He regularly managed over $3 million/year of restoration projects as a PM in the private sector and is Rosgen Level III certified with 16 years experience in heavy equipment stream restoration. For the decomissioning project InRoads Consulting, led by Adam Switalski, is under contract to assist with field oversight and quality control. The Lolo NF brings a team of hydrologists, biologists, engineers and soil scientists to the project for planning and design, permitting and construction oversight.

Past Projects

Project Name	Grant or Contract Amount	Funding Entity *(entity name/program, contact person, phone, email)*	Completion Date
Lolo Ditch Fish Screen	$ 105,000.00	USFWS/ CFDA Program George Jordan 406-247-7365, george_jordan@fws.gov	December 2020
Lower Bitterroot Tributary Restoration	$ 293,000.00	Montana DEQ/319 Mark Ockey 406-461-6737, Mockey@mt.gov	December 2022
Miller Creek Restoration	$ 28,000.00	FWP Future Fisheries Michelle McGree 406-444-2432, mmcgree@mt.gov	December 2019

Budget Summary*

		Other Funding	Federal Match	Non-Federal Match	319 Funding Request	Total Cost
	Education and Outreach	$ 0	$ 0	$ 10,000	$ 5,000	$ 15,000
	Project Administration	$ 0	$ 0	$ 10,000	$ 20,000	$ 30,000
	Total	$ 0	$ 0	$ 20,000	$ 25,000	$ 45,000
	Project 1 Name	Basin Wide Restoration Upper Lolo Watershed				
	Project Planning	$ 0	$ 10,000	$ 4,000	$ 8,000	$ 22,000
	Landowner Agreements, O & M	$ 0	$ 500	$ 200	$ 300	$ 1,000
Project 1	Project Implementation	$ 0	$ 973,400	$ 166,000	$ 250,000	$ 1,389,400
	Other Activities	$ 0	$ 0	$ 0	$ 0	$ 0
	Project Effectiveness Monitoring	$ 0	$ 2,000	$ 2,000	$ 4,000	$ 8,000
	Total	$ 0	$ 985,900	$ 172,200	$ 262,300	$ 1,420,400
	Project 2 Name					
	Project Planning					$ 0
	Landowner Agreements, O & M					$ 0
Project 2	Project Implementation					$ 0
	Other Activities					$ 0
	Project Effectiveness Monitoring					$ 0
	Total	$ 0	$ 0	$ 0	$ 0	$ 0
	Project 3 Name					
	Project Planning					$ 0
	Landowner Agreements, O & M					$ 0
Project 3	Project Implementation					$ 0
	Other Activities					$ 0
	Project Effectiveness Monitoring					$ 0
	Total	$ 0	$ 0	$ 0	$ 0	$ 0
	Total	$ 0	$ 1,273,200	$ 192,200	$ 287,300	$ 1,465,400

Fields outlined in black **on this page will auto-populate from other sections of the application form. Fields outlined in red **on this page** will not auto-populate. You must manually transfer the information for fields outlined in red.*

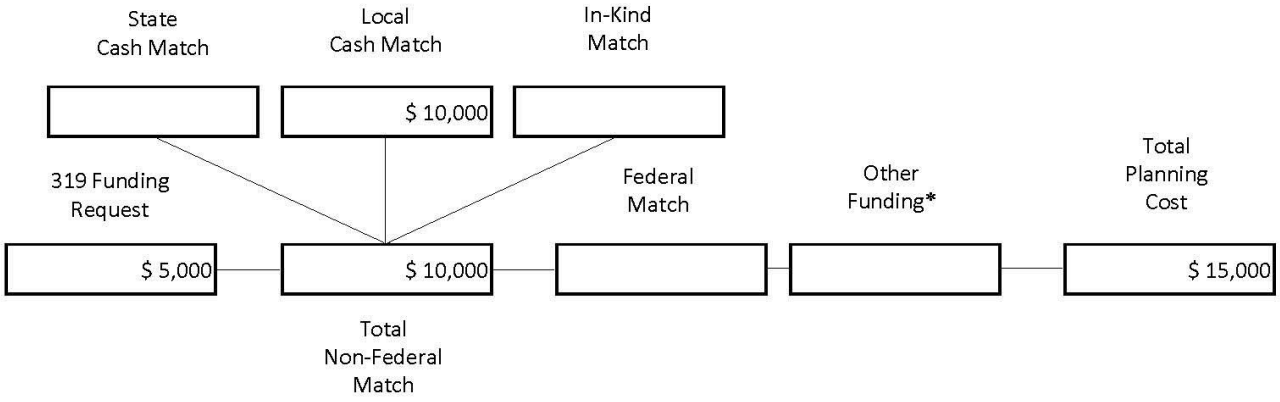
Education and Outreach

DEQ recognizes that developing good projects often requires a considerable amount of time and effort up front to build relationships and trust with individual landowners and stakeholder groups. To promote the development of future projects, DEQ is encouraging project sponsors to use up to $5,000 in 319 funding for education and outreach to develop and capitalize on these critical relationships. DEQ encourages applicants to incorporate on-the-ground projects into education and outreach efforts through on-site demonstrations and project tours. 319 funding may not be used to pay for food and beverages, or for honorariums and gifts. Education and outreach activities funded by 319 or used as match for 319 funding must adhere to all of the eligibility requirements outlined in the annual Call for Applications document.

Education and Outreach Deliverables *(Identify the education and outreach activities you will engage in and methods you will use to document their completion.)*

Contractor shall conduct the following education and outreach activities:
- Create a professionally produced video of restoration accomplishments to date in Lolo Creek to share with partners and the public
- Raise awareness of 319 restoration activities on Lolo Creek through social media posts and newsletters.
- Continue to work with the Lolo National Forest to identify opportunities to reduce nonpoint source pollution from Forest lands in Lolo Creek.

Contractor shall submit to DEQ the following deliverables:
- Written descriptions, through status and annual reports completed under E&O task, of efforts to identify and solicit interest in developing new on-the-ground projects.
- Screen-shots of social media posts and resulting public comments.
- Written documentation through status and annual reports completed under E&O task, of efforts to work with Lolo National Forest to identify and address nonpoint source pollution.
- Video tour of completed restoration projects in Lolo Creek



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**Use this space to record any funding that will be used to support creation of the task deliverables, but will not be reported as match. The purpose of this information is to give application reviewers a clearer understanding of the total amount of funding required to complete a task.*

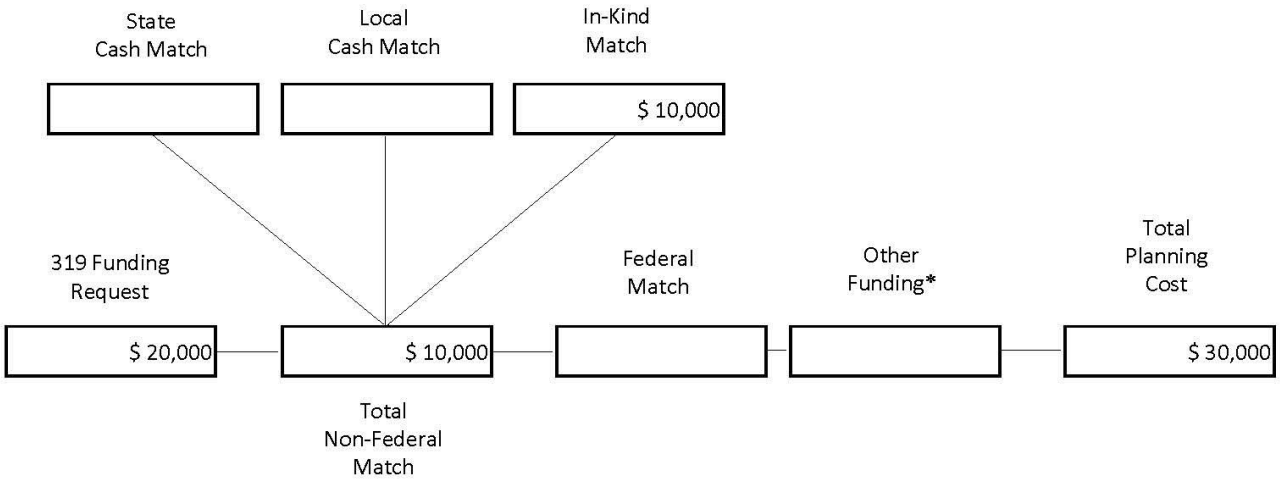
Project Administration

Project administration includes book keeping, invoicing, interim/annual/final report preparation, office supplies, rent, communications, etc. Up to 10% of the total requested 319 funds for your entire application can be used to pay for project administration. However, like all other tasks, payment is by reimbursement for actual expenses incurred.

Project Administration Deliverables *(Include interim/mid-year, annual, and final reports, as well as invoicing and office necessities.)*

Contractor shall submit to DEQ the following deliverables as described under the Project Administration Task. This includes: status reports, annual reports, Attachment B-billing statements, and a final report. Contractor shall ensure that all reports are written clearly, with appropriate grammar, punctuation, and level of detail.

Contractor will do the following with respect to all deliverables associated with all tasks in this contract:
- Adhere to report guidance and templates provided by the DEQ project manager.
- Submit all draft and final documents electronically, in Adobe PDF, Microsoft Word, or Microsoft Excel format.
- Submit all draft and final documents to the DEQ project manager using email, or if files are greater than 5.0 megabytes in size using the state of Montana file transfer service (https://transfer.mt.gov) or as directed by the DEQ project manager.



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Project Form

A separate Project Form ***(including providing separate attachments)*** must be submitted for each project included in your application. Use the following examples to help determine when to lump and when to split projects. For additional assistance, contact Mark Ockey at mockey@mt.gov.

Splitting Examples (fill out multiple Project Forms)

- Stream restoration work occurring on two separate streams, on parcels owned by two separate individuals
- Two projects with significantly different sets of project partners
- Two projects that address substantially different pollution sources (e.g., one project that moves a corral off of a stream, and another to remove mine tailings, with both projects being on the same 800-acre recreational property)

Lumping Examples

- Contiguous stream restoration work spanning multiple land parcels
- 3 projects that address similar sources of pollution on a single land parcel (e.g., moving a corral off a stream, implementing a grazing management plan, and relocating a manure storage facility out of the floodplain, all on the same ranch)
- A mini-grant program designed to address numerous failing septic systems scattered throughout a watershed

Project Name Basin Wide Restoration of Upper Lolo Watershed

Project Location

Latitude 46.73709 Longitude -114.52961

Latitude _____ Longitude _____

Latitude _____ Longitude _____

12-digit HUC(s) # 170102051401

☑ **Project site map** attached, showing the location of all proposed on-the-ground restoration

Project Planning and Purpose

Select the Watershed Restoration Plan that your project will help implement.

Lolo Creek - Lolo Watershed Group

Y Letter of support from author entity attached? *(if no, explain why below.)*

Waterbody name from the 2018 List of Impaired Waters Upper lolo

Probable causes of impairment to be addressed Sedimentation/siltation, fish passage, stream-side vegetation

Waterbody name from the 2018 List of Impaired Waters _____

Probable causes of impairment to be addressed _____

or*

Name of healthy waterbody to be protected _____

Description of identified threat to non-impairment status

Name of healthy waterbody to be protected _____

Description of identified threat to non-impairment status

**While the majority of the available 319 project funding is dedicated to addressing known impairments, EPA is allowing states to use a limited amount of funding to protect non-impaired waters (healthy waters) from becoming impaired.*

Community Participation and Support

Landowner	Contributions to Project	Letter of Support Attached?
USFS- Lolo National Forest	Permitting, engineering and design, project oversight, monitoring, funding	☑
		☐
		☐
		☐

Partner	Role	Letter of Support Attached?
Montana Fish Wildlife and Parks	Project funding through Future Fisheries and monitors the fishery	☐
Lolo Watershed Group	Project supporter and WRP author	☑
Westslope Chapter Trout Unlimited	Project supporter and funding contributor	☑
		☐

Other Community/Stakeholder Support

Project Description

Describe the nature and extent of the nonpoint source problem you are trying to address, the root causes of the problem, and your proposed solution.

The Upper Lolo Creek watershed is a stronghhold for native Westslope Cutthroat and bull trout but it is significantly impacted by sediment generated by forest roads and failing or undersized culverts. Both species, particularly bull trout, are sensitive to high sediment loads. The Clark Fork Coalition has been partnering with the Lolo National Forest and the DEQ 319 program since 2014 to reduce sediment in this area and DEQ 319 has been investing in projects in the basin since 2006 with the ultimate goal of delisting the watershed. The 2003 Upper Lolo Sediment TMDL sets goals of between 33 and 65% load reductions from forest roads and includes the following activities to achieve this goal:

- Upgrade remaining forest roads to meet Montana Forestry BMPs,
- Reclaim forest roads that are surplus to the needs of forest land managers,
- Upgrade undersized culverts over time to better accommodate large floods,
- Correct priority fish passage barriers that are significantly affecting the connectivity of native fish habitats.

A great amount of progress has been made by CFC through the work carried out in the last 3 phases of sediment and passage work but there is quite a bit more to be done in order to delist the watershed from TMDL listing. The 2010 TMDL Implementation Evaluation found that more BMP implementation activities are required to achieve water quality standards, and sediment and habitat monitoring conducted by DEQ in 2020 suggests this is still the case. To this end CFC and the Lolo NF have partnered on an ambitious 4th phase of restoration work in the Upper Lolo watershed to resurface and/or implement BMP's on 34.4 miles of of forest roads, upgrade 19 culverts to reduce sediment and promote fish passage, decommission 4.4 miles of forest roads, and add Large Woody Debris to 19.1 miles of streams.

All restoration activities for this project will take place on USFS property. The project activities are based on the recommendations stated in the Upper Lolo Sediment TMDL Implementation Evaluation (Section 2.0 TMDL Recommended Activities), the Lolo Creek Watershed Restoration Plan (Chapter 4- needs in Lolo Creek) and USFS "Conservation Strategy for Bull Trout on USFS lands in Western Montana"(Lolo, West Fork Lolo Creek; pg 288-289). All roads proposed for decommissioning are non-system roads behind locked gates that have never been open to travel by public vehicles.

We plan to utilize Great American Outdoor Act funding (GAOA) available through the Lolo NF for the road surfacing and BMP work, which we anticipate to be at least 70% of the project costs. 319 funding awarded as a result of this proposal will be focused on completing the road decommissioning, upgrading culverts and installing LWD jambs to catch sediment and move streams away from close proximity to forest roads.

Is this project a continuation of a previous project? If so, please explain the connection.

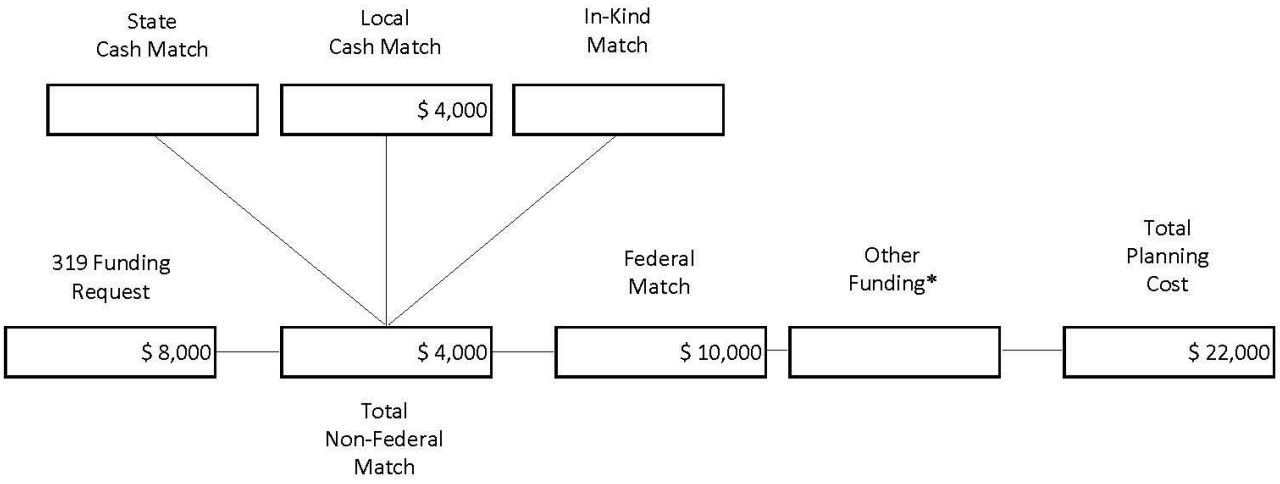
This project is the fourth phase of a major restoration effort by the Clark Fork Coalition to permanently reduce sediment entering the Upper Lolo watershed. In 2016 CFC decommissioned 17 miles of roads in the East Fork of Lolo Creek, decommissioned 10 miles in Granite Creek in 2018 and an additional 7 miles of road in the West Fork and lee Creek drainages in 2020. This current phase will work in all of the above mentioned drainages, addressing issues not dealt with in the previous projects due to permitting and funding constraints. CFC plans to make this the final major phase of sediment reduction work in the Upper Lolo watershed with only a road reroute to still be completed in upper Granite Creek.

Tasks and Budget

DEQ uses a standard template to develop scopes of work for 319 contracts. The tasks below match up with DEQ standard scope of work template. Some tasks might not be applicable to your project. Please leave the non-applicable tasks blank. If your project doesn't fit the task outline, use the task labeled "Other" to describe your project.

Task 1 - Project Planning Deliverables *(Include such things as completing project designs, conducting site evaluations, obtaining permits, organizing volunteers, conducting scoping meetings, etc. Identify specific deliverables that will be submitted.)*

Permitting- The road decommissioning is covered by a previous NEPA, new permits and NEPA for all other project activities will be secured by the Lolo NF.
Planning- A more comprehensive survey of project streams in order to generate specific LWD jamb placement is needed
Design- CFC will work with Lolo NF personnel on to chose the most applicable culvert design on a site by site basis
- A complete, draft project map for review and comment.
- A complete, final project map. In the final map, Contractor shall address all concerns raised by DEQ in the review of previous drafts.
- Copies of all permits necessary for implementation of the activities described in the final project proposal map.
- Copies of draft and final culvert upgrade designs



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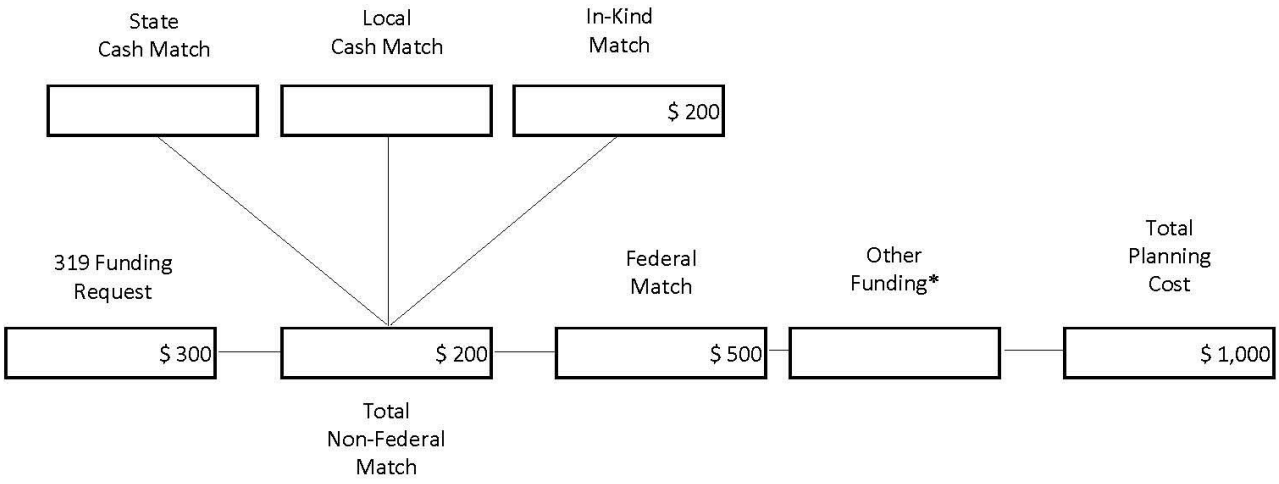
Landowner Agreements, Operation and Maintenance
This task only applies to projects involving on-the-ground activities. DEQ periodically evaluates the effectiveness of each on-the-ground project. To accomplish this, DEQ requires a process be in place to allow periodic access to the project site. The landowner agreement should also specify the roles of each project partner in the design, implementation and continued operation of on-the-ground pollution prevention practices. DEQ does not require the use of a specific landowner agreement template. In some situations, existing agreements between the project sponsor and the landowner may be sufficient.

Task 2 - Landowner Agreements, Operation and Maintenance Deliverables *(Include such things as landowner/sponsor communication, and draft and final agreements.*

• Amend current landowner agreement to incorporate new activities, then submit to DEQ for review and comment, in Microsoft Word or pdf format. Contractor shall submit all draft landowner agreements prior to signature, and allow sufficient time for review, comment, and subsequent modification prior to implementation. • PDF copies of signed landowner agreements. Contractor shall ensure signed landowner agreements address all comments and concerns raised by DEQ.



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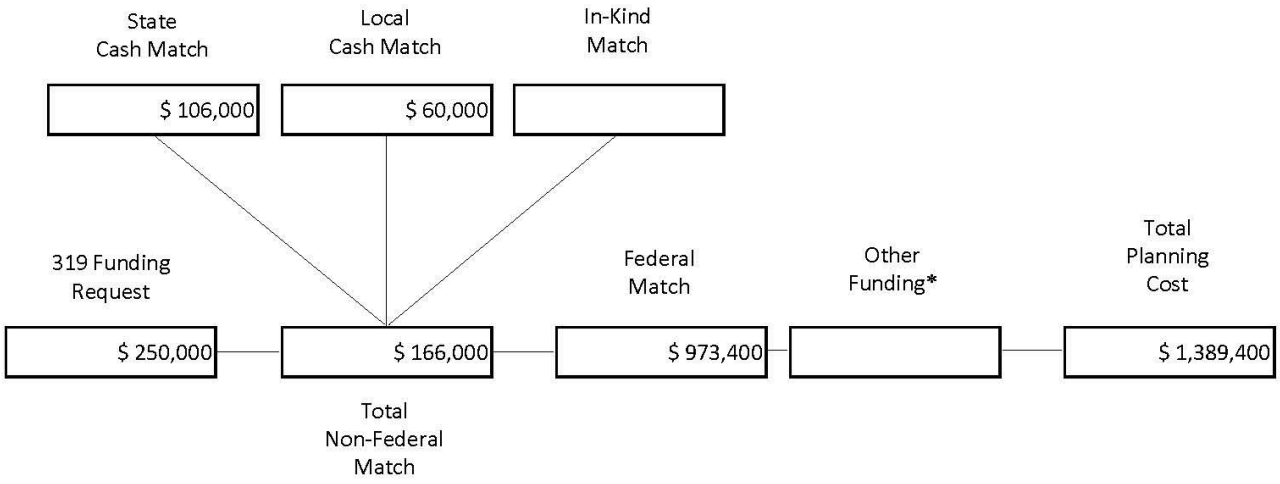
Project Implementation

Task 3 - Project Implementation Deliverables *(Include such things as construction oversight, implementation of on-the-ground restoration practices, preparation and submittal of as-built drawings, etc.)*

• A complete as-built project map showing all decommissioned roads, upgraded culverts, LWD jambs and BMP's on forest roads.
• A detailed description of any deviations from the final project map completed under project implementation task and an explanation for the need for each deviation.
• An estimate of the total cost of designing and implementing the project, including funds that were neither 319 funds nor funds used as match.



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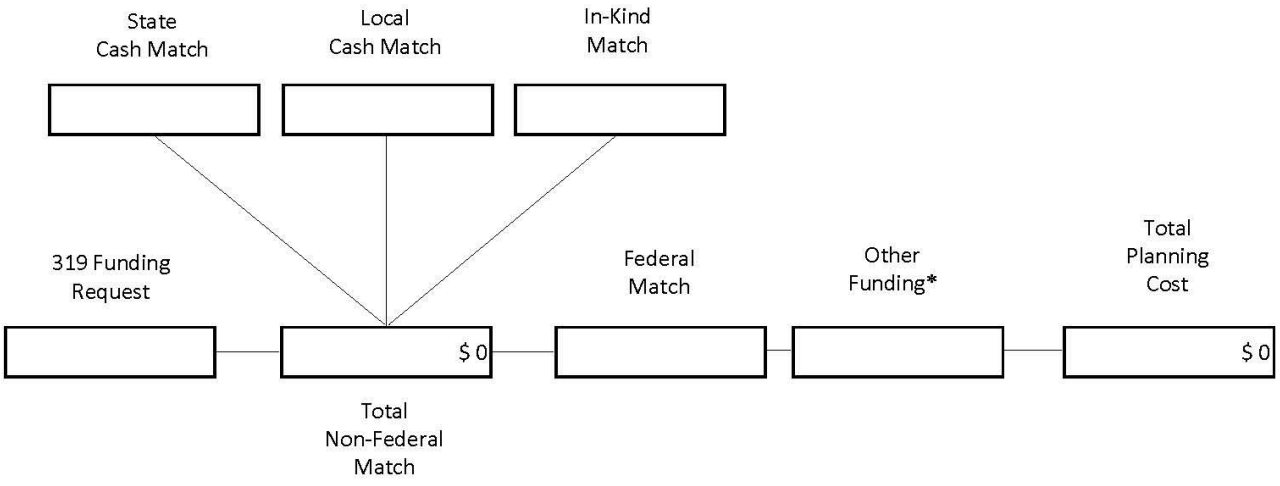
Other Activities

Use this task if the activities you are proposing are outside the scope of the typical design/implement/monitor process. Provide sufficient details to enable application reviewers to successfully compare the nonpoint source pollution reduction benefits of your project to those of other projects in the applicant pool.

Task 4 - Project Deliverables *(Include activities you will complete and the products you will submit to demonstrate completion.)*



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Project Effectiveness Monitoring

The short duration (1-3 years) and limited spatial extent (often just a few hundred yards) of most 319-funded projects frequently precludes the use of traditional water chemistry monitoring as a means of evaluating project effectiveness. Instead, DEQ encourages project sponsors to use simpler, more qualitative tools. Typically, this will include pre- and post-construction photo point monitoring, vegetation mortality measurements, and perhaps modeling to estimate pollution load reductions. Please contact one of the DEQ Nonpoint Source Program staff for guidance relative to your specific project.

Task 5 - Project Effectiveness Monitoring Deliverables *(Identify the specific tools and products you will use to evaluate and demonstrate the effectiveness of your project in reducing nonpoint source pollution.)*

CFC will work with the Lolo NF to run either WEPP or a version of GRAIP to model sediment inputs and load reduction. CFC will also work with the Lolo NF to try and get pre and post project fish monitoring data on reaches of stream that will be made assessable by upgrading culverts.

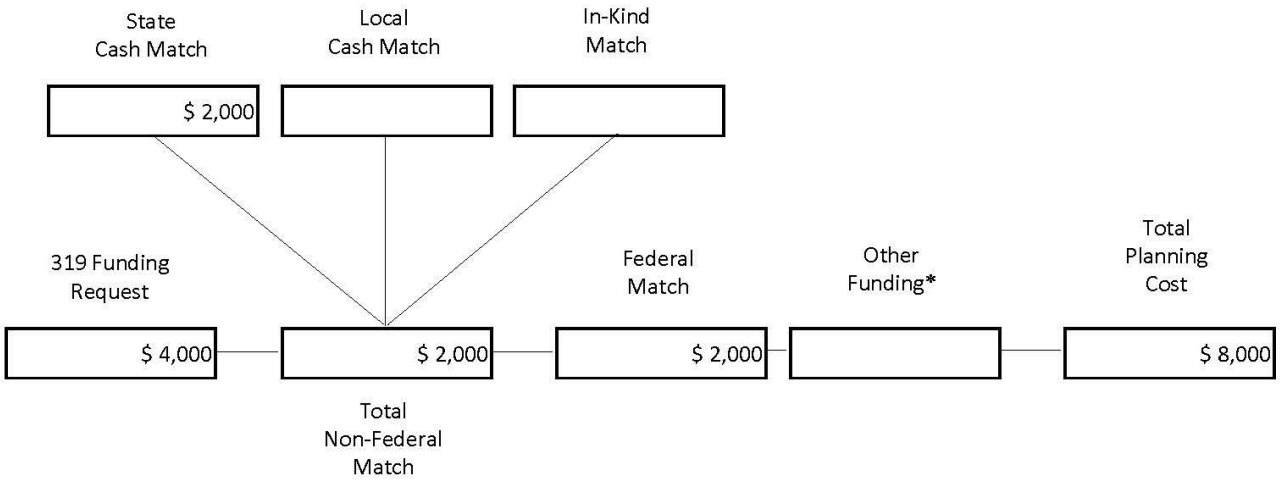
• A complete draft monitoring plan for review and comment in electronic (Microsoft Word) format. A final monitoring plan. Contractor shall ensure that the final monitoring plan addresses all comments and concerns raised by DEQ.

• A written summary of all monitoring activities. The written summary must include the following:

o Electronic copies of photo-point photographs, in JPEG format. A photo log identifying photo ID, site ID, photo date, photographer name, latitude and longitude from which the photo was taken, approximate direction the photographer was facing, and a brief description of what the photo is intended to show.

o Electronic copies of all data and data analyses.

o A detailed description of any deviations from the final monitoring plan, and an explanation of the need for each deviation.



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Water Quality Benefits and Sustainability

Explain why the project is an appropriate next step for making progress towards removing a pollutant/waterbody combination from Montana's 2018 Impaired Waters List or preventing a healthy waterbody from becoming impaired?

When the Clark Fork Coalition and the Lolo National Forest started to collaborate in 2015 on permanently reducing sediment sources in the Upper Lolo watershed a phased approach splitting the watershed into 3 parts was decided on. These three parts were: East Fork Lolo Creek watershed, Granite Creek watershed and West Fork Lolo Creek watershed. CFC has now completed large scale restoration projects in all three of the above mentioned watersheds this year and has been working with the Lolo NF to take an inventory of all other possible sediment sources on National Forest land in the Upper Lolo watershed in order to address the highest priority sediment sources in a fourth phase using road decommissioning, culvert removals/upgrades, LWD placement and road BMP's.

Will your project address a major local source of nonpoint source pollution? Explain.

Our project will address many small but when added together significant sources of sediment in the basin. CFC's previous projects have restored the so called "low hanging fruit" and we are now working with the Lolo NF to mitigate sediment coming from system roads in order to keep them open to the public without negatively impacting the fishery.

Describe the long-term, sustainable benefits your project will have on water quality.

When forest roads and culverts are properly decommissioned or removed and the stream crossings restored they permanently no longer are sources of sediment. The result of this project will be long term, sustainable reduction in sediment in the Upper Lolo watershed by removing unneeded non-system forest roads and culverts and the sediment they produce. Upgrading undersized culverts will assure that chatastrophic failures do not happen in th futre due to high flow events while LWD jambs will trap sediment and help guide streams away from interfacing with road and cut scopes, active sources of sediment. The installation of BMP's and gravel lifts on Forest Service system roads will insure that road sediments are reduced and stay within the road prism and do not enter watershed streams.

Explain how your project will promote self-maintaining natural, ecological, and social processes that protect water quality.

The goal of this project is to restore natural processes and to help the native species that depend on them. Through the decompaction and restoration of the natural prism on forest roads water will be able to percolate downwards instead of running off in a concentrated flow that carries sediment with it. Streams that were choked down into undersized culverts will regain their full width and floodplains. Adding LWD to creeks will trap fine sediments, create deep scour pools and increase stream habitat and productivity.
The project will restore natural processes to the watershed in two ways. First this will occur though the removal of substantial present and future sources of sediment from the watershed, allowing the present sediment loading to flush out over time and restore the natural substrate to the streams. Secondly by upgrading road crossings that are barriers to aquatic organism passage more of the watershed can be utilized.

Nonpoint Source Goals and Success Metrics

Nonpoint source pollution goal	Action that will be taken to reach the goal	Metric used to measure success
East Fork Lolo Creek- Reduce tons/ yr of sediment generated by forest roads from 649 to 630	BMP's 11.7 miles, Upgrade 1 major culvert, LWD 3.2 miles mechanical- 2.9 miles hand falling	Reduction in tons/yr of sediment
West Fork Lolo Creek- Reduce tons/ yr of sediment generated by forest roads from 690 to 543	Decommission 4.4 miles of forest roads	Reduction in tons/yr of sediment
Granite Creek- Reduce tons/ yr of sediment generated by forest roads from 545 to 471	Gravel lift 6.8 miles, BMP's 10.8 miles, Upgrade 6 culverts, LWD 1.9 miles mechanical- 6.3 miles hand falling	Reduction in tons/yr of sediment
Lee Creek- Reduce tons/ yr of sediment generated by forest roads from 104 to 97	Gravel lift 3.6 miles, BMP's 3.6 miles, Upgrade 10 culverts, LWD 3.8 miles hand falling	Reduction in tons/yr of sediment
Lost Park Creek- Reduce tons/ yr of sediment generated by forest roads from 213 to 199	Gravel lift 8.3 miles, BMP's 8.3 miles, Upgrade 2 culverts, LWD 1.0 miles mechanical	Reduction in tons/yr of sediment

Project Education and Outreach

Describe the educational benefits of your project. Will the project inspire additional nonpoint source pollution prevention work within the watershed?

It is CFC's hope that by demonstrating that a well planned and phased multi-year approach to reducing sediment through restoration projects will lead to removing streams from the TMDL list. In turn we plan to share the results and lessons learned with other landowners and stakeholders as a catalyst for continuing restoration projects on other TMDL listed streams in th Clark Fork River basin.

Bigger Picture Benefits

Describe your project's benefits to each of the items below. If there are no associated benefits, type "NA" for "not applicable".

Benefit to additional natural resources (e.g. native fisheries, threatened and endangered species, wetlands, etc).

The proposed project will positively effect native fish including the threatened bull trout and Westslope cutthroat trout by reducing sediment that is presently choking out spawning areas and cobble substrate that houses macro invertebrates and opening up presently unavailable reaches of tributaries for spawning and cold water refugia.

Addressing climate resiliency and hazard mitigation.

Most of the Upper Lolo watershed is an area that has not burned in over 100 years. Under the impacts of climate change it is not a matter of if but when this landscape will burn again. By removing the "sediment bombs" that bad forest roads and culverts represent we are building resiliency into the system for when forest fire does happen. Also as stream temperatures climb due to climate change it is vitally important to open up access to cold water refugia that is presently blocked by culverts that are fish barriers.

Provides direct public recreational access or aesthetic benefit.

Upgrading culverts, installing gravel lifts and implementing BMP's on Forest Service roads will ensure the roads remain open and passable to the public. LWD installation will improve the fishery through sediment reduction and an increase of habitat and road decommissioning will virtually "erase" unsightly forest roads on the landscape and allow for a more natural experience for people recreating in the area in the years to come. One of the goals of the project is to positively affect the fishery, leading to more recreational opportunities in the project area and greater Lolo Creek watershed.

Reduces pollutant loading above a permitted point source in a manner that could contribute to future economic benefit for a downstream Montana community.

There is no permitted point source for sediment in the Lolo Creek watershed.

Directly helps protect a drinking water source.

Through increased precipitation infiltration in the upper watershed groundwater wells lower in the watershed may see better recharge from Lolo Creek in the dry season of late summer.

Benefit to socially disadvantaged populations.

Salish elders tell us that long before early settlers dug their networks of irrigation ditches; long before the Corps of Discovery nearly perished crossing the Bitterroots; and long before countless generations of native peoples braved the treacherous mountain journey to reach buffalo hunting grounds to the east and salmon-filled streams to the west, the animal people forged the passageways of the Lolo Creek drainage. To present-day elders these trails are part of a creation story that pre-dates time itself, and Lewis and Clark's perilous Bitterroot passage is the stuff of "recent times." It is interwoven into the Clark Fork Coalition's mission to restore the ancestral fisheries of the Salish people of which the Upper Lolo drainage figures prominently.

Additional Attachments

Attach additional items that could help reviewers better understand your project. Items could include site photos, design drawings, site evaluations, permits, etc. Please be conscious of reviewers' time, as they may not have time to read lengthy studies and reports. List all additional attachments below.

- [x] Culvert design
- [x] Current site condition photos
- [ ]
- [ ]
- [ ]
- [ ]
- [ ]
- [ ]

Letters of Support

USDA United States Department of Agriculture | Forest Service | Lolo National Forest Missoula Ranger District | Building 24A, Fort Missoula Missoula, MT 59804-7297 406 329-3750

Date: 11/12/2020

Kristy Fortman
DEQ 319 Watershed Management Section Supervisor
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Dear Ms. Fortman,

The Lolo National Forest supports the Clark Fork Coalition's grant application for the Upper Lolo BMP and stream enhancement work. The Clark Fork Coalition is applying for grant funds from the Clean Water Act Section 319 Nonpoint Source (NPS) Program to work with the US Forest Service to reduce human-caused sediment sources and improve fisheries habitat. Primary goals are native fish enhancement and connectivity and fulfilling TMDL responsibilities to reduce sediment deliveries to these streams. The Lolo National Forest fulfilled previous work to address TMDL responsibilities with the Upper Lolo Restoration project in 2005. Additional work is necessary to address sediment sources and habitat fragmentation on open system roads.

The Clark Fork Coalition and the Lolo National Forest have been working on cooperative projects for several years, including decommissioning 30 miles of roads in the East Fork Lolo, West Fork Lolo, and Granite Creek drainages, establishing temperature monitoring stations, collecting stream discharge data for instream flow management, working to understand beaver habitat feasibility and reintroduction, and a completed climate change watershed vulnerability assessment. The Lolo National Forest continues to provide funding to these efforts when possible. As such, the Clark Fork Coalition and the Lolo National Forest have a track record of proven success and are now continuing the partnership with the Upper Lolo BMP and stream enhancement project. Our ongoing focus in Upper Lolo Creek drainages is because of TMDL responsibilities and its significance to cold water native fisheries.

Funds from the NPS Program are essential to completing on-the-ground reclamation projects and will be matched by state, federal, and private funds.

Thank you for the funding opportunity and your continued work for conserving natural resources. Please do not hesitate to contact me if you have any questions.

Sincerely,

Jennifer J. Hensiek
Missoula District Ranger

WestSlope Chapter
Trout Unlimited

November 11, 2020

Re: Basin Wide Restoration of Upper Lolo Watershed

To Whom It May Concern:

The WestSlope Chapter Trout Unlimited (WSCTU) is a local non-profit conservation group focused on conserving, protecting, and restoring cold water fisheries in the Missoula area. We'd like to offer this letter of support for the Clark Fork Coalition's Basin Wide Restoration of Upper Lolo Watershed proposal for 319 non point Source Project funding. Our membership, comprised of over 900 passionate anglers, actively enjoys the fisheries supported by Lolo Creek.

Upper Lolo Creek provides quality habitat for native trout species such as westslope cutthroat trout and bull trout. Many of the streams in the watershed suffer from sediment issues from forest roads and undersized culverts. WSCTU has supported work in Upper Lolo Creek for many years, including CFC's previous phases of restoration. Phase four of this important work will benefit fisheries by improving fish habitat connectivity and addressing sediment issues. Specifically, by implementing BMP's on 34.4 miles of forest roads, upgrading 19 culverts to reduce sediment and promote fish passage, decommissioning 4.4 miles of forest roads, and adding Large Woody Debris to 19.1 miles of streams.

Given the benefits of this project to native cold water species, the WestSlope Chapter of Trout Unlimited fully supports the Clark Fork Coalition's Basin Wide Restoration of Upper Lolo Watershed. Thank you for the opportunity to offer our support for this project.

Sincerely,

Mark Kuipers
President, WestSlope Chapter of Trout Unlimited

November 11th, 2020

To: Hannah Riedl
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620

RE: Basin Wide Restoration of Upper Lolo Watershed

Dear Hannah,

The Lolo Watershed Group supports the activities of the Clark Fork Coalition (CFC) as they address the cause of sedimentation in Lolo Creek. As referenced in the Lolo Creek WRP, Lolo Creek has been classified as impaired due to sediment contributing sources in the upper and middle portions of the watershed. The CFC's "Basin Wide Restoration of Upper Lolo Watershed" project directly addresses these sources by upgrading forest roads and culverts, reclaiming surplus roads, and removing fish passage barriers.

LWG hopes this ambitious project is the final push to delisting upper Lolo Creek restoring it to a sustainable healthy state.

Sincerely,

Heather Brighton

Heather Brighton

Lolo Watershed Group Coordinator
P.O. Box 1354
Lolo, MT 59847
heather@lolowatershed.org

Supplemental Attachments

Upper Lolo BMPs

Legend

- Roughened Channel
- Upgrade
- BMPs
- Gravelling and BMPs
- Interstate and Highways

N

0 0.5 1 2 3 4 Miles

Upper Lolo Wood Reaches

N

Legend

WoodPlacement

- Hand Falling
- Mechanical

0 0.5 1 2 3 4 Miles

West Fork Lolo Road Decommissioning

Legend

- West Fork Roads to Decommission
- Forest Service Undetermined

4237 16105 2180 343 4279 17194 16105 2180 4209 17188 4232 17908 17906 9942 4203 4200 19074 43249 19217 4200 343 2182 461 17135 4322 4332 2185 4290 699 17154 17120 4304 2195 699 16146 295 4202

NEZ PERCE

LEWIS AND CLARK

Martin

Powell

Lolo Cr

Granite Sprs

Lolo Hot Springs

Sally Basin

Mud Cr

Lee Creek

Lolo Creek

Lolo Creek East

LEE CREEK

Lolo Creek West Fork

Snowshoe Falls

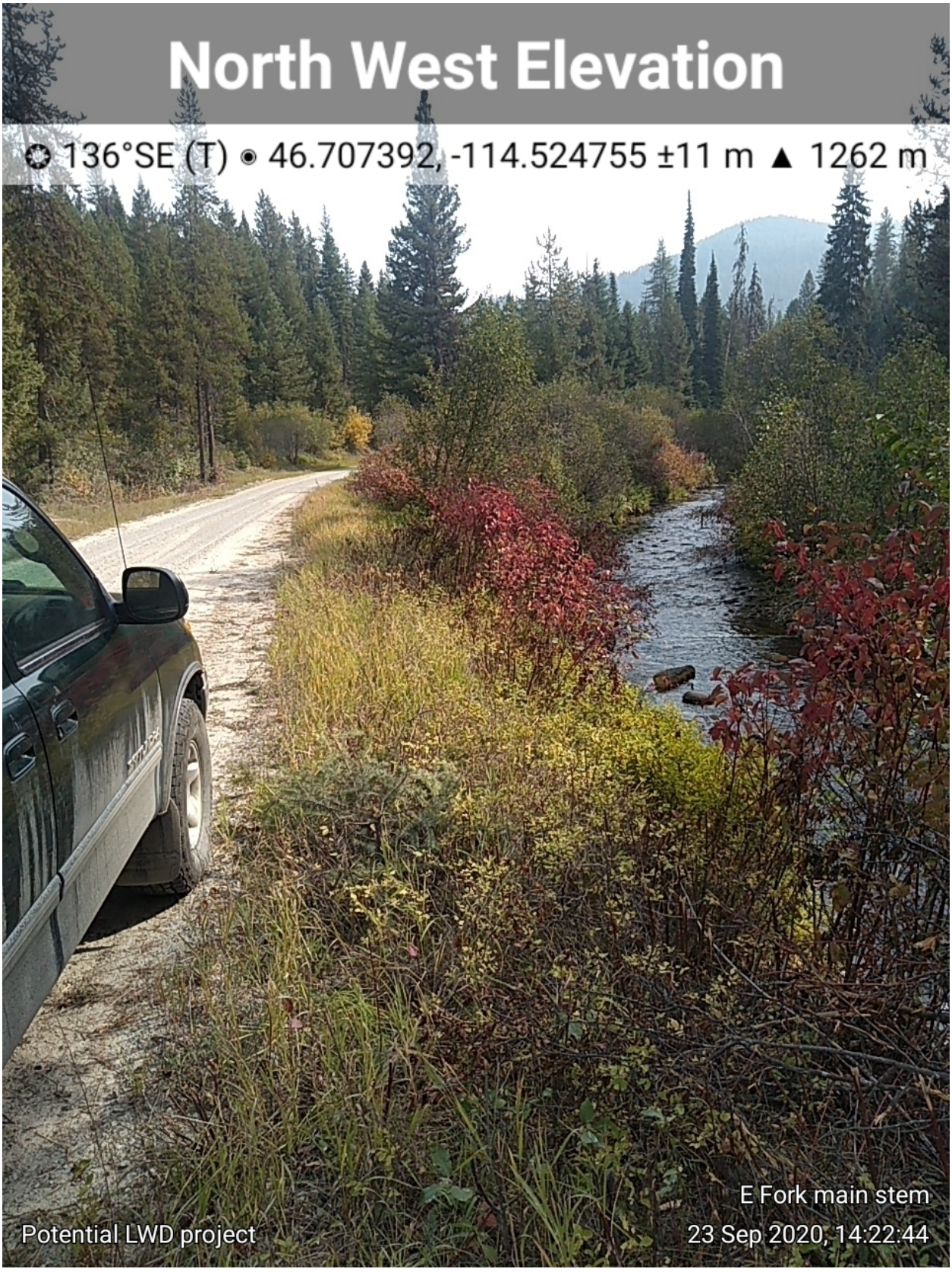
46°45'00"

114°30'00"

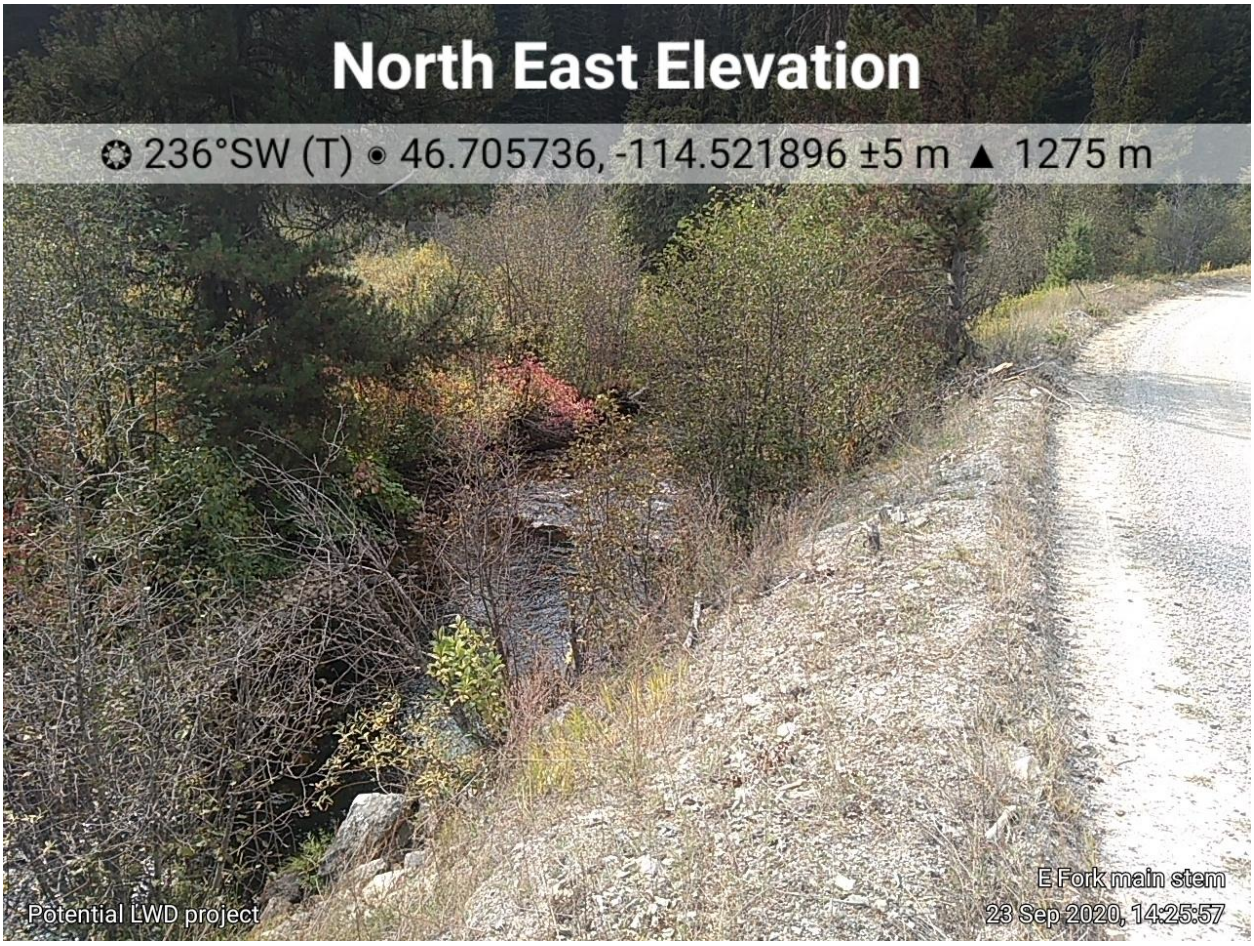
0 0.225 0.45 0.9 1.35 1.8 Miles

East Fork tributary perched culvert

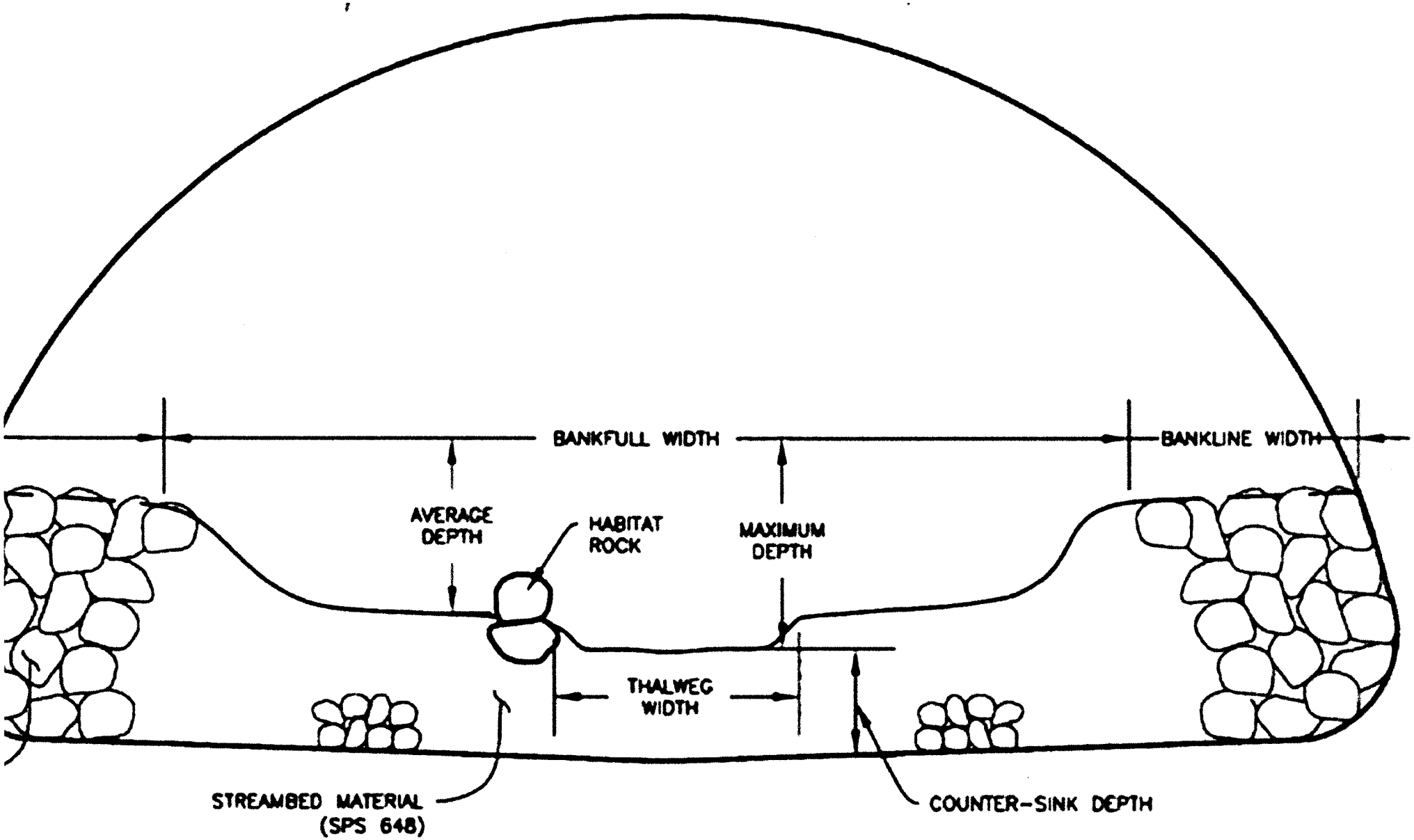
East Fork Road/Stream interface, LWD site



East Fork Road/Stream interface, LWD site



USFS gravel stockpile- Granite Creek



STREAM CROSS-SECTION DIMENSIONS*

Scale: N.T.S.

*THESE DIMENSIONS APPLY TO ALL STRUCTURE TYPES (IE. PIPE ARCH, CIRCULAR CULVERT, BOTTOMLESS ARCH OR BRIDGE)