

# Section 319 Grant - Final Application

Final Applications are due Monday, October 1, 2012

## **Section I: General Information**

Project Title East Fork Bitterroot River, Watershed Impro-	vement
<u>Projec</u>	ct Sponsor Information
Sponsor Name Trout Unlimited	Tax Identification # <u>38-1612715</u>
County Missoula Website www.tu.org	DUNS # 051698132
Primary Contact Heather Whiteley	Signatory Heather Whiteley
Title Project Manager	Title Project Manager
Address 111 N. Higgins	Address 111 N. Higgins
City Missoula State Montana Zip Code 5980	City Missoula State Montana Zip Code 59802
Phone Number 406-541-8614	Phone Number 406-541-8614
Fax Number 206-203-0751	Fax Number 206-203-0751
E-mail Address hwhiteley@tu.org	E-mail Address hwhiteley@tu.org
Signature	Signature
	<u>Project Location</u>
Statewide If project is not statewide please complet	te the rest of this section.
How is project related to a TMDL? Implementing a TMDL	
Watershed Name or HUC # 1707205	TMDL Planning Area Bitterroot Headwaters
Project 1 Name East Fork Bitterroot River	Latitude (1) 45.926N Longitude (1) -113.82559W
Project 2 Name	Latitude (2) Longitude (2)
Project 3 Name	Latitude (3) Longitude (3)
Project 4 Name	Latitude (4) Longitude (4)
Project 5 Name	Latitude (5) Longitude (5)
<u>Nonpoint</u>	Source (NPS) Information
319 Project Category Watershed Restoration	Waterbody Type River/Stream
Functional Category Sediment Control	Is waterbody on the 2010 Impaired Waters List? Yes
1st Pollution Category Silviculture (Road Construction/I	Maintenance) Percent of Total (%) 100
2nd Pollution Category	Percent of Total (%)
3rd Pollution Category	Percent of Total (%)
4th Pollution Category	Percent of Total (%) Page 1 of 12
	Page 10112

		<del></del>	
319 Funds Requested	\$40,000.00	Does the project sponsor ha	ave any open 319 contracts? Yes
Matching Funds		Project Title Ninemile Cre	eek WRP and Josephine Creek
State Match	\$10,000.00	DEQ Contract Number	212059
State In-Kind Mate	ch		
Local Funds	\$20,000.00	319 Award	\$38,400.00
Other Match		Projected Closing Date	December 31, 2013
Total Matching Funds	\$30,000.00	Project Title	
Other Federal Funds	\$55,000.00	DEQ Contract Number	
Total Project Budget	\$125,000.00	319 Award	
Advance Requested*	Administrative Fee \$3,000.00	0.57	
*Advances require additional justification of	and DEO approval.	Projected Closing Date	

**Project Funding** 

#### **Project Description**

Methods: Please describe the specific activities of this project.

This project will fully rehabilitate 10 miles of forest roads slated for decommissioning along tributaries to the East Fork Bitterroot River. Road decommissioning will involve decompaction, recontouring, seeding, fertilizing, slashing and/or mulching. Additionally, stream crossing rehabilitation will include culvert removal and regrading to match historic contours. Monitoring activities will include Water Erosion Prediction Project (WEPP) modeling for pre and post project implementation to be collected and analyzed by the Forest Service and Trout Unlimited.

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

The project goal is to reduce sediment loading into streams from forest roads and bring the East Fork Bitterroot River into compliance with TMDL's. Objectives include: 1) reduce sediment transport from road surfaces into streams, 2) reestablish natural stream characteristics at road crossings, 3) restore soil productivity and watershed function, and 4) improve water quality and fish and wildlife habitat.

Overview: Please provide a brief summary of the proposed project.

In 2009, the Bitterroot National Forest conducted a survey of the road network throughout priority watersheds on the forest. Agency specialists found that most of the roads were constructed for 1960's era timber harvests or fire suppression, abandoned after use and were causing water quality problems. During the ensuing analysis, roads were prioritized for decommissioning based on their proximity to streams, road-stream crossing density, surface erosion and sediment contributions. Based on that data, West Fork Ranger District developed the Martin Creek Watershed Restoration Project (MCWR) to decommission roads in the Martin, Lodgepole, Swift, Kerlee, Dowling, Bertie Lord, Jennings Camp and Cameron Creek watersheds.

The Bitterroot Headwaters TMDL and restoration plan (2005) specifies that the Forest Service reduce sediment loads from roads in the Bitterroot Headwaters to 42% (TMDL, p.171). During the MCWR project, 122 miles of forest roads will be decommissioned or placed in administrative storage. 59 miles of these roads have been identified for future transportation needs, including fires suppression efforts, but will remain closed to motorized travel. The remainder of the road system, approximately 63 miles, has been identified as surplus, and some of the roads are impacting water quality. 10 miles of roads will be fully obliterated, 10 miles of roads will be partially rehabilitated and the remaining 43 miles are stable and well vegetated and do not need any treatment. Because of the proximity of these roaded drainages to the East Fork Bitterroot River, this project will addresses the 2007 Montana Nonpoint Source goals for improving water quality by reducing sediment by 42% in the Bitterroot Headwaters.

The Bitterroot National Forest has completed an Environmental Assessment for the MCWR project. Project treatments for the road rehabilitation work have been developed by Forest Service Hydrologists, based upon past successful work in the Piquett Creek and other Bitterroot N.F. watersheds. Trout Unlimited will provide additional funding, as well as increased capacity for project management, monitoring and education outreach. Implementation will begin in the summer of 2013. The EA can be reviewed at the following website: http://www.fs.fed.us/nepa/fs-usda-pop.php/?project=30974.

## **Section II: Background Information**

#### A: Statement of Need and Intent

The East Fork of the Bitterroot River is a TMDL listed waterbody for sediment impairments, as well as a watershed targeted by the Bitterroot National Forest, Montana Fish, Wildlife and Parks and other partners for the recovery of native salmonids. The strategy for addressing water quality and habitat impairments in the East Fork of the Bitterroot River watershed is supported by a suite of documents, including the Bitterroot Headwaters TMDL and restoration plan, the Martin Creek Environmental Assessment, and the Bitterroot Subbasin plan.

This project is important for two reasons. First, the Bitterroot Headwaters TMDL and restoration plan (2005) specifies that the Forest Service reduce sediment loads from roads in the Bitterroot Headwaters to 42% (TMDL, p.171). Sediment and thermal loading are the main impairments to the East Fork of the Bitterroot River. Groups such as the Bitter Root Water Forum have begun a campaign to vegetate riparian buffers along the East Fork of the Bitterroot River to reduce stream temperatures and act as a sediment trap. Trout Unlimited will compliment these efforts by decommissioning forest roads and stream crossings in the East Fork watershed. Second, Trout Unlimited is involved in this project because it provides the highest chance of success to restore, protect, and reconnect fish habitat. The East Fork and its tributaries including Martin Creek, Meadow creek, Bertie Lord creek, Middle East Fork and Cameron creek contain at least one ESA listed species (bull trout, or Salvelinus confluentus) and one sensitive fish species (westslope cutthroat trout, or Oncorhynchus clarki lewisi). Road densities are high in all the above 6th code HUCS. The roads have reduced watershed health and the quality of fish habitat (Martin Creek EA, 2011). This project will reduce road densities and the number of stream crossings to improve water quality and ultimately lead to improved fish habitat and native fish populations.

#### **B: Collaborative Effort**

Partner	Role
Bitterroot National Forest	Land manager, funding partners
Bitter Root Chapter Trout Unlimited	Volunteer labor and funding
Bitter Root Water Forum	Large scale watershed project partner
Montana Fish, Wildlife and Parks	Monitoring, technical support

#### Additional Information (Collaborative Effort)

Trout Unlimited has a history of working with the Bitter Root Water Forum and other partners in a collaborative capacity through cooperative fundraising, in-kind contributions, and group planning. TU regularly communicates with Montana Fish, Wildlife and Parks, BRWF and the Bitterroot National Forest on project work, goals and objectives and strategic approaches to restoration by participating in the Bitterroot Conservation Partnership meetings. BRWF is currently developing the Watershed Restoration Plan for the Bitterroot headwaters which will be available summer of 2013. TU's road decommissioning work will compliment the efforts of BRWF to reduce thermal loading and sediment impairments to the East Fork of the Bitterroot River.

Funding Organization	<b>Award Amount</b>	Project Description	<b>Project Status</b>	<b>Contact Information</b>
Lolo National Forest	\$90,000	Petty Creek highway revegetation and road stabilization project	In progress	Traci Sylte Lolo National Forest tsylte@fs.fed.us
Bitterroot National Forest	\$50,000	Road decommissioning, revegetation and volunteer monitoring	In progress	Matt Gordon, Grants and agreements specialist (406) 329-1012 office
Lolo National Forest	\$50,000	Riparian road revegetation project - using excavator mounted stinger to plant willow cuttings in riprap and hardened banks on forest roads	Completed	Traci Sylte Lolo National Forest tsylte@fs.fed.us
National Forest Foundation	\$7,500	Road decommissioning, revegetation and volunteer monitoring	In progress	Adam Liljeblad National froest Foundation aliljeblad@nationalforests. org

LAdditional Information (F	l Planning and Man	l agement)			
				Page 4 c	of 12

# **Section III: Project Components**

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

The Bitterroot and Westslope chapters of Trout Unlimited will host volunteer days in the East seed, mulch and fertilizer on the newly decommissioned roads. Intended outcomes of this evices and provide the Bitterroot and Missoula community an opportunity to participate in watersheds. TU has had success in hosting numerous planting and seeding volunteer days in drawing from this same group of volunteers for the East Fork work. Volunteer days will include fields of hydrology, soils and restoration including, informational handouts on project work.	vent are to provide the Forest Service in-kind on the ground restoration in their in the Bitterroot watershed and plan on
C: Operation and Maintenance	
After project activities - road decommssioning and rehabilitation - are completed, the Bitterrobe conducting and extensive effectiveness monitoring project. While the project team does operation or maintenance in the project, any problem areas that are identified will be remediforest or TU. Furthermore, this project is being completed by the Martin Creek Environmenta Bitterroot National Forest. The EA contains specific language requiring the forest to monitor protect the watershed improvements. No equipment that requires long term maintenance withis project.	not expect any needs for long term ied by staff from the Bitterroot National al Assessment recently completed by the the project and manage the lands to
D: Monitoring: Please briefly describe the monitoring component of this proposal.	
The Bitterroot National Forest has conducted Watershed Erosion Prediction Project modeling coordinate this monitoring for the East Fork Bitterroot river project. With the help of TU staff, documenting site conditions for vegetation and sediment transport and then model the different treatment areas. The modeling will show the decrease in sediment contributions in tons/yea the STORET database system.	, the FS will collect on the ground data erence between no treatment and

Task 1 Title Project Implementation		
Description		
This project proposes to fully decommission approximately 10 miles of forest roads in the East Fork watershed. involve a range of activities including decompaction, recontouring, seeding, fertilizing and mulching. Addition worked to meet natural grades and culverts will be removed. All project work will be conducted on Bitterroot N directly applied towards excavator rental and operation contract, laborer, seed, fertilizer, mulch and mobilization of the project work will be conducted on Bitterroot N directly applied towards excavator rental and operation contract, laborer, seed, fertilizer, mulch and mobilization of the project work will be conducted on Bitterroot N directly applied towards excavator rental and operation contract, laborer, seed, fertilizer, mulch and mobilization of the project work will be conducted on Bitterroot N directly applied towards excavator rental and operation contract, laborer, seed, fertilizer, mulch and mobilization of the project work will be conducted on Bitterroot N directly applied towards excavator rental and operation contract, laborer, seed, fertilizer, mulch and mobilization of the project work will be conducted on Bitterroot N directly applied towards excavator rental and operation contract, laborer, seed, fertilizer, mulch and mobilization of the project work will be conducted by the project will be c	ally, all stream crossings v ational Forest lands. Fund	vill be re-
Deliverables	Task 1 Fund	ing
10 miles of road fully recontoured and decommissioned roads with reduced sediment contributions to the East Fork of the Bitterroot River watershed.	319 Funds	\$30,000.00
	Non-Federal Match	\$20,000.00
	Other Federal Funds	\$50,000.00
	Total Cost	\$100,000.00
	Is Match Secured?	
Timeline July to October 2013 Match Source Bitterroot National Fores	t, Trout Unlimited, Mor	ntana FWP
Task 2 Title Project Monitoring		
Description		
The Bitterroot National Forest has conducted WEPP modeling on the forest in the past and plans to East Fork Bitterroot river project. With the help of TU staff, the FS will collect on the ground data document and treatment areas. The modeling would show the definition of the design of the past and plans to	umenting site condition	
tons/year which will then be submitted to DEQ in the STORET database system.	crease in sediment cor	
tons/year which will then be submitted to DEQ in the STORET database system.  Deliverables	crease in sediment cor	ntributions in
Deliverables  The WEPP model will compute spatial and temporal distributions of soil loss and deposition and provide an estimate of control soil loss and sediment yield of the project area.		ntributions in
Deliverables  The WEPP model will compute spatial and temporal distributions of soil loss and deposition and	Task 2 Fund	ing
Deliverables  The WEPP model will compute spatial and temporal distributions of soil loss and deposition and provide an estimate of control soil loss and sediment yield of the project area.	<u>Task 2 Fund</u> 319 Funds	ing \$2,000.00
Deliverables  The WEPP model will compute spatial and temporal distributions of soil loss and deposition and provide an estimate of control soil loss and sediment yield of the project area.	<u>Task 2 Fund</u> 319 Funds Non-Federal Match	ing \$2,000.00
Deliverables  The WEPP model will compute spatial and temporal distributions of soil loss and deposition and provide an estimate of control soil loss and sediment yield of the project area.	<u>Task 2 Fund</u> 319 Funds Non-Federal Match Other Federal Funds	ing \$2,000.00 \$5,000.00

**Section IV: Scope of Work** 

Task 3 Title Education and Outreach		10/3/12
Description		
The Bitter Root and West Slope chapters of Trout Unlimited will host a volunteer day in the East Fork mulch and fertilizer on the newly decommissioned roads. Intended outcomes of this event are to proservices and provide the Bitterroot and Missoula community an opportunity to participate in on the watersheds. TU has had success in hosting several planting and seeding volunteer days in the Bitte drawing from this same group of volunteers for the East Fork work. Volunteer days will include speal soils and restoration including informational handouts on project work.	ovide the Forest Service ground restoration of t erroot watershed and p	e in-kind :heir Ilan on
Deliverables	Task 3 Fund	ing
Education outreach delivered to 20 volunteers.	319 Funds	
	Non-Federal Match	\$5,000.00
	Other Federal Funds	
	Total Cost	\$5,000.00
	Is Match Secured?	
Timeline October 2013 Match Source Trout Unlimited	•	
Task 4 Title Sampling and Analysis Plan		
Description		
Representatives of the B.R. National Forest, Trout Unlimited will convene to develop a Sampling and EPA approved TMDL for the Bitterroot headwaters watershed. The SAP will follow guidelines provid Bureau (WQPB) and the EPA Office of Water, Wetland, and Oceans to ensure that final products meet requirements. Through short and long term post-restoration monitoring, the SAP will allow contract the project and include sampling design, project team responsibilities, and measures for quality assumptions.	ed by DEQ Water Quali state and federal data or to measure the effec	ty Planning quality
Deliverables	<u>Task 4 Fund</u>	ing
A completed SAPP and QAP developed with the assistance of MTDEQ.	319 Funds	\$5,000.00
	Non-Federal Match	
	Other Federal Funds	
	Total Cost	
	Total Cost	\$5,000.00
	Is Match Secured?	\$5,000.00

Match Source

Timeline

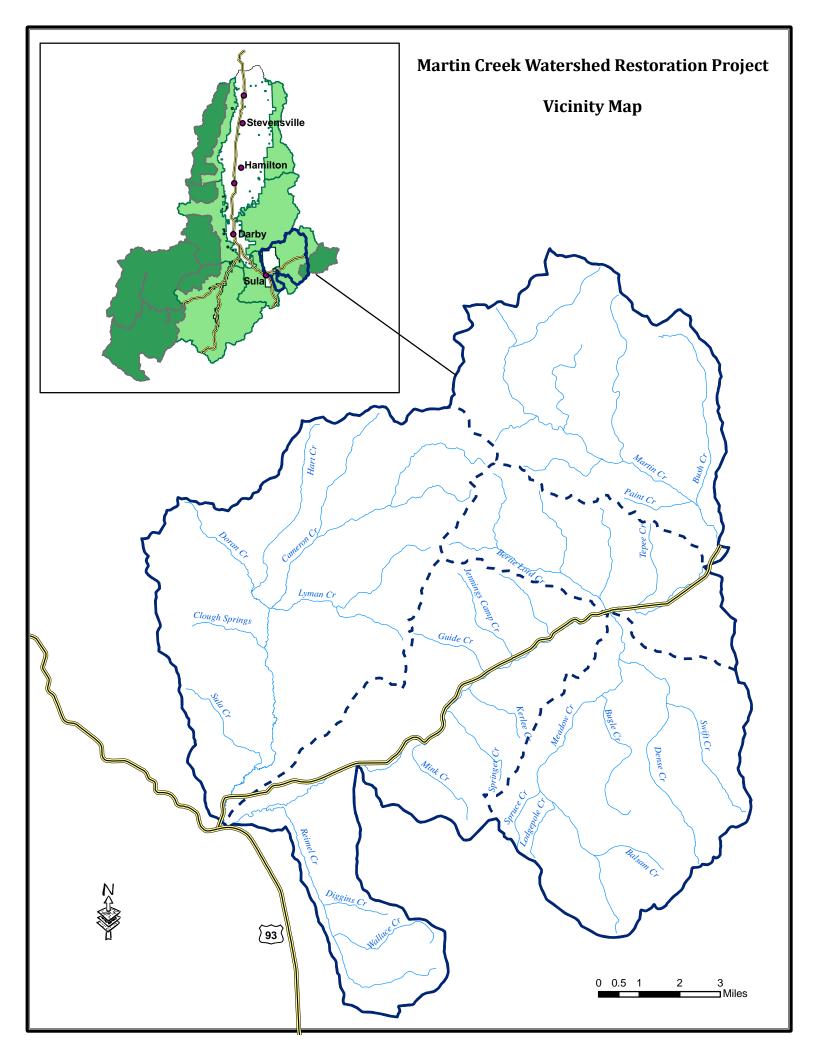
Is Match Secured?

# **Section V: Supporting Documents**

## A: Detailed Project Budget

	Cash Match		In-Kind Match					
Task Number and Specific Action	Private	State	Federal	Private	State	Federal	319 Funds	Total Costs
Task 1 - Mobilization			\$5,000					\$5,000
Task 1 - Road decommissioning		\$10,000	\$45,000				\$30,000	\$85,000
Task 1- Supplies and materials	\$5,000	\$5,000						\$10,000
Task 2 - Data collection				\$5,000			\$2,000	\$7,000
Task 2 - Data analysis						\$5,000		\$5,000
Task 3 - Volunteer restoration				\$5,000				\$5,000
Task 4 - Develop SAP							\$5,000	\$5,000
Task 5 - Contract Administration							\$3,000	\$3,000
TOTAL	\$5,000	<u>\$15,000</u>	\$50,000	\$10,000		\$5,000	\$40,000	\$125,000

**B: Project Milestone Table:** Please complete the following Project Milestone Table by entering task numbers and titles in the left  $h_{and}^{10/3/12}$ column, then check the box(es) for the appropriate quarter(s) and year(s) in which the task will take place. 2QT 30T | 40T | 10T | **20T** 3QT **4QT** 1QT **2QT 3QT** 4QT | 1QT Milestone 2013 | 2013 | 2013 | 2014 | 2014 | 2014 | 2014 | 2015 | 2015 | 2015 | 2015 | 2016 Task 1 - Project Implementation Task 2 - Sampling and Analysis Plan Task 3 - Project Monitoring Task 4 - Education and Outreach Task 5 - Contract Administration Please ensure that you submit a project map(s) and letters of support along with this Final Application form. If design drawings are available please provide those as well. For on-the-ground work please include copies of the applicable permits. **✓** D: Letters of Support E: Design Drawings F: Applicable Permits G: Comments: Please use the space provided for any additional information that may not have been captured by this application form. Definition of Decommissioning on Bitterroot National Forest Lands: 36 CFR 212.5 - Decommissioning roads involves restoring roads to a more natural state. Activities used to decommission a road include, but are not limited to, the following: reestablishing former drainage patterns, stabilizing slopes, restoring vegetation, blocking the entrance to the road, installing water bars, removing culverts, reestablishing drainage- ways, removing unstable fills, pulling back road shoulders, scattering slash on the roadbed, completely eliminating the roadbed by restoring natural contours and slopes, or other methods designed to meet the specific conditions associated with the unneeded road. Forest officials should give priority to decommissioning those unneeded roads that pose the greatest risk to public safety or to environmental degradation. Decommissioned roads are removed from the National Forest System and are returned to the productive land base. Typically decommissioned roads on the Bitterroot are actively treated through decompacting, recontouring, seeding, fertilizing, & mulching. All crossings are removed and natural drain is established. In some cases roads without crossings are naturally reclaimed by encroaching vegetation. On these roads, the road entrance would be recontoured to block access. Definition of Storage on Bitterroot National Forest Lands: Stored roads remain on the National Forest System and are closed to all access with gate, earth berm, or recontoured entrance.



Building 24, Fort Missoula Missoula, MT 59804-7297 406 329-3750

File Code: 2500

Date: September 28, 2012

Mr. Robert Ray Montana Department of Environmental Quality 1520 E. Sixth Avenue PO Box 200901 Helena, MT 59620-0901

## Dear Robert,

I would like to offer the support of the Bitterroot National Forest for Trout Unlimited's application for a Section 319 Grant to complete restoration work in the Martin Creek Watershed Restoration Project on the Sula Ranger District. The restoration work involves road decommissioning and storage activities in tributary watersheds of the East Fork of the Bitterroot River. The Bitterroot NF has currently entered into a supplemental project agreement with Trout Unlimited to complete this restoration work.

The 2012 Section 319 Grant request is for the decommissioning of 10 miles of forest roads located along tributaries to the East Fork Bitterroot River. Road decommissioning will involve decompaction, recontouring, seeding, fertilizing, slashing and/or mulching. Additionally, stream crossing rehabilitation will include culvert removal and re-grading to match historic contours. Monitoring activities will include Water Erosion Prediction Project (WEPP) modeling for pre and post project implementation to be collected and analyzed by the Forest Service and Trout Unlimited.

Over the last two years, the partnership between Trout Unlimited and the Bitterroot NF has completed over twenty miles of road decommissioning and additional miles of road storage in the Piquett Creek Watershed located on the West Fork Ranger District. The work has restored hydrologic processes, ensured the stabilization of road systems, and improved the recovery of native vegetation. Funds from the Section 319 Grant Program will be critical to complete the restoration treatments in the Martin Creek Watershed Restoration Project. Therefore, the Forest Service strongly supports this grant application. Thank you for your consideration.

Sincerely,

JULIE K. KING Forest Supervisor





9/27/12

Robert Ray Montana Department of Environmental Quality 1520 E. Sixth Avenue PO Box 200901 Helena, MT 59620

#### Dear Robert:

I understand that Trout Unlimited has applied for a 319 grant to help decommission 10 miles of forest roads along tributaries to the East Fork Bitterroot River. I have reviewed the list of streams where this work will occur and I support the effort.

The East Fork Bitterroot and tributaries upstream of Sula are one of the largest refuges for westslope cutthroat trout and bull trout in the Bitterroot drainage. We have monitored fish populations in this area for many years. Through radio telemetry we have documented the importance of these tributaries to the fluvial westslope cutthroat and bull trout in the East Fork Bitterroot River.

Efforts to reduce sediment and restore natural function to these streams should help maintain these populations in the face of factors such as warming stream temperatures and expanding populations of brown trout.

This project will reduce road densities and number of stream crossings which is needed to improve fish habitat and water quality. It compliments other projects that are attempting to restore natural stream riparian function on private land. Thank you for your consideration.

Sincerely,

Chris Clancy Fisheries Biologist

Chris Clancy



Robert Ray Montana Department of Environmental Quality 1520 E. Sixth Avenue PO Box 200901 Helena, MT 59620

September 24, 2012

Dear Robert,

The Bitter Root Water Forum (BRWF) is in support of Trout Unlimited's (TU) efforts to decommission 10 miles of forest roads along tributaries to the East Fork of the Bitterroot River. As the local watershed group serving the Bitterroot Valley, BRWF is well aware of the non-point source pollution problems facing the headwaters of our river and is supportive of groups like TU who take an interest in supporting the health of our watershed.

BRWF is currently developing a Watershed Restoration Plan that will address thermal loading and sediment impairments to the East Fork and its tributaries. TU's work to decommission roads will compliment our efforts to restore the health of the watershed and we recommend that they receive funding to implement this project.

BRWF and TU are both active partners in the Bitterroot Conservation Partnership (BCP), a collaboration of organizations dedicated to sharing information and assisting partner organizations so that we can maximize our conservation impact in the Bitterroot Valley. "Martin Creek Road Decommissioning" is an example of a project that is beneficial for the watershed but outside the current realm of BRWF activities; therefore we support our partner, TU, in pursuing this project and will provide assistance and volunteer recruitment as we are able.

Thank you for your consideration.

Sincerely,

Heather Mullee Executive Director

PO Box 1247 Hamilton, MT 59840

(406) 375-2272 brwaterforum@ bitterroot.net

www.brwaterforum.org

Executive Director Heather Mullee

AmeriCorps Member Kalena Gravina

Board of Directors
Dave Schultz,
President
Rob Johnson,
Vice President
Travis Martinez,
Treasurer
Ed Snook,
Secretary
Al Pernichele
Chris Clancy
Eddie Olwell