Project Proposal Request for FY 2007 - FY 2009 Funding (Revised Summer 2006)

Proposal 200705300: Upper Lolo Creek Watershed Restoration

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Part 2. Reviews

Part 1 of 2. Administration and Budgeting

Section 1: General Administrative Information

Process Information:	Date Proposal Submitted & Finalized	Status	Form Generator
	December 17, 2005	Finalized	Scott Spaulding

Proposal Type:	New
Proposal Number:	200705300
Proposal Name:	Upper Lolo Creek Watershed Restoration
Agency, Institution or Organization:	US Forest Service: Lolo National Forest
Short Description:	Decommission roads in the Upper Lolo Creek Watershed for resident fish benefit. The primary objective is to reduce cumulative effects associated with roads and road-related management activities, in large part fine sediment generation and delivery.
Information Transfer:	This restoration effort can be used as a model for other Forest watersheds that are water quality impaired primarily from road related effect, and in need of remedial action. Results and potential benefits will help refine future water quality restoration plans and gage the value and feasibility of achieving current TMDL water quality targets. Lots of emphasis has been placed on the value of road decomissioning with data at regional and site specific scale indicating problems associated with roads. This project would help document watershed-scale benefits associated with road decomissioning.

Project Proposal Contacts

Contact	Organization	Address	Phone/Email	Roles	Notes
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Section 2: Project Location

Sponsor Province:	Mountain Columbia	ARC Province:	No Change
Sponsor Subbasin:	Bitterroot	ARC Subbasin:	No Change

Latitude	Longitude	Waterbody	Location Description	County/State	Subbasin	Primary?
46.7305	114.5307	stream	Upper Lolo Creek Watershed. Lolo Creek is a tributary to the lower Bitterroot River, tributary to the upper Clark Fork River. The lat/lon is for the mouth of Granite Creek watershed a 6th-field HUC whose confluence with the West Fork Lolo Creek is the downstream extent of the project area	Missoula, Montana	Bitterroot	Yes

Section 3: Focal Species

Primary	Secondary	Additional Species
Bull Trout Westslope Cutthroat		

Section 4: Past Accomplishments for Each Fiscal Year of This Project

This proposal is for funding a new project, and has no past accomplishments.

Section 5: Relationships to Other Projects

Funding Source	Related ID	Related Project Title	Relationship
Other: Montana Fish Wildlife and Parks	[no entry]	West Fork Lolo Creek Large Woody Debris Addition	This project was jointly implemented by Montana Fish Wildlife and Parks, Lolo National Forest and Montana Trout using funds from all three sources. Large woody debris clusters were experimentally added to an of over-simplified section of main Westork Lolo Creek. The project was experiemental in nature evaluating the benefit of added complexity on stream channel form, habitat diversity and quality, and sustainability, and fish density responses.
Other: MT DEQ	TMDL	Water Quality Restoration Plan and Total Maximum Daily Loads for the Upper Lolo Creek TMDL Planning Area	This recent assessment of current stream condition and impairments provides much a good information base for channel geomophic and habitat condition, and sediment loads, that can be teired from for additional monitoring of this proposed project.

Section 6: Biological Objectives

Biological Objective	Full Description	Associated Subbasin Plan	Strategy	Page Nos
Enhance ecological diversity and spp viability	Protect, enhance, and restore native fish habitat function to maintain or enhance ecological diversity and long-term viability of native fish species including bull and westslope cutthroat trout using a watershed-based approach.	None	Implement fish habitat protection, restoration, and enhancement measures including road decommissioning, road crossing removal, and stream crossing upgrades to allow for aquatic organism passage and proper stream function at the crossing location.	[Pg no blank]
Protect and restore native resident fish	Protect and restore native locally adapted resident species including the ESA threatend bull trout and westslope cutthroat trout.	None	Decommission and upgrade roads to 1) reduce delivery of fine sediments to a level equivalent to the fine sediment levels of reference streams, and 2) to improve channel stability to a level equivalent to that of reference streams identified in TMDL WQRP.	[Pg no blank]

Protect and restore native resident fish	Protect and restore native locally adapted resident species including the ESA threatened bull trout and Westslope cutthroat trout.	None	Replace 7 priority fish passage barriers in the upper Lolo Creek watershed to re-establish population segment connectivity and improve opportunities for increased life history diversity.	[Pg no blank]

Section 7: Work Elements and Associated Biological Objectives

Work Element Name	Work Element Title	Start Date	End Date	Estimated Budget
Produce Environmental Compliance Documentation	Produce the Upper Lolo Watershed Restoration Environmental Analysis (EA)	10/1/2007	12/31/2007	$55,000

Description

Includes internal and external scoping, issue identification, multi resource input for exisitng condition and environmental consequences specialist reports, response to comments, and producition of the decision memo

Biological Objectives	Metrics
Enhance ecological diversity and spp viability Protect and restore native resident fish	*No Metrics for this Work Element*

Decommission Road	Decommission approximately 22.3 miles of road in FY2009 in the West Fork Lolo Creek Subwatershed of the Upper Lolo Creek project area.	7/15/2009	9/30/2009	$68,000

Description

Approximately 22.4 miles of road in the West Fork Lolo Creek sub-watershed (6th field HUC) will be decomissioned in FY2009. Approximately 80% of these roads will be decomissioned to a Lolo National Forest level III standard, that includes obliterating/recontouring the first 100 feet of the entrance, deep ripping the road prisim for improved infiltration and surface decompaction, removal and restoration of all drainage crossings, and reseeding with native seed mix. Approximately 15% of these roads will recieve a level IV treatment level that is like the level III described above but with locations of full recontouring where road segment is unstable or near a stream. The remainder of roads will recieve the highest standard of closure at the level V standard that includes complete recountour of the road prism and stream crossing restoration, and the addition of large woody material and native seed to facilitate surface stability and productivity. Approximately 12 large stream crossings will be removed.

Biological Objectives	Metrics
Enhance ecological diversity and spp viability Protect and restore native resident fish	* # of road miles decommissioned : **22.3 miles**

Decommission Road	Decommission approximately 30 miles of road in FY2008 in the East Fork Subwatershed of the Upper Lolo Creek project area	7/15/2008	9/30/2008	$100,000

Description

Approximately 30 miles of road in the East Fork sub-watershed (6th field HUC) will be decomissioned in FY2008. Approximately 80% of these roads will be decomissioned to a Lolo National Forest level III standard, that includes obliterating/recontouring the first 100 feet of the entrance, deep ripping the road prisim for improved infiltration and surface decompaction, removal and restoration of all drainage crossings, and reseeding with native seed mix. Approximately 15% of these roads will recieve a level IV treatment level that is like the level III described above, but with locations of full recontouring where road segment is unstable or near a stream. The remainder of roads will recieve the highest standard of closure at level V standard that includes complete recountour of the road prism and stream crossing restoration, and addition of large woody material and native seed to facilitate surface stability and productivity. Approximately 13 large stream crossings will be removed.

Biological Objectives	Metrics
Enhance ecological diversity and spp viability Protect and restore native resident fish	* # of road miles decommissioned : **30.0 miles**

Decommission Road	Decommission approximately 32.4 miles of road in FY2007 in the Granite Creek Subwatershed of the Upper Lolo Creek project area.	7/15/2007	9/30/2007	$108,000

Description

Approximately 32.4 miles of road in the Granite Creek sub-watershed (6th field HUC) will be decomissioned in FY2007. Approximately 80% of these roads will be decomissioned to a Lolo National Forest level III standard, that includes obliterating/recontouring the first 100 feet of the entrance, deep ripping the road prisim for improved infiltration and surface decompaction, removal and restoration of all drainage crossings, and reseeding with native seed mix. Approximately 15% of these roads will recieve a level IV treatment level that is like the level III described above but with locations of full recontouring where road segment is unstable or near a stream. The remainder of roads will recieve the highest standard of closure at the level V standard that includes complete recountour of the road prism and stream crossing restoration, and addition of large woody material and native seed to facilitate surface stability and productivity. Approximately 12 large stream crossings will be removed.

Biological Objectives	Metrics
Enhance ecological diversity and spp viability Protect and restore native resident fish	* # of road miles decommissioned : **32.4 miles**

Install Fish Passage Structure	Replace 7 priority fish passage barriers	10/1/2007	12/30/2008	$191,500

Description				
Montana Trout in cooperation with the Lolo National Forest, the Lolo Watershed Group, and Plum Creek Timber is spearheading efforts to generate funds to replace 7 prioirty fish passage barriers in streams throughout the upper Lolo Creek Watershed area that encompasses the three subwatesheds (Granite, West Fork Lolo, and East Fork Lolo creek watershsheds)				
Biological Objectives		Metrics		
Protect and restore native resident fish		* # of miles of habitat accessed: **12.5**		
Manage and Administer Projects	Decommission approximately 22.3 miles of road in FY2009 in the West Fork Lolo Creek Subwatershed of the Upper Lolo Creek project area.	1/1/2009	9/30/2009	$20,400
Description				
Cover administrative costs of putting together contract packages and overseeing this contract on the ground.				
Biological Objectives		Metrics		
Enhance ecological diversity and spp viability Protect and restore native resident fish		*No Metrics for this Work Element*		
Manage and Administer Projects	Decommission approximately 30 miles of road in FY2008 in the East Fork Subwatershed of the Upper Lolo Creek project area.	1/1/2008	9/30/2008	$30,000
Description				
Cover administrative costs of putting together contract packages and overseeing this contract on the ground.				
Biological Objectives		Metrics		
Enhance ecological diversity and spp viability Protect and restore native resident fish		*No Metrics for this Work Element*		
Manage and Administer Projects	Decommission approximately 32.4 miles of road in FY2007 in the Granite Creek Subwatershed of the Upper Lolo Creek project area.	1/1/2007	9/30/2007	$32,400
Description				
Cover administrative costs of putting together contract packages and overseeing this contract on the ground.				
Biological Objectives		Metrics		
Enhance ecological diversity and spp viability Protect and restore native resident fish		*No Metrics for this Work Element*		
Manage and Administer Projects	Grant and Agreement Administration Overhead	10/1/2006	9/30/2009	$86,160
Description				
Overhead at 20% for administering the grant for the amount of funds requested from the CRB for this project. Amount requested will be split up in 3 year segments.				
Biological Objectives		Metrics		
Enhance ecological diversity and spp viability Protect and restore native resident fish		*No Metrics for this Work Element*		
Collect/Generate/Validate Field and Lab Data	Collect field monitoring physical and biologiacal data for three years.	1/1/2007	12/31/2009	$83,499
Description				
Entails the establishment of 4 permanent sites at the mouths of major sub-watershedper to gather suspended sediment data monthly from April to the end of September. 9 sites accross the upper watershed to collect annually, stream channel metric data including channel cross sections, pebble counts, fines accumulation, and channel stability. This element also, includes monitoring permanent fish sites during the same project period and collection of data that includes fish population estimates, fish assemblage structure, and spawning surveys. We will use 2 GS-5 hydro techs for approx 8 weeks per year and 2 GS 5 fish techs at 5 weeks per year. Plus 1 GS 11 bio/hydro for oversight at two weeks per year. This also includes the $6k associated with pressure transducer acquisition and ISCO instrrucment calibration.				
Biological Objectives		Metrics		
Enhance ecological diversity and spp viability Protect and restore native resident fish		Primary R, M, and E Type: **suspended, bedload sediment and channel stability**		

Section 8: Budget

Itemized Estimated Budget

Item	Note	FY 2007 Cost	FY 2008 Cost	FY 2009 Cost
Other	Construction costs	$108,000	$100,000	$68,000
Supplies	suspended sediment sampling equipment refurbishing	$6,000	$ 0	$ 0
Personnel	1 GS-11 engeneering contract generator and administrator	$32,400	$30,000	$20,400
Personnel	4 GS 5 techs for monitoring field work and data entry (2 hydro and 2 fish), and 1 GS-11 hdyro/fish bio for monitoring oversight and training.	$25,833	$25,833	$25,833
Personnel	Completion of NEPA document	$55,000	$ 0	$ 0
Capital Equipment	Includes all details of pipe acquisitoin, project design, contractor selection, and design and oversight spearheaded by the partner of Montana Trout. Also, $2,500 for flow stage pressure transducer	$191,500	$ 0	$ 0
Overhead	Overhead for grant adminsitration	$28,720	$28,720	$28,720
	Totals	$447,453	$184,553	$142,953

Total Estimated FY 2007-2009 Budgets

Total Itemized Budget	$774,959
Total Work Element Budget	$774,959

Cost sharing

Funding Source or Organization	Item or Service Provided	FY 2007 Est Value ($)	FY 2008 Est Value ($)	FY 2009 Est Value ($)	Cash or in-kind?	Status
EPA 319	acquisition of 7 new crossing structures	$85,000	$ 0	$ 0	Cash	Under Review
Forest Service	NEPA EA that will cover all road decomissioning, improvement and passage improvement efforts	$55,000	$ 0	$ 0	In-Kind	Confirmed
Forest Service	Survey, design, replacement, and monitoring of 7 new crossing structures.	$68,000	$ 0	$ 0	In-Kind	Under Review
Montana Trout	remainger of funds needed crossing structe acquisition and replacement	$50,000	$ 0	$ 0	Cash	Under Development
	Totals	$258,000	$ 0	$ 0		

Section 9: Project Future Costs and/or Termination

FY 2010 Est Budget	FY 2011 Est Budget	Comments
$383,000	$705,000	For upgrades on remaining 10 priority fish passage structures, full BMP compliance on a total of 34 open roads, and gravel surfacing on another 11 miles of road. Additional prioritzation will likely occur to make outyear implementation more feasible.

Future Operations & Maintenance Costs

New crossing stucutrues will be the operation and maintenance responsibility of both the Lolo National Forest and Plum Creek Timber in perpetuity.

Termination Date	Comments
FY 2011 or 12	

Final Deliverables

Annual progress reports will be made on project implementation effectiveness and pre and on-going implementation monitoring of fish and water metrics. The final report will present a synthesis of physical habitat variables including watershed sediment generation and storage information, stream channel stability condition and trends, and fish population assemblage, density and spawning trends.

Section 10: Project Documents

Document	Type	Size	Date
Fix-it Loop Documents			
Response to_ISRP_commet_ULCWR_	doc	28 kb	7/11/2006

Decision_Notice_Upper_Lolo_Ck_Watershed_Rest_EA	pdf	83 kb	1/8/2006

Documents Originally Submitted with this Proposal:

Narrative for proposal 200705300	doc	300 kb	1/10/2006
200705300 map	pdf	1.6 M	1/10/2006

Part 2 of 2. Reviews of Proposal

Administrative Review Group (ARG) Results

Account Type: Expense	No changes were made to this proposal

BPA's *in lieu* Funding Review of new project proposals (August 3, 2006) [Download letter and table]

BPA's *in lieu* Rating: 1.0
Approx. BPA share of total costs: BPA 70%(75)
Status of Cost Share: Mixed

Notes: FS road mitigation; assume covered by BPA-FS MOU

NPCC Final Funding Recommendations (October 23, 2006) [Full NPCC Council Recs]

FY 2007 NPCC Rec	FY 2008 NPCC Rec	FY 2009 NPCC Rec	Total NPCC Rec
$ 0	$ 0	$ 0	$ 0
Budget Type:	Expense		
Budget Category:	ProvinceExpense		
Recommendation:	Do Not Fund		
NPCC Comments:			

NPCC Draft Funding Recommendations (September 15, 2006) [Full NPCC Council Recs]

FY 2007 NPCC Rec	FY 2008 NPCC Rec	FY 2009 NPCC Rec	Total NPCC Rec
$ 0	$ 0	$ 0	$ 0
FY 2007 MSRT Rec	**FY 2008 MSRT Rec**	**FY 2009 MSRT Rec**	**Total MSRT Rec**
$ 0	$ 0	$ 0	$ 0
Budget Category:	ProvinceExpense		
NPCC Comments:			
Local or MSRT Comments: Oversight group did not rank this project because there are no federal hydropower impacts and no subbasin plan for the subbasin in which the project is proposed.			

Independent Scientific Review Panel Final Review (August 31, 2006) [Download full document]

Recommendation: Fundable

Comments: This could be a model project for "protect and restore" efforts having to do with road de-commissioning. Overall, concerns have been addressed including a positive response to a suggestion for a Ph.D. student to evaluate the many data sets accumulated during the project. The spraying of an herbicide prior to disturbance may be useful, depending on the season; however, the most important element will be suitable re-vegetation after disturbance, as noted in some of the public comment. Fertilization may benefit weeds more than native species and is an expense that could probably be eliminated. Mulching with weed free straw may be a more effective use of funds.

Independent Scientific Review Panel Preliminary Review (June 2, 2006) [Download full document]

Recommendation: Response requested

Comments: This appears to be a good proposal, but the ISRP requests a response on a couple of issues. Is this proposal going to reduce the overall road density of the watershed within 300 meters of the river? If new roads are going to be put in, are they going to be further than 300 meters from the rivers? The ISRP needs assurance that other (new) roads will not impact the system, or that impacts will be addressed. Good monitoring and evaluation is included in the proposal. Sediment monitoring is a critical aspect of evaluating this project, and the reactivation of the earlier sediment-monitoring program is applauded. The proposal should also emphasize a weed management plan. There is no subbasin plan to frame this project, but the general strategies in the proposal are consistent with the Council's 2000 Fish and Wildlife Program. Perhaps this project would lend itself to a Ph.D. Dissertation because much useful information should be generated.

Please respond to reviewer's questions outlined in the previous paragraph.