

# **East Sheep FS Road 5160 Culvert Replacement Project**

## **Proposal**

02/01/2016

Contact: Joe Platz

### **1. Project Name: East Sheep FS Road 5160 Culvert Replacement Project**

The project is located on Sheep Creek, on lands administered by the US Forest Service.

### **2. Applicant:**

US Forest Service (USFS), LaGrande Ranger District; Attn: Joe Platz; 3502 HWY 30; LaGrande, OR 97850.  
Email: [jplatz@fs.fed.us](mailto:jplatz@fs.fed.us). Phone Number: 541-962-8571. Fax Number: 541-962-8580.

### **3. Participating Landowner(s) and Agencies:**

- (1) USFS; Attn: Joe Platz; 3502 HWY 30, LaGrande, OR 97850; (541) 962-8571; Fax: (541) 962-8580
- (2) Grande Ronde Model Watershed, Lyle Kuchenbecker; 1114 J Ave., La Grande, OR 97850; 541-663-0570; Fax: 541-962-1585
- (3) Bonneville Power Administration, Tracy Hauser; P.O. Box 3621; Portland, OR 97208; PH 503-230-4296; FAX 503-230-4564

### **4. Project Contact(s):**

#### Technical contact(s):

Joe Platz: 3502 HWY 30, LaGrande, OR 97850; [jplatz@fs.fed.us](mailto:jplatz@fs.fed.us); (541) 962-8571

#### Administrative contact(s):

Bill Gamble: 3502 HWY 30, LaGrande, OR 97850; [bgamble@fs.fed.us](mailto:bgamble@fs.fed.us); (541) 962-8582

### **5. Project Location:**

The East Sheep FS Road 5160 Culvert Replacement Project is located approximately 23 miles southwest of the town of La Grande, Oregon on National Forest System lands adjacent Sheep Creek and the East Fork of Sheep Creek in T6S. R35E, Sections 12, 22, 23, 26, & 36. These streams are located within the Sheep Creek subwatershed, which are within the Upper Grande Ronde watershed.

### **6. Project Objectives:**

- Improve passage for steelhead, chinook and bull trout.
- Improve natural flow pattern.
- Reduce the risk of culvert failure.

### **7. Project Description**

#### Introduction

Sheep Creek and East Sheep Creek is spawning and rearing habitat for summer steelhead and is designated critical habitat for bull trout. Spring/summer chinook spawning and rearing habitat is located with Sheep Creek. Redband trout also exist within the above stream.

#### Existing condition

The 5160 culvert on Sheep Creek is currently undersized and does not pass fish at all life stages.

### **Project Description:**

- 1) **5184100** – Replace culvert to provide for adequate fish passage, allow for a natural streambed and meet bankfull criteria. Proposed for implementation in 2018.
- 2) **Junction of 5184 and 5182** – Install bottomless pipe arch to replace the bridge, remove user built trails and stop motor vehicle use in the stream. Funded through USFS funds. Implementation would occur in 2016.
- 3) **5182510** – Replace culvert to provide for adequate fish passage, allow for a natural streambed and meet bankfull criteria. Funded through CTUIR funds. Implementation would occur in 2016.
- 4) **5182500** – Replace culvert to provide for adequate fish passage, allow for a natural streambed and meet bankfull criteria. Proposed to be funded for implementation in 2018.
- 5) **5184350** – While not needed for fish passage, this culvert is deteriorating and would be replaced to provide for additional flow passage and longevity. Funded through USFS funds. Implementation would occur in 2016.
- 6) ***5160 – Replace and realign culvert with a larger culvert to adequately handle high flows, prevent flooding and maintain aquatic organism passage. Proposed to be funded through BPA funds. Implementation would occur in 2016.***

#### Highlighted Construction requirements:

- a. Finished road grade shall match the existing road grade.
- b. All tree, shrub, brush removal shall be coordinated with a Forest Service fish biologist or hydrologist prior to removal.
- c. When reconstructing the stream channel, consult with District resource specialists as necessary to achieve final grades and layouts as agreed to by the contracting officer.
- d. Contractor shall use the existing roadway for a staging area.
- e. All material within the existing bankfull width and the ordinary high water mark shall be streambed simulation material, other than the surface course aggregate under the footings.
- f. A USFS fish biologist or hydrologist will be on site when the stream channel and streambed are constructed. The biologist or hydrologist will ensure that the substrate is sufficient to pass fish and that the material is installed properly to streambed grade level.
- g. All instream work will be completed during the instream work window (July 1 – July 31) of one year.
- h. The dewatering plan shall minimize sediment from entering the stream, maintain stream flows downstream of the work area, and shall be designed to minimize impact on construction of the new culvert.
- i. Fish will be salvaged prior to project implementation with appropriate block nets installed. An electroshocker will be used to salvage the fish. The fish will be placed downstream of project operations. All fish salvage operations will be supervised by a Forest Service fish biologist.
- j. Rehabilitate the site with native seed, mulch and native conifer/deciduous seedlings.

### Benefits

Benefits include: This project would replace 5 culverts and replace an old bridge site with a fish passable culvert. Four of the six culverts would be replaced in 2016. The remaining 2 culverts would be proposed for replacement in 2018. All of the work will be completed within the immediate vicinity of the culverts. As a

result of this project, there will be 3 miles of chinook spawning and rearing habitat and 9 miles of steelhead spawning and rearing habitat with improved fish passage.

### Project Maintenance

Maintenance of the culverts would be completed by the USFS (Mark Gomez). Maintenance would involve assessing the culvert stability, erosion concerns, associated damage and debris clogs on an every other year basis. Maintenance will occur, as needed, to address any of the concerns identified in the bi-yearly assessment. Maintenance may include: cleaning debris, stabilizing slopes and streambank on the upstream and downstream ends of the culvert, stabilizing the road prism, and culvert repair.

### Permits

NEPA, ESA consultation with NMFS and USFWS, and permits from the US Army Corps of Engineers/Department of State Lands will be obtained for this project. All instream work will be performed in the instream work window, which is July 1 – July 31.

### Monitoring Plan -

- Photo points: Monitoring will involve photo points of before and after operations occur. Follow up photo points will occur at year 1 and year 3 after project completion. This monitoring will occur by Joe Platz.
- Culvert Assessment: An assessment of culvert stability, erosion concerns, associated damage and debris clogs will occur on an every other year basis. This monitoring will be conducted by Mark Gomez.
- Reports: A final report that describes the actual implementation will be completed in January of 2017. Subsequent monitoring and assessment reports will all be completed in January of the year they reside in. Reports will be completed by Joe Platz.

Work Dates – The design for the 5160 culvert is 75% complete and will be completed in the winter of 2016. The work will begin in June of 2016 and end in November of 2016. All instream work will be completed within the instream work window, which is July 1 – July 31.

## **8. Project Budget**

The project budget is attached.

## **9. Attachments**

Attachments include: (1) Project Budget, (2) Vicinity Map, (3) Project Description Map, (4) Photos, and (5) Letter.

**2016 Forest Service Budget**  
**EAST SHEEP FS ROAD 5160 CULVERT REPLACEMENT PROJECT**  
**May 1, 2016 - February 28, 2017**

	Qty	Unit	Unit Cost	2016 BPA Requested Funds	USFS Costs	Comments
<b>A. PERSONNEL</b>						
<i>Regular Staff:</i>				<b>\$0</b>	<b>\$46,035</b>	
NEPA staff	25.0	8 hr day @	\$291 /day		\$7,275	N,P,M,MA
Biological Technician (project lead)	10.0	8 hr day @	\$336 /day		\$3,360	N,P,M,MA,I,C
Engineer(s) (includes design)	100.0	8hr day @	\$354 /day		\$35,400	I,C,D
<b>B. VEHICLES</b>						
					<b>\$2,025</b>	
GSA lease	3 mo	@	\$275 /mo		\$825	I,C,M,MA
GSA mileage	3000 mi.	@	\$0.40 /mi		\$1,200	I,C,M,MA
<b>C. SERVICES AND SUPPLIES</b>						
				<b>\$0</b>	<b>\$170</b>	
Native Seed	5 lbs	@	10.00 /lb		\$50	MT
Mulch	20 bales	@	6.00 /bale		\$120	MT
Seedlings	100 seed.	@	1.25 /seed		\$125	MT
<b>D. SUBTOTAL</b>						
				<b>\$0</b>	<b>\$48,230</b>	
<b>E. INDIRECT COST</b>						
8.0%				<b>\$0</b>		
<b>F. SUBCONTRACTS</b>						
				<b>\$134,421</b>	<b>\$0</b>	
<b>G. TOTAL CONTRACT COST</b>						
				<b>\$134,421</b>	<b>\$48,230</b>	

**Comments**

N = NEPA

I = Implementation

C = Contract administration

P = Permits

CO = Coordination of BPA projects

M = Monitoring

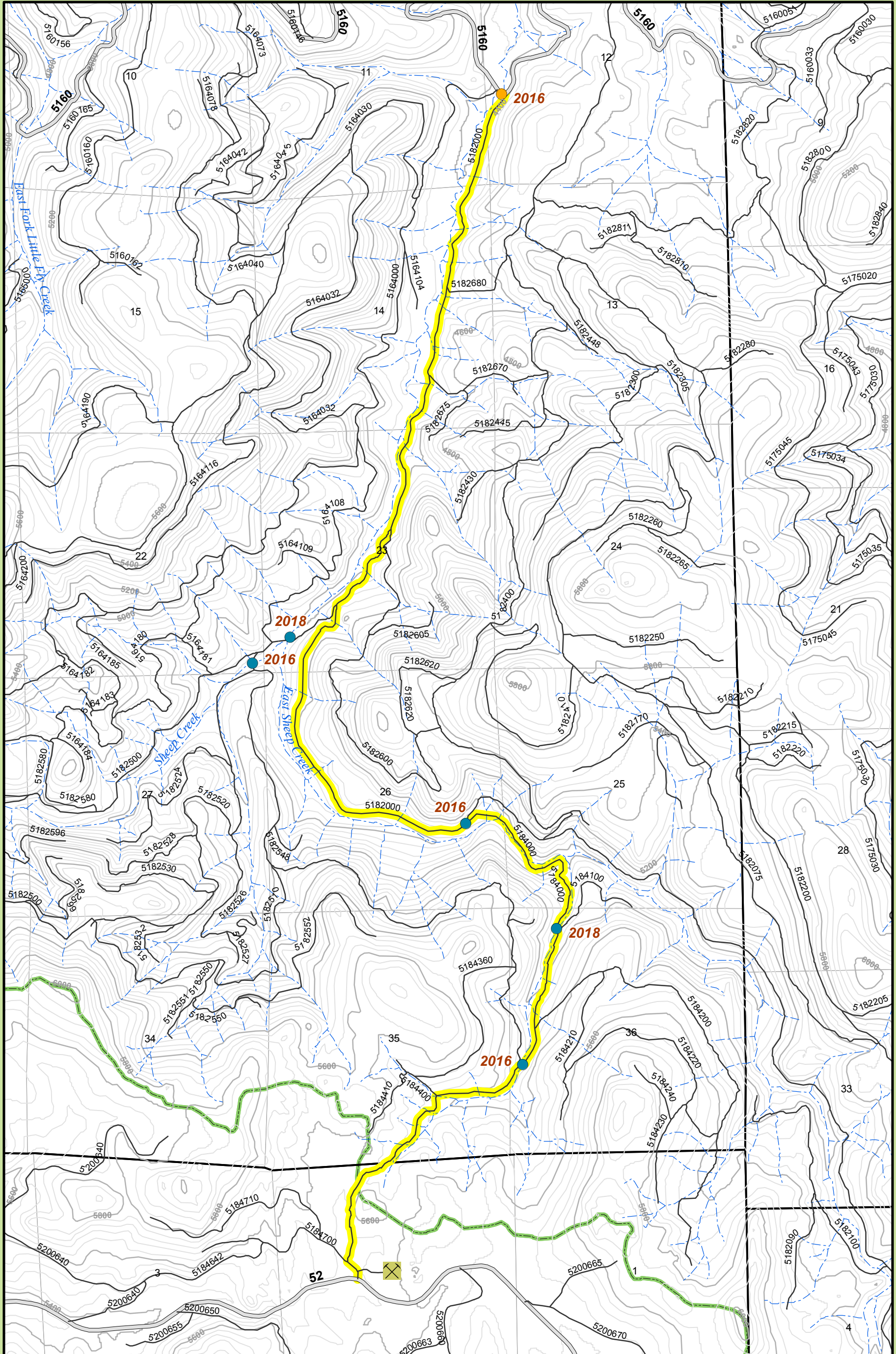
MA = Maintenance

MT = Materials for implementation

D = Design



# East Sheep FS Road 5160 Project



- |  |                      |
|--|----------------------|
| Culvert Replacement                      | Existing Roads       |
| Proposed BPA Funding Culvert Replacement | Main Streams         |
| Gravel Pit                               | District Boundary    |
| Gravel Lift                              | National Forest Land |
- Rd 5184 - 2.9 Miles  
Rd 5182 - 3.9 Miles

The Forest Service has a dedicated source of funding to address transportation related aquatic issues. It is called Legacy Roads Funding<sup>1</sup> and it may be used for a variety of aquatic issues that are up to the local unit to identify. This is a competitive program, with projects being selected based upon the Region 6 Aquatic Restoration Strategy and the National Watershed Condition Framework. The current three year cycle (2014-2016) was planned to be funded at \$30 million across Region 6. However, congress has not authorized the full program allotment in any of the 3 years. This year has been especially challenging. The Legacy Road funding was again not authorized at its full amount. This year the forest had planned to implement \$1.1 million worth of Aquatics/Transportation projects using \$700,000 of CMLG funds and \$400,000 of funds from various partners. When the forest's allotment of Legacy Roads funding came in at 50% of the planned allotment, tough choices were made. Projects in the North Fork John Day Watershed were pushed to 2017 and the full focus of the remaining \$350,000 was placed in the Sheep Creek watershed. As chance would have it, a unique opportunity to replace three major aquatic passage barriers in the Sheep Creek Watershed all in one year was created. While replacing three major culverts in one 4-week in-stream work window may seem daunting, specific effort was placed into selecting structures that could be quickly constructed. In fact performing several in the same area in this way will allow the forest to take advantage of the efficiencies of having a single contractor perform the work. Like in any procurement situation, the forest expects to see a 'volume discount' when building three of these structures in one year rather than building one each year over 3 years. This expected cost reduction will allow more work to be focused on sediment reduction activities in the watershed. The Forest Service is planning to recondition approximately 12 miles of road and refurbish/construct sedimentation Best Management Practices (BMPs) along the entire route from Forest Road 5160 to Forest Road 52. Of Course none of this is possible without the long standing relationship between the Wallowa-Whitman National Forest, Grande Ronde Model Watershed and the Confederated Tribes of the Umatilla Indian Reservation. Without these two major partners in aquatic restoration, this project would have just a small percentage of its planned impact. It is because of your efforts that we are able to ensure fish passage and sediment delivery reduction on the scale I have talked about in this letter.

<sup>1</sup> Per appropriations law, CMLG (Legacy Roads) funds should be used to: reduce or eliminate road and trail impacts in environmentally-sensitive areas, particularly where they might affect water bodies that support community water supplies and/or threatened, endangered and sensitive species; and/or for urgently needed road repairs required due to recent storm events. More specifically, CMLG funds should be used to make progress towards Regional goals of protecting and restoring watersheds and aquatic ecosystems, meeting regulatory standards and agreements (e.g., Clean Water Act, ESA), and making the road and trail network more sustainable and durable. Funding activities include: aquatic organism passage; road decommissioning and storage; road or trail improvements and storm damage risk reduction (SDRR, or "storm proofing") treatments; and storm damage repair.







