Project Manager Report Approval Form

Purpose: Document public dollar investment to protect and restore healthy watersheds and natural habitats that support thriving communities and strong economies.

Date of Report: 6-7-2021 **Grant #** 219-5024-16570 **Project Manager** Coby Menton

Report type: PISR # 1 Progress # Quarterly # Other:

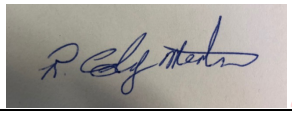
CHECK LIST	If NO, Explain
1. Review requirements noted in Special Conditions (Exh B) of the grant agreement to identify additional and/or different reporting requirements. Did Grantee meet these requirements? ☒ Yes ☐ No ☐ N/A	☐ **Progress Report** indicates grantee will not be able to meet project objectives described in grant scope of work. ☐ **PISR** special conditions were not met. ☐ **Other:** **Explain Why:**
2. Review PISR requirements noted in Exhibit D of the grant agreement. Did Grantee meet these requirements? ☒ Yes ☐ No ☐ N/A	☐ **PISR report** does not provide sufficient documentation to determine the status of OWEB investment. ☐ **Other:** **Explain Why:**
3. Photo points: Did Grantee fulfill the requirements for photo point monitoring (i.e. before and after photos located at consistent photo points, including a current photo)? ☒ Yes ☐ No ☐ N/A	☐ Photo points do not include all major project components. ☐ Photo points do not include project locations on each landowner site. ☐ Grantee is unable to locate photo point(s). ☐ Grantee is unable to access photo point location. ☐ Other: **Explain Why:**
4. Other requirement(s):	**Explain Why:**

REPORT APPROVAL

☐ **Progress report** demonstrates a trajectory for success in meeting project objectives. If not, report sufficiently indicates Grantee is taking action to increase likelihood for project success.

☒ **PISR** sufficiently describes project status to determine OWEB investment is in place and functioning as intended. If not, report sufficiently documents why, so as to inform future OWEB decisions.

Justification: Briefly explain how you resolved issues documented in the checklist and/or attach relevant communications. If you need more room, continue on reverse side.

Report Approved By:  Digitally signed by Coby Menton Date: 2021.06.07 14:18:36 -07'00' **Date**

Project Manager Signature

Monitoring report – Wallowa Mountain Loop Road (Bridge portion)

Application Number: 219-5024-16570

Submitted by: Grande Ronde Model WS Foundation

Budget Summary:
OWEB Amount Requested: $118,096
Total Project Amount: $8,010,736

Exhibit D - 1. Project Background and Assessment

The double culvert on Little Sheep Creek under Wallowa County Road 4602 at the intersection with State Route 350 in Wallowa County, Oregon was a passage barrier to ESA Listed fish including steelhead trout (*Oncorhynchus mykiss*) and bull trout (*Salvelinus confluentus*), as well as several other aquatic species. The structure did not meet fish passage requirement regulations as currently applied by ODFW, US Fish and Wildlife Service and National Marine Fisheries Service, specifically jump height and water velocity criteria. Fisheries are very important in the area, with great emphasis being placed on restoring habitat. BPA and others are spending millions of dollars on fisheries projects as part of the Biological Opinion for the Columbia River dams. Many culverts along the roadway were damaged or buried and required maintenance or replacement and a double culvert installation on Little Sheep Creek required fish passage provisions. Replacing the culverts with a channel spanning bridge restored access to 11-miles of habitat upstream. These culverts were an upstream velocity barrier to all fish at high flow and upstream movement at low flows due to jump height and shallow water depth inside the culverts. As debris collected at the top end of each culvert, jump heights were greater than 6-inches exceeding fish passage criteria. The jump height barrier was exacerbated annually by stream dewatering in the later part of the irrigation season as well as natural flow decline in mid and late summer.

Replacing two culverts on Little Sheep Creek with a free-spanning bridge continues to provide improved fish passage for ESA listed fish including steelhead trout (*Oncorhynchus mykiss*) and bull trout (*Salvelinus confluentus*), as well as several other aquatic species. In addition, the removal of the culverts (3) has improved sediment transportation along this reach of Little Sheep Creek and reduced sedimentation along 5-miles of Wallowa County Road 4602 adjacent to Little Sheep Creek. Restoring road surface condition reduces maintenance and operation costs as well as improving safety and mobility. All actions were identified in regional planning and watershed restoration documents. The following objectives continue to be realized with this project.

Objective #1

Restored fish passage to 11-miles of Little Sheep Creek on Wallowa County Road 4602, at mile 0, where the road crosses Little Sheep Creek such that both State and federal fish passage criteria are met as currently applied.

Objective #2

Improved roadway drainage reducing erosion and sedimentation input to Little Sheep Creek along 5-miles of Wallowa County Road 4602 from State Highway 350 to the US Forest Service boundary.

Objective #3

Improved travel safety and mobility along Wallowa County Road 4602 from State Highway 350 to the US Forest Service boundary such that all forms of traffic including bicycles, motorcycles, passenger vehicles, RV's, and commercial equipment are accommodated with good visibility, adequate turn-outs, and a road surface of appropriate width and tread.

Exhibit D – 2. Grant agreement Conditions of Agreement from Exhibit B - 3.

(a) Photo points

Photo 1: Top left: standing downstream of double culvert (2018). At high flow water velocity high enough to preclude fish passage and at low flow water depth through culverts is to shallow to allow fish passage. Top right: new bridge following completion of project with improved fish passage (2019) and bottom left (2021)

Photo 2: Top left: standing upstream of double culvert (2018). Stream substrate and debris aggrades at top end of culverts causing a jump height barrier to fish passage. Top right: Upstream view of new bridge and improved fish passage (2019) and bottom left (2021).

Photo 3: Top left: Standing upstream of culverts (2018). Culvert on the left is a flood relief culvert for times of high flow or when the two primary culverts are plugged. All 3 culverts will be removed and replaced with a bridge. Top right. New bridge without the need for overflow culverts (2019 and bottom left (2021).

Photo 4: Top left: Close-up photo of culverts at upper end showing channel substrate build up, debris and compromised inlets (2018). Top right: Close-up photo showing lower velocity, ability for substrate and debris to transport (2019) and bottom left (2021).

Photo 5: Top left: Standing across State Route 350 and looking east at former road alignment (2018). 4602 road skew was eliminated, a turn off lane from SR 350 was constructed, and the bridge was installed at the approximate center of the road curve. Top right: New road alignment and bridge (2019) and bottom left (2021).

Photo 6. Drone imagery captured post project in 2020. The images show the improved sediment transportation and sorting as well as the new bridge alignment.

(b) The improved sediment transportation and sorting as a result of the project now provides appropriate substrate size for steelhead to spawn. This was observed while taking photo points in 2021 and from the drone imagery in Photo 6.
(c) Other than the photo points and drone imagery, there has been no additional data collected that is directly related to this project. However, the Nez Perce Tribe continues to supplement Little Sheep Creek with steelhead carcasses to benefit macroinvertebrate production and improve juvenile fish rearing conditions.

Exhibit D – 3. Maintenance or modifications since Project completion

Wallowa County Public Road maintenance crews did have to clean the borrow ditch along the eastern edge of road 4602 where the resurfacing occurred (see attached breakdown of cost). This work was supposed to be part of the contract with Western Federal Lands.

Exhibit D – 4. Accounting of costs associated with maintenance

The above road maintenance cost Wallowa County $54,010, which they will be getting reimbursed through original contractor Western Federal Lands.

Exhibit D – 5. Public awareness activities since completion report

There have been no public awareness activities since the completion report.

Exhibit D – 6. Lessons learned

Grass seed did not germinate on upstream left bank, leaving exposed soil. Reseeding this area during the fall or spring would help recover the disturbed area. Additional plantings of native riparian hardwoods would also speed the recovery of this site. The Grande Ronde Model Watershed will work with Wallowa County to explore options for reseeding and planting when the environmental conditions are suitable.

The project sponsor (Wallowa County) expressed concern that the right hand turn lane and angle of approach lack the width and curvature to accommodate large vehicles or vehicles towing trailers, potentially creating a traffic safety issue as these vehicles may still have to utilize highway 350 while turning onto the 4602 Wallowa Mountain Loop Road.

Exhibit D – 7. Project photos (see Exhibit D – 3. Photo points)

October 13, 2020

Mike,

The following are Wallowa County Road Department's costs for the ditch cleaning on the Wallowa Mountain Loop Road. The hourly rates are operated and maintained. I've included some photos of the work done. Due to wetland classifications where ditch cleaning was not allowed, several photos show where cleaning was stopped to protect the area. We also encountered a couple of areas that visually seemed to be wetlands, so we treated them as such. I believe the project was a success and feel our efforts will prolong the life of the road.

Our total linear measurement of treated ditch line was 10,235 feet. Our cost was driven up from our original assessment, to $5.28/linear foot. However, the wetland classification and visual wetland classification by plant and water presence cut the total linear footage. I am confident the entire ditch line of the project will perform to its optimum potential.

Thank you for your persistence, and your work to get this project going. Please call if you have any questions.

Sincerely,

Brandon Tanzey
Wallowa County Road Supervisor

		Quantity	Rate	Time	Total
Loop Road	**9/28/2020**				
Mobilization			$150.00	2	$300.00
			$105.00	2	$210.00
				Total =	$510.00
Loop Road	**9/29/2020**				
Truck		4	$105.00	10	$4,200.00
Excavator			$80.00	9	$720.00
D6D Dozer			$125.00	9	$1,125.00
Sign (per day)		8	$25.00	1	$200.00
Setup/Teardown			$300.00	1	$300.00
Flagger		2	$37.00	9	$666.00
Supervision			$65.00	5	$325.00
Travel Time		2	$57.00	1	$114.00
				Total =	$7,650.00
Loop Road	**9/30/2020**				
Truck		4	$105.00	10	$4,200.00
Excavator			$80.00	9	$720.00
D6D Dozer			$125.00	9	$1,125.00
Broom			$70.00	1	$70.00
Sign		8	$25.00	1	$200.00
Setup/Teardown			$300.00	1	$300.00
Flagger		2	$37.00	9	$666.00
Supervision			$65.00	2	$130.00
Travel Time		2	$57.00	1	$114.00
				Total =	$7,525.00
Loop Road	**10/1/2020**				
Truck		4	$105.00	10	$4,200.00
Excavator			$80.00	9	$720.00
D6D Dozer			$125.00	9	$1,125.00
Broom			$70.00	1	$70.00
Sign		8	$25.00	1	$200.00
Setup/Teardown			$300.00	1	$300.00
Flagger		2	$37.00	9	$666.00
Supervision			$65.00	0	$0.00
Travel Time		2	$57.00	1	$114.00
				Total =	$7,395.00

		Quantity	Rate	Time	Total
Loop Road	**10/5/2020**				
Truck		4	$105.00	10	$4,200.00
Excavator			$80.00	9	$720.00
D6D Dozer			$125.00	9	$1,125.00
Broom			$70.00	2	$140.00
Sign (per day)		8	$25.00	1	$200.00
Setup/Teardown			$300.00	1	$300.00
Flagger		2	$37.00	9	$666.00
Supervision			$65.00	0	$0.00
Travel Time		2	$57.00	1	$114.00
				Total =	$7,465.00
Loop Road	**10/6/2020**				
Truck		4	$105.00	10	$4,200.00
Excavator			$80.00	9	$720.00
D6D Dozer			$125.00	9	$1,125.00
Broom			$70.00	1	$70.00
Sign		8	$25.00	1	$200.00
Setup/Teardown			$300.00	1	$300.00
Flagger		2	$37.00	9	$666.00
Supervision			$65.00	4	$260.00
Travel Time		2	$57.00	1	$114.00
				Total =	$7,655.00
Loop Road	**10/7/2020**				
Truck		4	$105.00	10	$4,200.00
Excavator			$80.00	9	$720.00
D6D Dozer			$125.00	9	$1,125.00
Broom			$70.00	2	$140.00
Sign		8	$25.00	1	$200.00
Setup/Teardown			$300.00	1	$300.00
Flagger		2	$37.00	9	$666.00
Supervision			$65.00	0	$0.00
Travel Time		2	$57.00	1	$114.00
				Total =	$7,465.00

		Quantity	Rate	Time	Total
Loop Road	**10/8/2020**				
Truck		4	$105.00	10	$4,200.00
Excavator			$80.00	9	$720.00
D6D Dozer			$125.00	9	$1,125.00
Broom			$70.00	3	$210.00
Sign (per day)		8	$25.00	1	$200.00
Setup/Teardown			$300.00	1	$300.00
Flagger		2	$37.00	9	$666.00
Supervision			$65.00	0	$0.00
Travel Time		2	$57.00	1	$114.00
				Total =	$7,535.00
Loop Road	**10/12/2020**				
D6D Dozer			$125.00	2	$250.00
Mobilization			$150.00	2	$300.00
Supervision			$65.00	4	$260.00
				Total =	$810.00
			Total Job Cost =		**$54,010.00**