

Lewis River Aquatic Fund Projects (SA 7.5.3.2) Project Closeout Report

Project Title: Lewis River Hydroelectric Project
8322 Fish Passage Culvert Replacement

Project Approved By: Aquatic Coordination Committee
4/3/07

Original Project Sponsor: USDA Forest Service

Project Funding \$80,000 ACC
\$24,000 Title II Funds
\$79,000 Legacy road funds

Project Description (work completed):

- Removed a culvert that was creating passage problems for fish on a tributary of Muddy River with a bridge. We originally planned to use a bottomless arch, but were able to secure additional funding from Legacy Roads grants to ensure full channel connectivity with a bridge. One mile of stream was reconnected to the Muddy River consisting of both rearing and spawning habitat for anadromous and resident fish, and potentially bull trout. This stream provides refugia from high water events for juvenile salmonids and provides cold water during warm summer months.

Workforce:

- **Personnel (by craft)**
- **Contractors:**

- USFS-Engineer 1
- USFS-Fish Biologist-1
- USFS- Hydrologist-1
- McNealy Contracting- 4

Schedule Summary: Planned Completion Date: September 2007
Actual Completion Date: October 2009

Problems Encountered:

- We changed the structure from a bottomless culvert to a bridge to allow for full channel restoration.
- Delay at factory on bridge components caused a six week delay in implementation.
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Things that went well:

- Good Contractor
- Minimal sediment in creek during replacement because creek was dewatered during project implementation.
- Restored 1 mile of cold water fish habitat connectivity

Work Not Completed:

- All work was completed.
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Lessons Learned:

- Order bridge parts well in advance of project to head off any factory delays.

*** Attachments (Photo Documentation):**

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*(Per National Marine Fisheries Service's Biological Opinion for Relicensing of the Lewis River Hydroelectric Projects):

Identify process or methodology the project will include and provide photo documentation of habitat conditions at the project site **before, during, and after** project completion.

- a. Include general views and close-ups showing details of the project and project area, including pre- and post-construction.
- b. Label each photo with date, time, project name, photographer's name, and documentation of the subject activity.

Proposed Road Decommissioning, Culvert Replacements & Culvert Removals

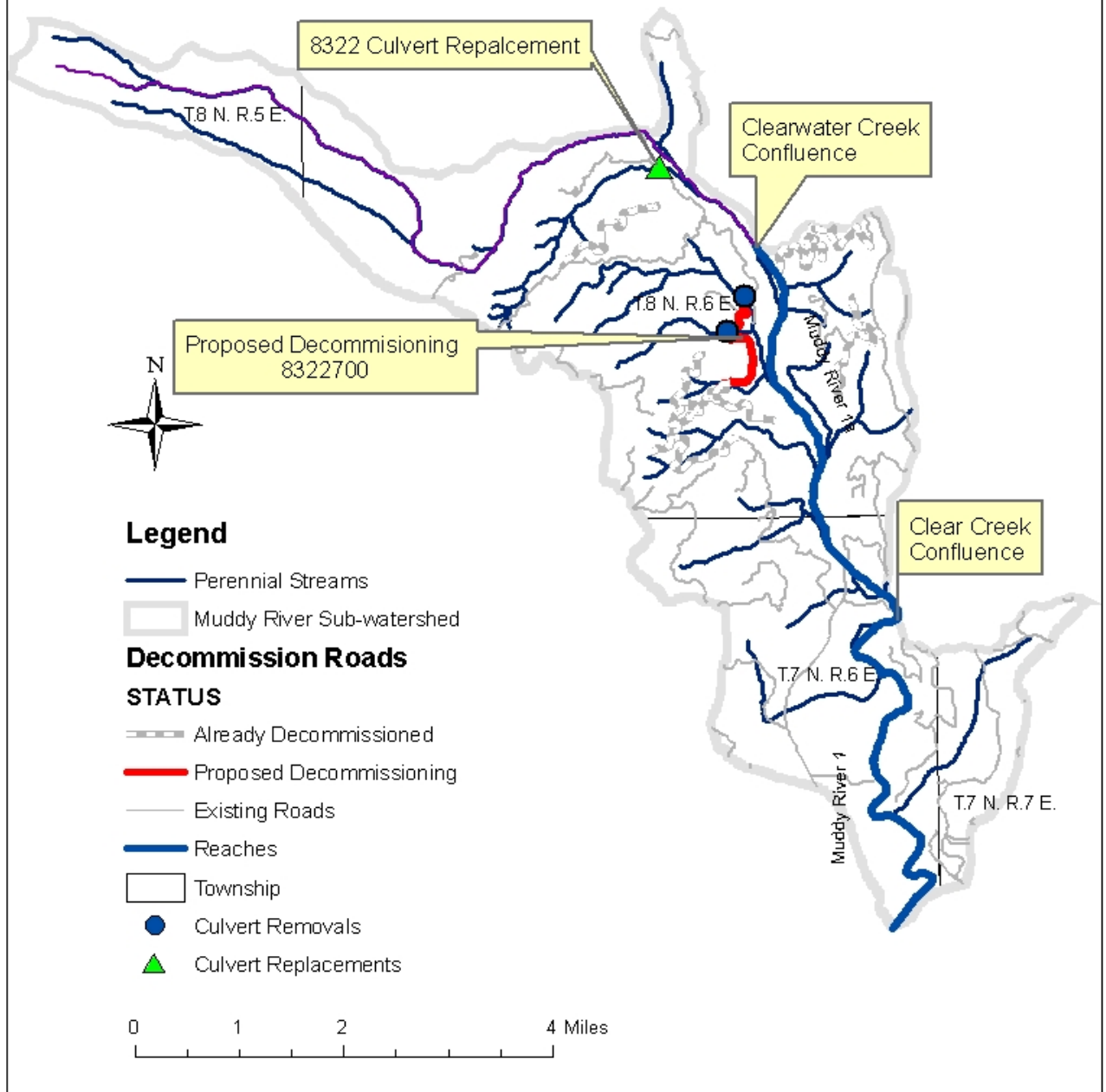


Figure 1. Map of Project Area.



Picture 1. Outlet of Culvert to be replaced. Tracy 2005



Picture 2. Inlet of culvert to be replaced. Tracy 2005



Picture 3. Culvert before replacement. Note kinked tree on left. Tracy 2005



Picture 4. New bridge has replaced the culvert. Note Kinked tree on left. Becker
10/2009



Picture 4. New bridge in place of old culvert. Becker 10/2009