

PROPOSED ACTION

The Craig Ranger District is proposing to complete riparian thinning, road storage, floodplain roughening, and instream channel rehabilitation projects in the Harris River Watershed (Map 1 and Table 1) in response to the Purpose and Need for action detailed in this Environmental Assessment (EA) (see page 4). The Purpose and Need responds to recommendations in Harris River Watershed Restoration Plan (HRWRP) completed in late 2006. The Harris River has been divided into three sub-basins: Upper Harris River; Fubar Creek; and Lower Harris River. While addressing watershed impacts, projects are also designed to improve visitor access and interpretation would provide the public a greater appreciation, education, and ownership of the forest and aquatic ecosystems.

The Forest Service proposes to implement rehabilitation projects with the goal of restoring sustainable ecological functions in the Harris River Watershed (Table 1, Table 2, and Appendix A of individual detailed project descriptions). Detailed project descriptions may be found in Appendix A. The proposed rehabilitation projects vary in scope, scale, and spatial influence. The projects would be timed to maximize, watershed recovery, project efficiency, and interdisciplinary goals while minimizing risk to existing resources. Whether the projects are large or small engineered projects with persistent long-term rehabilitation goals or short-term low cost projects, all proposed projects meet the basin rehabilitation strategy documented in the Harris River Watershed Restoration Plan document.

The Harris River Rehabilitation EA outlines the projects and suggests how they may be sequenced or prioritized such that overall basin rehabilitation will be most effective. The primary objectives for rehabilitation projects in the Harris River focus on reducing sedimentation from headwater tributaries to lower floodplain reaches, promoting healthy and stable fish and wildlife populations, while improving visitor access and interpretation opportunities. This would be accomplished through elimination of artificial fish barriers, reduction of and fill failure erosion potential from roads, promotion of instream processes that develop healthy fish habitat, reduction of stream bank erosion and diversion potential, improvement of hydrologic connectivity, wildlife emphasis thinning, and trail improvements. Projects proposed on or utilizing State property will require additional partnership development and agreements.

Timing of Project Action

Timing of the proposed action is critical to project implementation as work in streams is limited to seasonal windows because of fish emergence, fish return and weather. These windows must be used to implement in stream work between the periods when smolt emerge from last years spawn and the return of the present years adult spawning fish. These windows are different for each species so they correspond to a sequencing dependant upon fish presence in each stream.

| | |
|-------------------|------------------------|
| Pink/chum salmon | June 1 to August 3 |
| Coho salmon | June 15 to September 1 |
| Sockeye salmon | July 18 to August 15 |
| Steelhead | July 18 to August 15 |
| Cutthroat trout | June 25 to September 1 |
| Dolly Varden char | June 15 to September |

Note that the type of project sequencing is dependent upon whether the project *directly* or *indirectly* affects watershed processes, watershed management goals, and fish timing windows. Projects that directly affect watershed processes should be carefully applied in specific sequence such that impacts upstream are addressed first to ensure that sources of resource damage are addressed and to improve the chance of project successes downstream. Examples of projects that directly affect watershed processes include any instream work, projects that alter flow or immediately change sediment input or transport capabilities. Projects that indirectly affect watershed processes may be applied across the watershed independent of other project sequencing and may be guided under a different priority system that may include resource stresses, public access/interaction, and available funding. Examples of more indirect projects may include isolated treatment sites or long-term goal projects such as road storage, landslide stabilization, instream tributary large wood, or riparian thinning. Both direct and indirect projects will be critical to overall watershed rehabilitation for spatial, temporal, and economic beneficial effects.

The watershed rehabilitation projects proposed in this Environmental Assessment have the potential to provide jobs and help stimulate the local economy.

Table 1. Proposed Harris River Watershed Rehabilitation Action

| Harris River Watershed Restoration Proposed Project List From Harris River Restoration Plan | | | | | | | |
|---|--------------------|---|--------------------|--|---------------------|-------------------|---------------|
| Project Name | Sub-Basin | Ownership | Landscape Position | Project Type | Watershed Processes | Relative Priority | Length, Miles |
| Fubar Creek Instream Rehabilitation Phase II | Fubar Creek | Federal | Riparian | Instream | Hydro | High | 0.5 |
| 2024050 (South) Decommission/Fubar Creek Trail Designation & Improvement | Fubar Creek | Federal | Riparian | Recreation | Hydro | High | 0.7 |
| 2026000 & 2026200 Decom/Storage | Upper Harris River | Federal | Upper-Slope | Road | Hydro/Landslide | High | 2.1 |
| 2000220 Road Storage | Fubar Creek | Federal | Headwater | Road | Hydro/Landslide | High | 0.6 |
| 2024110 Decommission & Hydrologic Connectivity Restoration | Lower Harris River | Federal | Low-Slope | Road | Hydro | Med-High | 1.5 |
| 2024050 (North) Harris River Trail Upgrade/Stream Rehabilitation | Lower Harris River | Federal | Tributary | Instream/Recreation | Hydro/Instream | High | 1.4 |
| 2025100 Road Storage | Upper Harris River | Federal | Mid-Slope | Road | Hydro/Landslide | High | 0.8 |
| 2025000_RR1 Improvement Hydrologic Connectivity Restoration | Upper Harris River | Federal | Mid-Slope | Road | Hydro/Landslide | Low-Med | 1.8 |
| 2025000_RR2 Trail Improvement & Stream Bank Stabilization | Upper Harris River | Federal | Low-Slope | Instream/Recreation | Hydro | Med | 2.8 |
| Upper Harris River Mainstem LWD Structure-Sediment Routing | Basinwide | Federal | Riparian | Riparian | Riparian | High | 1.0 |
| 2024100_RR1 State Trail Improvement | Lower Harris River | State | Low-Slope | Road Hydrologic Connectivity | Hydro | Med-High | 1.0 |
| Tributary LWD Modifications and Enhancements | Basinwide | Federal | Low-Riparian | Instream | Hydro | High | 2.0 |
| Riparian Thinning & Floodplain Roughening | Basinwide | Federal | Riparian | Riparian | Riparian | High | -- |
| Lower Harris River Mainstem LWD Structure-Bank Stabilization | Basinwide | Federal | Riparian | Instream | Hydro | High | 2.0 |
| 2024185 Road Storage | Lower Harris River | Federal/State | Mid-Slope | Road | Hydro/Landslide | Med | 2.2 |
| 2024060_0.048L Road Storage | Lower Harris River | Federal | Mid-Slope | Road | Hydro | Med | 1.6 |
| 2024080_Harris Peak Road Storage | Lower Harris River | Federal | Mid-Slope | Road | Hydro/Landslide | Med-High | 1.4 |
| 2024080_0.06R&RA State Road Storage | Lower Harris River | State | Low-Slope | Road | Hydro/Landslide | High | 0.3 |
| Harris River Red Pipe Correction | All | Both | Low-Slope | Road/Instream | Biological | Low-Med | -- |
| 924_25.94R State Road Storage | Lower Harris River | State | Low-Slope | Road | Hydro | High | 0.2 |
| Treatment Summary (estimated quantities) | | | | Overall Proposed Accomplishment | | | |
| Culverts removed = 53 | | Fill imported, cy = 40 | | Road Storage/Stormproofing, mi = | | 9.2 | |
| New culverts installed = 20 | | Outslope/Reshape road, ft = 2,432 | | Road Hydrologic Connectivity Restoration, mi = | | 3.4 | |
| Culverts replaced = 1 | | Clean IBD, ft = 1,370 | | Trail Improvement, mi = | | 3.8 | |
| Waterbars installed = 113 | | New ditch relief culverts installed = 2 | | Instream Rehabilitation, mi = | | 5.5 | |
| Cross road drains = 80 | | Rolling dips installed = 14 | | Riparian Rehabilitation, ac = | | 20.0 | |
| Excavated fill, cy = 43,020 | | Grade control structures installed = 1 | | | | | |
| Log bridges removed = 3 | | Rip Rap, sq ft = 440 | | | | | |
| Log culverts removed = 31 | | Fish passage culverts replaced = 6 | | | | | |
| Re-establish channels at crossings, ft = 130 | | | | | | | |

Table 2 Harris River Red Pipe(blocked upstream habitat for fish) Descriptions.

| RTE_NO | Mile Post | Channel Type | % Inlet Blocked or Damaged | Pipe Width, in | Pipe Length, ft | Habitat Length, ft | Site Description |
|---------|-----------|--------------|----------------------------|----------------|-----------------|--------------------|--|
| 2000240 | 0.057 | MM_MM | 0 | 24 | 30 | 71 | Class 2_2 stream crossing with a 24" perched plastic pipe. Site is located in the Harris River campground and will need to be addressed as an individual project. No immediate treatment is recommended due to limited upstream habitat. |
| 2024100 | 0.976 | PA5_PA5 | 99 | -- | 2 | 560 | Class 1_1 stream crossing with a log culvert located on State land and is part of the Indian Creek Trail in the lower Harris basin across the Harris River footbridge. Beaver activity up and downstream. Culvert is packed with sediment and debris. Coho found downstream. Assess for hand crew removal of sediment and debris as heavy equipment is not an option. Only other option will be to blast and construct a bridge. |
| 2025000 | 1.7 | | 100 | 30 | 24 | 413 | Class 2_2 stream crossing with a 30" wood culvert. Site is located on drivable portion of access road to the Twentymile Trailhead. Beaver activity upstream. Moderate to intensive hand labor can correct problem, but may be addressed as general road improvement project. Debris blocks fish passage. Install 48 inch pipe and clear pipe inlet area. |
| 2025000 | 1.86 | MM_MM | 0 | 24 | -- | 60 | Class 2_2 stream crossing with a 24 inch CMP on Twentymile Trail at intersection with the 2025100 road. Sixty feet of upstream habitat is the inboard ditch of road/trail. No immediate treatment is recommended , but may be addressed in either trail improvement or 2025100 road storage projects. |
| 2025000 | 3.187 | PA5_PA5 | 90 | 9 | -- | 409 | Class 2_2 stream crossing on the Twentymile Trail. Drainage structure has been removed, however, beaver activity upstream and downstream have dammed the crossing and backwatered the stream onto road surface. Treatment of the site may be addressed as part of the Twentymile Trail improvement project. |
| 2026000 | 0.23 | HC_HC | 100 | 18 | 29 | 125 | Class 2_2 stream crossing with an 18" CMP on the "Summit" Road in the Upper Harris River. The upstream 125 feet of habitat is the inboard ditch. No fish found upstream. Water is piping through road prism. Habitat upstream and downstream is marginal. No immediate treatment is recommended. |