## **Decision Memo**

# Climber's Bivouac – Road 8100 830 Improvements

USDA Forest Service Gifford Pinchot National Forest

Mount St. Helens National Volcanic Monument

Township 8N, Range 5E, Section 27, 28, 29, 32

Skamania County, Washington

## Background

This project has two components, improvement of vehicle access to Climbers Bivouac, and campsite and parking lot improvements at the trailhead / campground. The Climbers Bivouac and Ptarmigan Trail form the primary access point for climbing of Mount St. Helens.

Road 8100-830 leads from the end of paving on road 8100 to the Climbers Bivouac. The aggregate surfaced road accommodates an average of 11,000 vehicles each summer season. The road has been problematic to maintain because of steep grades and the tenancy of the road surface to become washboarded. The irregular travel surface creates a safety hazard when vehicles begin to bounce and jump while ascending the grade. Dust from the gravel road reduces visibility as well as coating vegetation along the road corridor. The road must be graded at least twice a season to control the washboarding, at a significant cost each year. Chemical dust abatement has been used on the road surface which has helped suppress dust and somewhat extend the time between grading.

The Climbers Bivouac is used in a manner as implied by the name. Climbers congregate at the parking lot and are permitted to "bivouac" in preparation of an early morning start to climbing. Some climbers camp in their vehicles, while others pitch a tent or in dry weather place a tarp and sleeping pad on the ground. Space is available around the parking lot, or a short walk away to more secluded locations hidden by vegetation. All campsites are user generated. No designated campsites are established. Most climbers cook using backpacking stoves, but a few build fires at their campsites. Two new CXT concrete vault toilets are found at the Bivouac. A single unit is located at the eastern end of the parking lot, and a double unit closer to the trailhead. The two new toilets were installed in 2002 to replace a failed composting toilet, located at the trailhead.

The Bivouac loop road is aggregate surfaced, and as develops potholes in wet weather and dust in dry weather. Dust from the loop road tends to settle on parked vehicles, vegetation and on camp equipment. Runoff from the roadway carries silt and sand from the road surface to some of the campsites. The Climbers Bivouac is constructed on top of a blocky dacite lava flow, which is porous and provides rapid infiltration of precipitation. As a result no surface streams are found in the vicinity.

## **Proposed Action**

This action will pave road 8100 830 with asphalt from its intersection with road 8100 to the Climbers Bivouac. The parking lot at Climbers Bivouac, including parking turnouts will also be paved. Two cut banks on the north side of the parking lot are eroding. These areas will be graded before paving, and large barrier boulders (in place) will be reset to prevent vehicles from leaving the road surface. The steep slopes will be revegetated using native species of plants and grasses.

Within the confines of the Climbers Bivouac developed recreation site, pathways to dispersed campsites will be paved with fine gravel, and metal fire rings provided for campfires. In pathway development, grades and path width will be established to meet ADA standards to the extent terrain permits. Recreation improvements will be made in accordance with the design narrative for the site.

## **Project Description:**

This project would add aggregate and surface 2.9 miles (the entire length) of USFS road 8100 830 with 3" asphalt, along with the parking area (.25 miles). Construction of turnouts and a through cut are also planned as part of this project. These activities require the removal of 76 trees currently located near the road edge; two of these trees are late successional/old growth trees. Within the campground, the project would improve management and reduce campsite expansion by developing and hardening 15 primitive walk-in tent camping sites. Seven of the sites are located within existing disturbed areas; the rest would require vegetation clearance. Installing fire grates at selected campsites and limiting fires to these sites only would reduce campfire impacts and fire hazard.

## Scoping

Internal scoping has been completed for the paving of the 81 830 road and Climbers Bivouac improvements. The public was notified of this project through publication of the Winter 2005 Gifford Pinchot National Forest Schedule of Proposed Actions (1/1/2005). No comments have been received.

## Decision

It is my decision to improve Road 8100 830 through minor widening and paving, paving of the Climbers Bivouac parking area, and hardening of campsites, as described above. This decision includes the required mitigation measures described on p. 4.

This action may be categorically excluded from documentation in an EA or an EIS. The specific category of action applicable to these projects is identified in Forest Service Handbook 1909.15, Chapter 30, and Section 31.12, Category 4 as:

Repair and maintenance of roads, trails, and land line boundaries.

and Category 5:

Repair and maintenance of recreation sites and facilities.

These are categories for which a project or case file and Decision Memo are not normally required, however at my discretion they may be prepared.

There are no past, present or known future actions within the scope of this project that would have a cumulative impact on the human environment.

The categorical exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects that may significantly affect the environment. In this decision, I considered the potential to affect federally listed or sensitive species and the potential for damage or disturbance to culturally significant or prehistoric sites. I base this determination upon the following resource specialists' review of the project:

#### **Fisheries:**

There is no bull trout critical habitat on National Forest lands. This activity occurs outside of riparian reserves and is significantly upstream from bull trout habitat. There would be **no effect** to bull trout or bull trout critical habitat. There is no anadromy within Swift Creek. Fish passage is blocked by dams in the lower reach of Swift Creek. Therefore, there would be **no effect** on chinook, coho, and steelhead. Pygmy whitefish and interior redband trout are designated Regional Forester's sensitive species. Neither species is known to exist within the project area.

#### **Botany:**

No federally listed or sensitive species were found during surveys. A number of the Sensitive species (1 lichen and 13 fungi) are not considered surveyable; therefore it is not known whether they are present at the site (see pre-field documentation for complete list of species not considered surveyable). For analysis purposes, it is assumed that these species are present in the project area. Because the project scope and area is small, there would be very limited impact upon suitable habitat. In addition, because the project is located in an area that experiences frequent disturbance (a campground and trailhead), or along an existing road, and most of the project activities would occur in early seral forest, it is unlikely that high quality suitable habitat is present for these species. As a result, the project was determined to have the potential to impact individuals and habitat, but project

actions are not likely to contribute to a trend towards federal listing, or cause a loss of population or species viability for these Sensitive species.

## Wildlife:

## **Threatened and Endangered Species**

The site is located in an area of heavy human use during the summer climbing season, and moderate snowmobile and cross-country ski use in the winter. There is no spotted owl nesting habitat in the vicinity of the project, and there are no historic activity centers. The 8100 830 road is adjacent to two isolated patches of spotted owl foraging habitat that average 185 acres in size. However, these patches are not likely to be used by spotted owls due to their isolation and distance from nesting habitat and historic activity centers. The 2 to 3 large trees that would be removed along the 8100 830 road are not in suitable habitat.

The project would not result in appreciably more human use at Climber's Bivouac since camping would be limited to the hardened sites, which are similar in number to the existing dispersed sites.

The area is not likely to be used by gray wolf or grizzly bear due to the amount of human use and road density. There is no bald eagle or marbled murrelet habitat in the project area.

There would ne **no effect** to any federally listed species known or suspected to occur on the Gifford Pinchot National Forest, or to designated Critical Habitat.

#### **Sensitive Species**

The proposal would result in negligible new surface disturbance at Climber's Bivouac, and minor roadside disturbance along the 8100 830 road. Climber's Bivouac is not in habitat that is likely to support Sensitive terrestrial mollusks or salamanders. The stand is young, the overhead canopy is generally open, the litter layer is very thin, down wood is sparse, and the pumice soil is well-drained. The type of work planned with this project would not impact any other listed Sensitive species.

There would be **no impacts** to terrestrial species on the Regional Forester's Sensitive Species list.

#### **Management Indicator Species**

The project would not result in any new effects to Management Indicator Species. Loss of 2 to 3 large Douglas-fir trees would remove potential future snag habitat for cavity excavators and pileated woodpeckers. The effect is negligible however, since these trees are very close to the road, and as such would not be important habitat for pileated woodpeckers. In addition there are numerous suitable trees in the stand across the road from these large Douglas-firs.

There would be **no effects** to any Management Indicator Species.

#### **Heritage Resources:**

A Cultural Resource report for Climber's Bivouac Road and Trailhead was completed and approved. No cultural resources were identified during surveys, therfore there is **no effect** and no mitigtion measures would be required.

#### **Mitigation Measures**

The following are mitigation measures will be required through this decision:

#### **Mandatory Aquatics Mitigation Measures**

These mitigation measures will become part of the decision. All applicable state and federal requirements associated with the Clean Water Act (CWA) will be met through planning, application, and monitoring of BMP's in conformance with the CWA and Federal guidance and management direction. Activities will comply with provisions described in the Memorandum of Understanding with the Washington State Department of Fish and Wildlife (MOU).

There will be no in-water work, so restrictions presented in Washington Dept. of Fish and Wildlife guidelines for timing of in-water work do not need to be followed. If the project design should change and require in-water work, the project will require reevaluation under NEPA and ESA.

Construction methods, impacts and conservation measures are provide in the *Biological Assessment for USDA Forest Service Fish Passage Restoration Activities Affecting ESAlisted Animal and Plant Species Found in Eastern Oregon and the Whole of Washington, Region 6 USDA Forest Service* (USFS Programmatic Biological Assessment (BA), (2003) and the USFWS Programmatic Letter of Concurrence (LOC), (2004). Applicable construction methods and conservation measures are considered required mitigation for the *purposes of this decision.* 

 Erosion control measures will be kept current as practicable with ongoing operations. Disturbed sites adjacent to streams will be protected from erosion within seven days of project completion by the application of seed and mulch, and other erosion control devices. An aquatic specialist will periodically assess erosion control measures for adequacy. If the aquatic specialist determines that erosion control measures are not implemented correctly or the specified erosion control measures are not adequate to control erosion, modifications to the erosion control plan will be developed and implemented as soon as possible. Within one year of project completion, ditch lines shall be revegetated with native grasses or woody species that have been approved by the district aquatic program manager. Stream banks will not be disturbed.

- 2. Ditches and exposed soils will preferably be seeded with native grasses and covered with weed-free straw mulch. The objective is to provide immediate, short-term soil protection, and to accelerate development of ground cover to protect soils in the longer term.
- 3. If 24-hour rainfall accumulation exceeds 0.5 inches at the nearest precipitation gauging station, instream work and other sediment-generating activities will cease until precipitation stops and soils drain. The district hydrologist will be responsible for notifying the COR when this rainfall accumulation threshold is reached.
- 4. Disposal of excess material will be at designated areas, outside of Riparian Reserves.
- 5. Service and refueling areas will be located 100 ft. away from stream courses or wet areas (including chainsaws and other hand powered tools). A Forest Service approved spill containment plan that includes requirements for on-site spill containment materials will be in place before operations begin. A spill containment kit will be located where equipment is stored. Equipment will be scrubbed so it is free of external petroleum-based products and invasive plant seeds or biomass. Hydraulic/oil/fuel leaks will be repaired prior to operating on National Forest System lands. Equipment will be checked daily for leaks and any necessary repairs shall be completed prior to commencing work activities along the stream. Equipment storage locations will be approved by the project administrator. Equipment will not be stored adjacent to or in stream channels when not in use, which will avoid potential effects of vandals, accidents, or natural disasters.
- 6. Accumulation of soils or debris shall be removed from the drive mechanisms and undercarriage of equipment prior to its working below the ordinary high water line of stream courses. Vehicle or equipment wheels, tracks, or tires shall not operate within the wetted perimeter of streams, although the equipment appendages may operate within the wetted perimeter. Stream crossings are not allowed.
- 7. Minimize disturbance of existing vegetation in ditches and at stream crossings to the extent necessary to restore the hydrologic function of the road.
- 8. All culvert work will be done in the dry season, or at the lowest flow of the year. Design criteria as described in the MOU and Programmatic LOC and BA will be followed. (See Table 1. for details.)
- 9. Prevent off-site sediment movement through use of filter materials or catchments. Route sediment toward sediment traps consisting of silt fencing and/or straw bales. Runoff is expected to infiltrate.
- 10. Prevent off-site sediment movement through use of filter materials or catchments. Route sediment toward sediment traps consisting of silt fencing and/or straw bales. Runoff is expected to infiltrate.
- 11. Before the ground-disturbing phase of the project begins weeds will be controlled as described in the botany mitigation measures below.

12. Develop a vegetation management plan as recommended in project design document in consultation with South Zone Botanist and Monument Hydrologist to address erosion on unvegetated cut banks with parking area.

#### **Botany Mitigation Measures**

#### **Recommendations Specific to Project:**

Control weeds along the USFS road 8100 830 from its junction with USFS road 8100, to (and including) the Climber's Bivouac campground. Before the ground disturbing phase of project implementation begins, *Senecio jacobaea* (tansy ragwort), *Circium arvense* (Canada thistle), *Hypericum perforatum* (St. John's wort) and *Digitalis purpurea* (foxglove) shall be hand pulled, bagged and disposed of outside of Gifford Pinchot National Forest boundaries. The project lead shall inform the Gifford Pinchot South Zone botanist when the weed control work will be performed, and when it is complete.

For two field seasons following project completion, the project proponent shall arrange for resurveys of the project area for re-infestations or new infestations of noxious weeds. If tansy ragwort, Canada thistle or St. John's wort is re-located, infestations should be controlled, as specified above. In addition, if populations of other noxious weeds are located during surveys, they should be reported to the South Zone Botanist, and controlled, as specified above. After two years, the South Zone Botanist shall re-evaluate the weed control needs within the project area and determine whether further treatment is needed.

## **Findings Required by Law**

As required by the National Forest Management Act, I find that this decision is consistent with the *Gifford Pinchot National Forest Land and Resource Management Plan* (1990) as amended by the *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl* (1994), *Amendments to the Survey & Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines* (2001), *Amending Resource Management Plans for Seven Bureau of Land Management Districts and Land and Resource Management Plans for Nineteen National Forests Within the Range of the Northern Spotted Owl - Decision to Clarify Provisions Relating to the Aquatic Conservation Strategy* (2004), and *To Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines in Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl* (2004).

The project was designed in conformance with forest plan standards and incorporates appropriate forest plan standards and guidelines for roads and recreation sites.

I find that this decision is consistent with the Endangered Species Act. Essential and critical habitat will be protected. There are no timing restrictions for this action. There would be **no effect** to any federally listed species (terrestrial or plant species) known or suspected to occur on

the Forest, or to designated Critical Habitat. There will be **no impacts** to and terrestrial species on the Regional Forester's Sensitive Species list and **no impact** on Sensitive plant species.

I find that this action, as mitigated, is consistent with the actions covered under the July 26, 2004 NOAA Fisheries *Biological Opinion for Programmatic Activities on GPNF and CRGNSA* this activity is covered under Recreation Site, Trail, and Administrative Structures. There will be **no effect** to federally listed fish species or critical habitat. I find that this action is consistent with the Sustainable Fisheries Act of 1996 (Public Law 104-267) (which amended the Magnuson-Stevens Fishery Conservation and Management Act). Because Essential Fish Habitat will not be adversely affected for any of these species, no consultation is necessary.

I find that this decision is consistent with the National Historic Preservation Act. The proposed action will not result in a significant impact to the cultural and historic resource.

As mitigated, I find that this decision is consistent with the Clean Water Act. Implementation of this decision will mean that Aquatic Conservation Strategy objectives at the watershed scale will continue to be met.

## **Implementation Date**

This project may be implemented immediately.

## Administrative Review or Appeal Opportunities

This decision is not subject to administrative appeal.

#### **Contact Person**

For additional information concerning this decision or the Forest Service appeal process, contact Jim Nieland, Mount St Helens Recreation Planner (phone: (360) 449-7846 or email: jnieland@fs.fed.us).

Isl Clifford D. Ligons 3/7/05

CLIFFORD D. LIGONS Monument Manager

# Table 1. Programmatic Table for Southwest Washington Federal Actions, Road Maintenance

Taken from: "Biological Assessment for USDA Forest Service Programmatic Activities Affecting Columbia River and Coastal-Puget Sound Bull Trout, Lower Columbia River Steelhead, Middle Columbia River Steelhead, Puget Sound Chinook Salmon, Lower Columbia River Chinook Salmon, Lower Columbia Southwest Washington Coho, Columbia River Chum, Proposed Critical Habitat for Bull Trout, and Essential Fish Habitat, Gifford Pinchot National Forest Columbia River Gorge National Scenic Area, Washington (2003)."

Program & Description	Typical Effects and Determination	Project Design Criteria	Reporting Requirements
POAD MAINTENANCE	No Effect: Actions that would not have a direct or indirect, measurable or notable	<ol> <li>All applicable NFP S&amp;G's will be followed, as well as applicable administrative unit Best Management Practices and WA state findings and recommendations (Washington State Hydraulic Codes)</li> </ol>	For each Fiscal Year, report total miles of LAA activities on FS
KOAD MAINTENANCE	effect to the riparian area, stream habitat or	2. Dispose of slide and waste material in stable, non-floodplain sites	roads by 5 <sup>th</sup> field watershed.
Road maintenance helps to maintain safety,	federally listed aquatic species. For	approved by a geotechnical engineer or other qualified personnel. Use	
control/prevent road erosion and sedimentation and maintain or restore hydrologic function.	example, maintenance actions that occur	stable sites beyond floodplain within Riparian Reserves (RR) only if	Report number of LAA fish passage culverts
Road maintenance typically includes heavy	outside the RR, and are implemented during	an interdisciplinary process has identified the area as stable and not	replaced,
equipment for surface maintenance (sweeping, grading, leveling), minor road realignment to improve stream functions, drainage	an extended dry period of the year (typically	susceptible to delivery to the adjacent stream. Provide erosion control	Number of LAA culverts
maintenance, installation, replacement, or	June-mid Sept), where no degradation of	to minimize sediment delivery to streams or floodplain (E.G. Potential	bearing streams to
repair (ditch-lines, water dips, cross-drain culverts, and water bars), vegetation	habitat indicators can be reasonably expected	off channel habitat).	accommodate a 1 in 100 year flood event within
mowing, and mulching), road cut and fill	from the activity. Another example is in		watersheds.
repair/stabilization, surface repair/replacement (paving, repaving, chip-sealing and rocking),	drainages where no listed fish species are	<ol> <li>Minimize disturbance of existing vegetation in ditches and at stream crossings.</li> </ol>	
small slide removal (i.e., routinely, quickly, and easily handled with typical maintenance equipment), snow-plowing, dust abatement, and maintenance, and repair of structures	present.	<ol> <li>Minimize soil disturbance and displacement, but where sediment risks warrant, prevent off-site soil movement through use of filter materials (such as straw bales or silt fencing) as needed in conjunction with aviiting vagetation string.</li> </ol>	
(guardrails, signs, relief and stream crossing culverts, bridges).	NLAA: Actions, which would have a	existing vegetation surps.	
This category also includes immediate stabilization of storm-damaged roads to	negligible or discountable effect or	<ol> <li>Implement "may affect "soil-disturbing maintenance activities during dry conditions to the greatest extent practical and follow Washington Department of Fish and Wildlife (WDFW) Guidelines for Timing of</li> </ol>	
prevent or minimize adverse hydrologic effects or transmission of sediment into streams and	likelihood of adverse effect. For example,	In-Water Work, where relevant, except where the potential for greater damage to water quality and fish habitat exists if the emergency road	

<sup>&</sup>lt;sup>1</sup> "Clear-span bridge" in the context of this document denotes a bridge without structural supports (abutments, bents or piers) located within the active channel.

Program & Description	Typical Effects and Determination	Project Design Criteria	Reporting Requirements
other water bodies. This category is not applicable for deferred major storm damage <b>ROAD MAINTENANCE</b> (cont'd) repairs or major storm damage repairs performed solely to maintain vehicle traffic. Replacement of clear-span bridges <sup>1</sup> and replacement of stream-crossing culverts with clear-span bridges is covered. Tier to Regional Biological Assessment/Biological Opinion for Fish Passage Culverts, if available. Otherwise, action covered under this Biological Assessment.	actions which may occur within RR, but which would be extremely unlikely to transmit sediment (including sand) or contaminants to streams. Also, minor vegetation manipulation, which would not affect stream channel shade, LWM, or bank stability, etc., especially outside of 1 SPT, may be NLAA. LAA: Actions, which have a more than negligible likelihood of adverse effect. For example, nearly any action with substantial transmission of sediment (including sand) and/ turbidity to stream channels would be an LAA, as would nearly any in-channel work. Vegetation manipulation within 1 SPT would often, but would not invariably, be an LAA. Overall, a programmatically covered LAA road maintenance activity should result in a long-term reduction in the risk of road-generated turbidity, sediment, and /or channel extension to stream channels from existing road segments.	<ul> <li>maintenance is not performed as soon as possible.</li> <li>6. Replacement culverts should meet WDFW and NW Forest Plan standards. For fish passage culverts, refer to Regional Programmatic Biological Assessment/Biological Opinion, if available.</li> <li>7. Refuel power equipment (or use absorbent pads for immobile equipment) and prepare concrete at a location remote from water bodies (usually at least 100 feet distant) to prevent direct delivery of contaminants into a water body.</li> <li>8. Procurement of water used in dust abatement activities would follow the PDCs of the Pump Chance/Helipond Maintenance and Use programmatic category.</li> <li>9. Where possible, take corrective actions to repair chronic problem areas of sediment delivery or slope instability that have a potential to affect listed species.</li> <li>10. Culvert cleaning activities will retain all large wood in stream channel by translocating LWD/LWM typically downstream of the crossing, minimize sediment mobilization and avoid channel regrades.</li> <li>11. Lead-based paint removal or removal of structures containing lead points are not covered.</li> <li>12. Design replacement stream crossing structures to pass 100-year peak flood without exceeding the top of the culvert inlet. Hydraulic capacity must compensate for expected depositions in the culvert bottom (Refer to Forest Service Region 6 Biological Assessment for Culverts dated April 24, 2003, and NOAA Fisheries Biological Opinion dated September 2, 2003).</li> <li>13. Limit replacement stream-crossing structures on fish-bearing streams to one of the following options: a clear-span bridge, bottomless arch culvert, embedded culvert, or no-slope culvert. Use stream simulation for designing appropriate culvert types and specs.</li> <li>14. Locate any new abutments outside of the active stream channel.</li> <li>15. Fresh concrete (cured less than 72 hours), concrete contaminated wastewater, welding slag and grindings, concrete saw cutting by-products, and sandblasting abrasives shall be</li></ul>	
		<ol> <li>Stream-crossing structures shall not discharge storm water runoff directly to streams.</li> </ol>	

Program & Description	Typical Effects and Determination	Project Design Criteria	Reporting Requirements
ROAD MAINTENANCE (cont'd)		<ol> <li>Limit riprap use to scour protection of existing or replacement bridge structures and the replacement of pre-existing rock riprap. Riprap use will be minimized to the greatest extent possible and will not exceed 10 cy per site per year. Riprap will be designed in consultation with a fish biologist or hydrologist. Outside of these uses, riprap is not authorized.</li> <li>Stream bank stabilization shall use bio-engineered solutions (such as rootwads, log toes, coir logs, woody and herbaceous plantings). A minimum amount of rock may be used for infrastructure protection when no alternative (such as road realignment) exists, but bio-engineered components shall be the dominant design feature.</li> <li>Realign road as far away from streams as possible, preferably outside riparian reserves and on stable slopes that minimize cuts and fills. Plant and seed restored riparian areas with native vegetation.</li> <li>Minimize the number of trees (typically 8" or more in dbh) removed for purposes of road realignment to no more than 10 whenever possible. Use the down trees for instream or riparian restoration to the full extent possible.</li> <li>Avoid application of dust abatement materials (lignin sulfonates, calcium chloride, magnesium chloride) during or just before wet weather and at stream crossings or other locations that could result in direct delivery to a water body (typically not within 25' of a water body or stream channel).</li> </ol>	