

**Decision Memo**  
**for**  
**Harden Loop Salvage Project**  
USDA Forest Service  
Salmon-Challis National Forest  
Yankee Fork Ranger District  
Custer County, Idaho

**Decision**

I have decided to proceed with implementation of the management activities described below to thin understory trees and to cut dead and dying trees primarily to (1) salvage their existing economic value and (2) to remove beetle-infested trees and help reduce the spread of these pests to uninfested trees. In addition, residual understory trees will be thinned to eliminate ladder fuels and to reduce hazardous fuels accumulations. The treatment area is located roughly 8 air miles northeast of Stanley, Idaho in T11N, R14E, Sections 9, 10 and 15 within a 126-acre size stand located atop the divide that separates the Coal Creek drainage from the Upper Harden Creek drainage, in the Basin Creek watershed. Management activities will also salvage recent mortality and help restore the historic, old growth Douglas-fir/grassland community type. The project was designed in compliance with the standards and guidelines of the Challis National Forest Land and Resource Management Plan, under the requirements of recently legislated Healthy Forest authorities, and in response to the 10-Year Comprehensive Strategy. In addition, the Custer County, Idaho Wildland/Urban Interface Fire Mitigation Plan identifies need for “Mechanical Fuel Reduction in the areas between the Yankee Fork Ranger District and the North East Stanley District of the Salmon-Challis National Forest”.

The thinning, salvage and sanitation methods of mechanical treatment will be used to thin live (mostly understory) trees and to remove dead and dying trees from a stand of predominantly lodgepole pine with lesser amounts of Douglas-fir, subalpine fir and Engelmann spruce. All “dead and dying” (Schmitt, et.al., 2005) commercial-sized lodgepole pine will be felled. Precommercial-sized lodgepole will be thinned to 70 trees/ac where they occur as mixed species aggregations and to 435 tree/ac where they occur as a single specie aggregation on approximately 10 acres. All dead and dying commercial-sized Douglas-fir will be felled. Precommercial-sized Douglas-fir will be thinned to 70 trees/ac where they occur. All subalpine fir will be felled. No whitebark pine will be felled. Englemann spruce occurs on North aspect slopes and will be felled if needed to achieve spacing for Douglas-fir understory thinning or where there is at least 70 trees/acre Douglas-fir overstory component. All “pure” Englemann spruce aggregations will be left. Leave tree preference (high to low) will be whitebark pine, Douglas-fir, Englemann spruce, lodgepole pine, then subalpine fir. All standard thinning guidelines (desirable leave tree characteristics) will apply. Precautions will be taken to avoid damaging any leave trees. Forest snag retention guidelines will apply. The estimated volume of material to be removed is 850 mbf. The overall intent of this project is (1) to greatly reduce fuel loading by primarily salvaging the lodgepole [mountain pine beetle-host] component, and (2) to help restore the stand to a very fire-resistant, mature

Douglas-fir/grassland community type while retaining Englemann spruce pockets on North aspect slopes and in “wetter” areas of the project area. A stewardship contract will be prepared and trees meeting specified conditions will be sold and/or exchanged for tree thinning and brush piling services. A temporary road of one third mile (1900 ft) in length will be built from the end of a preexisting, one quarter mile length of unspecified road in order to fully access the stand. Incidental removal of additional trees will likely occur during location of the temp road, skid roads and landings. The contractor will obliterate both the temporary road and the unspecified road before termination of the contract. Following mechanical treatment activities, residual slash will be piled and burned and/or lopped and scattered and/or broadcast burned. A roughly 10-acre sized “patch” of lodgepole pine will be precommercially thinned to 10x10 ft spacing (435 trees/ac). Treatment activities will begin during summer or early fall of 2005. A sale contract and/or performance-based service contract will be prepared and advertised to acquire skilled crews and, to assure high quality treatment, Forest Service personnel will administer it. Thinning, salvage and sanitation activities will involve the use of chainsaws, rubber-tired skidders and/or crawler-type tractors. Contract camping privileges will be permitted either within or immediately adjacent to the treatment area. Access to and from the unit will be along existing Forest Service road 40183 from the Lower Harden Creek / Highway 75 junction. Minor reconditioning activities (waterbar removal/replacement, cross-drainage improvement and slough removal) will occur along Forest Service road 40183.

## **Purpose and Need**

Long term fire suppression in the general project area has led to a large buildup of forest fuels and a tremendous change in vegetation composition and structure across the landscape – tree species have increased in number and density beyond natural conditions. Unnaturally dense stands of trees are undergoing intense competition for limited amounts of water, nutrients and sunlight. In the added presence of recent drought conditions they are at increased risk of unnaturally intense fires and insect epidemics. As identified by R4 entomologists from the Boise Area Forest Health Protection staff, the proposed project area is currently experiencing a mountain pine beetle epidemic. Beetle populations have reached outbreak levels and lodgepole pine tree mortality is high. Other areas are also experiencing the same beetle epidemic. However, this particular area was selected because it is outside existing roadless areas, poses little or no impact on potential lynx habitat, is within an area of need identified by the Custer County, Idaho Wildland/Urban Interface Fire Mitigation Plan, and already has an existing road system in place. The project tracks with recommendations of the 1998 Basin Creek Watershed Analysis for activities that reduce tree stocking levels and fuel accumulations while maintaining healthy, resilient forest stands.

The **primary purpose** of the proposed action is to salvage the existing economic value of the dead and dying trees within the stand. Implementation of the proposed action will further remove numerous beetle-infested trees and help to reduce the spread of these pests to uninfested trees within the stand and within adjacent stands. A **secondary purpose** of the proposed action is to reduce hazardous fuels accumulations. The results of this project will further serve as a base from which to develop an adaptive

management learning curve. All proposed activities meet the Challis NF Land Resource Management Plan standards and guidelines.

The **primary need** for the proposed action is to recover product values in a timely manner. The window for recovery of near-equal (live) economic value of beetle-killed lodgepole pine is estimated to be a couple of years. The shelf life is short. Weather effects, decays and insect damages rapidly reduce and eventually eliminate the utility of killed trees for high value houselogs and saw timber. A **secondary need** for the proposed action is to immediately decrease the near-term risk of a catastrophic wildland fire occurring within the stand. Fire hazard is elevated immediately following tree mortality when “flashy” dead needles occupy much of the crown canopy. Salvaging the dead and dying tree boles and burning the associated slash will eliminate much of the flashy fuels and reduce much of the stand biomass. This activity will further help to reduce the current, high stem density. Specific objectives include: reduce the potential for wildfire starts, manage fuel loadings to acceptable levels for the long-term, restore and maintain biological and structural integrity and diversity, maintain and enhance a desirable recreation experience, provide for public safety, meet the public’s demand for wood products.

## **Scoping and Public Involvement**

Beginning in late spring, 2004, the Salmon-Challis NF South Zone Forest Vegetation Management group began examining the opportunity to combine the need to address fuels reduction with the need to address salvage following mountain pine beetle outbreak-induced mortality. In October, 2004, a project initiation letter was issued by the Yankee Fork District Ranger assigning an I.D. Team Leader and nine resource specialists from the Challis and Yankee Fork Ranger Districts and the Forest Supervisor’s Office to help identify any internal concerns associated with potential direct, indirect and/or cumulative impacts to resources from fuels reduction, salvage and restoration activities occurring within the proposed treatment area. Wildlife, fisheries, GIS, archaeology, soils, hydrology, silviculture, engineering, fuels and recreation disciplines were represented. All comments were used to develop a proposed action.

A notice was placed in the Forest’s Quarterly Schedule of Proposed Actions dated October 1, 2004, and mailed out to every subscriber on that mailing list. Contacts were made with representatives of the Nez Perce Tribe and the Shoshone-Bannock Tribes during the same month. A newspaper article about the project and soliciting comment also appeared in the *Challis Messenger* on November 18, 2004. Letters were sent to other, local resource agencies, county, and private concerns in an attempt to advise key community members and local resource managers of potential management activities and to solicit concerns and comments for potential-issue evaluation.

Two letters were received that expressed concerns regarding the desired and historic range of conditions, roads analysis, snag and old-growth management, terrestrial and aquatic animal and plant species, noxious weeds, potential cumulative impacts, and soil compaction and transportation. Collectively, external and internal comments were reviewed and evaluated to determine (1) whether or not significant issues were present

and (2) the appropriate level of subsequent analyses and documentation. An Issue Sorting Table is located in the project files. None of the comments or concerns submitted raised any key issues that needed to be considered in alternatives or any extraordinary circumstances that required further analysis in either an Environmental Assessment (EA) or Environmental Impact Statement (EIS).

### **Reasons for a Categorical Exclusion**

I have determined that this is a routine action with no extraordinary circumstances related to it, and that it falls within category 13 (“Salvage of dead and/or dying trees not to exceed 250 acres, requiring no more than ½ mile of temporary road construction”) of section 31.2-13 of FSH 1909.15, WO amendment 1909.15-2004-3. Other Categorical Exclusion categories that could have been used for this project included category 10, hazardous fuels reduction and category 14, commercial and non-commercial sanitation harvest of trees to control insects or disease. The project area is currently in Condition Class 3 in Fire Regime Group 1 and is located outside the wildland-urban interface, but would still meet the criteria for a fuels reduction category of action. The current mountain pine beetle outbreak in this area is extensive, so a sanitation harvest for control of the insect spread would not be effective. Category 13, salvage was chosen because of the predominance of existing dead and dying trees in the project area.

This project does not individually or cumulatively have a significant effect (40 CFR 1508.27) on the quality of the human environment and, therefore, may be categorically excluded from documentation in an EIS or an EA. A project or case file and a decision memo are required and were prepared. There are no known or reasonably foreseeable connected activities associated with this activity.

### **Test for Extraordinary Circumstances**

There are no extraordinary circumstances related to the decision as documented below.

- a) *Threatened, endangered, or sensitive species or their critical habitat:* This project will have no effect on Threatened or Endangered species or their habitat. It will have no impact, or may impact individuals or habitat, but will not contribute to a trend toward federal listing or cause a loss of viability to populations of Sensitive species. Biological Assessments and Evaluations have been completed and are part of the Project File.
- b) *Flood plains, wetland, or municipal watersheds:* No project activities will occur in any flood plains, wetlands, or municipal watersheds.
- c) *Congressionally designated areas, such as wilderness, wilderness study areas, or National Recreation areas:* No project activities will occur in any designated or proposed wilderness, wilderness study area, or National Recreation area.
- d) *Inventoried roadless areas:* No project activities will occur in any inventoried roadless areas. The nearest roadless area, Loon Creek (06-908), is located 0.7 air miles north and its proximate boundary is located along a ridgeline that separates the roadless area to the north from adjacent roaded areas to the south.

- e) *Research natural areas*: Consultation with representatives of the Nez Perce Tribe and the Shoshone-Bannock Tribes identified no significant sites, traditional use conflicts or other concerns with the proposed action.
- f) *American Indians and Alaska Native religious or cultural sites*. Consultation with representatives of the Nez Perce Tribe and the Shoshone-Bannock Tribes identified no significant sites, traditional use conflicts or other concerns with the proposed action.
- g) *Archeological sites, or historic properties or areas*: The area had been previously surveyed and suspect sites were resurveyed during 2005. There are no known sites identified by Forest archeologists in or adjacent to the project area. Any unknown sites discovered during project activities will be subsequently avoided and promptly reported to the Forest Archaeologist.

## **Monitoring**

The results of this project will be subjected to implementation and effectiveness monitoring and used as a yardstick to compare and contrast the results of other fuels reduction, salvage and restoration projects.

## **Findings Required by Other Laws and Regulations**

**National Environmental Policy Act (NEPA)**: Use of a Categorical Exclusion and Decision Memo document is in compliance with NEPA and the Council on Environmental Quality regulations (40 CFR 1500-1508) for implementing NEPA.

**Clean Water Act, Executive Order 11990 (wetlands) and 11988 (floodplains)**: There are no wetlands, floodplains or Riparian Habitat Conservation Areas included within the treatment area. No 303d (water quality impaired) listed stream segments will be affected, and beneficial water uses will be maintained.

**Clean Air Act**: Broadcast and/or slash pile burning activities will be implemented following analysis, evaluation and planning pursuant to direction in the Montana/Idaho State Airshed Group Operating Guide. Air quality will be minimally affected because of need to comply with guideline directions and constraints and because of the very limited extent of slash pile burning that can occur.

**Migratory Bird Treaty Act**: Migrant bird habitat is expected to remain viable within the project area. Cutting of trees will occur in mid to late summer, well after nesting season. Project implementation will not constitute a direct or indirect taking of migratory birds.

**National Forest Management Act (NFMA)**: This action is consistent with the NFMA and the Challis National Forest Land and Resource Management Plan, and PACFISH Amendment that strive to improve forest health, watershed, fish and wildlife habitat conditions. Forest Plan goals require resource managers to maintain and improve wildlife habitat and habitat diversity and to improve watershed conditions as opportunities arise. Specific management area direction requires the same. Consistent

with regulations at 36 CFR 219.19, the project was evaluated for impacts to habitats for Management Indicator Species (MIS). The project may impact individual pileated woodpeckers, but is not likely to cause a trend toward individual listing or loss of viability of the species or its habitat. This determination is consistent with forest-wide trends for populations and habitat conditions for this MIS.

**Executive Order 12898 (Environmental Justice):** In accordance with Title VI of the Civil Rights Act of 1964, this action does not directly, or through contractual or other arrangements, use criteria, methods, or practices that discriminate on the basis of race, color, or national origin. No disproportionately high and adverse environmental or human health effects on an identifiable low-income or minority population were discovered.

**National Historic Preservation Act:** The project has been reviewed by the Forest Archaeologist and has been determined on June 28, 2005 to have no adverse affect to any known or listed historic properties. Idaho State Historic Preservation Officer (SHPO) concurred with this finding on August 5, 2005. It will proceed with the understanding that if areas of general impact or intense impact change or become more extensive, or if heritage resources are discovered within the project area, the Forest Archaeologist will be immediately contacted for additional project review prior to implementation of those changes.

**Endangered Species Act (ESA):** This decision is consistent with the ESA. An aquatic species Biological Assessment and Biological Evaluation for Fish Species for the Harden Loop project was completed November 10, 2004, and determined “No Effect” for sockeye salmon, Chinook salmon, steelhead trout, bull trout and “No Impact” for sensitive species. A plant and terrestrial animal species Biological Evaluation and Assessment for the Harden Loop project was completed December 29, 2004, and determined “No Effect” for federally listed Threatened and Endangered (T and E) species and for species proposed for federal listing as T or E. For species listed as sensitive species by the Regional Forester, it will have no impact, or may impact individuals or habitat, but will not contribute to a trend toward federal listing or cause a loss of viability to populations. No USFWS or NOAA Fisheries concurrence with these determinations was necessary.

## **Contact Person**

David A. Faike (208-879-4100), Challis Ranger District, H/C 63 Box 1669, Hwy 93, Challis, Idaho 83226

## **Administrative Review and Implementation Date**

Pursuant to 36 CFR 215.12 (f) this decision is not appealable. Implementation of cutting and harvesting activities will begin in summer or fall of 2005.

*/s/ Thomas A. Montoya*

*August 9, 2005*

**THOMAS A. MONTOYA, District Ranger**

**Date**

## **Fuels Reduction, Salvage and Restoration Project Mitigation Measures**

### **Source: Scoping Concerns**

#### 1. Contract Terms/Conditions:

- Avoid nesting season; delay contract activities until after mid- to late-July.
- Include copy of Travel Plan.
- Camping areas will be agreed to in writing with the Forest Service under the standard contract "Use of Premises" camping permit. Not abiding by the conditions of the camping permit (including litter and sanitation) will be considered a breach of contract.
- The use of motorized equipment will not be permitted off roads shown in the contract maps without prior approval of the Contracting Officer.
- Human waste must be disposed of at least 200 feet from any stream, lake, or other body of water, or any recreational site, facility, or special permit use area and must be buried at least eight (8) inches deep.
- Require heavy equipment cleaning/inspection for noxious weeds before arrival to site.
- Maintain adequate buffers on any wet areas; contour temporary road; provide proper drainage on haul roads; obliterate temporary road and existing unspecified road; if needed, seed unspecified road, temporary road and skid trails with plant materials certified to be noxious weed seed free.
- Cease weeding / thinning activities in any area where unknown archaeological sites are found. Contact the Forest Archaeologist to assess the significance and boundaries of the find.

### **Literature Cited**

Schmitt, C.L. and Filip, G.M. 2005. Understanding and defining mortality in western conifers. R6-FHP-1-05, USDA Forest Service, PNW Region, Portland OR. 17p.