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Final Environmental Impact Statement

West Bear Vegetation Management Project

**Evanston Ranger District, Wasatch-Cache National Forest
Summit County, Utah**

Township 1 North, Range 9 East, Salt Lake Principle Meridian



Front Cover Photo: View looking east from Moffit Ridge across Beaver Lake in the right foreground and Whitney Reservoir in middle ground toward the forested ridge between Whitney Reservoir and Coyote Hollow.

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WEST BEAR VEGETATION MANAGEMENT PROJECT
Final
Environmental Impact Statement
Summit County, Utah Lead Agency: USDA Forest Service

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Abstract

Alternative 2 (The Proposed Action) is the Forest Service Preferred Alternative (See Appendix A, Map 2). It includes timber harvesting, prescribed burning, construction of temporary roads, intermittent service roads, and minor reconstruction of existing system roads. Treatment would involve group selection harvest in spruce-fir and mixed conifer stands, small (1 to 5 acre) patch cutting in mixed aspen/conifer stands, conifer removal and prescribed burning in aspen/conifer stands, and prescribed burning in aspen stands. The proposal includes retaining green trees and snags for wildlife habitat. Approximately 1,686 acres within 38 units would be treated under the proposal. Harvests would be accomplished using ground-based systems, and in conformance with Forest Plan Standards and Guidelines. Approximately 10,220 hundred cubic feet (CCF) would be harvested. Approximately 326 acres of aspen and mixed aspen/conifer would be burned following removal of conifers on those acres. In addition, 197 acres would be prescribed burned without prior conifer harvest. Access to the timber would require the construction of approximately 7.8 miles of temporary roads, 0.9 miles of intermittent service system roads, and relocation of approximately 0.6 miles of existing system roads to reduce sedimentation and improve drainage. All temporary roads would be recontoured/rehabilitated after harvest. Proposed reconstruction or relocation of existing roads would emphasize improving drainage design of the roads near stream crossings and relocating or improving drainage where the roads are near stream channels. No harvest or road construction would take place in inventoried roadless areas. Firelines would be constructed where needed prior to burning to reduce the probability of fire escaping the boundaries. Approximately 1.8 miles of firelines would be needed. In addition to Alternative 2, Alternative 1 (No Action), and Alternative 3 (Reduced Roads) have been analyzed. Alternative 1 would maintain the existing conditions in the analysis area. Alternative 3 (See Appendix A, Map 3) would reduce road construction and emphasize prescribed fire without mechanical pretreatment. It would treat approximately 1,387 acres within 28 tentative treatment units. Approximately 6,582 hundred cubic feet (CCF) would be harvested. It would require construction of approximately 1.9 miles of temporary roads, no intermittent service system road, and relocation of approximately 300 feet of an existing system road to reduce sedimentation and improve drainage. Temporary roads would be recontoured/rehabilitated after harvest as with the proposed action. An estimated 6.4 miles of firelines would be needed to accomplish the prescribed burning.

SUMMARY

The Wasatch-Cache National Forest proposes to manage forest land in the West Fork Bear River drainage (See Appendix A, Vicinity Map). Temporary roads would be constructed to provide access for timber harvest in portions of the area. The proposal also includes reconstruction or relocation of some poorly designed or located existing roads. The headwaters of this drainage are located on the Evanston Ranger District about 40 miles south of Evanston, Wyoming in the Uinta Mountain Range. The proposed action was developed to meet Forest Plan vegetation management objectives for achieving forest vegetation composition, structure, and patterns in properly functioning condition. The analysis area includes approximately 16,300 acres. The proposal addresses lands located primarily in the Humpy Creek, Meadow Creek, West Bear, Mill City Creek and a small portion of the Hayden Fork drainage located in Township 1 North, Ranges 9 East and 10 East, Salt Lake Meridian.

This action is needed to meet Revised Wasatch-Cache National Forest Plan vegetation management objectives to move toward properly functioning condition and to move toward a variety of vegetation types, age classes, and patch sizes covering the landscape and contributing to healthy watersheds, aquatic and terrestrial wildlife habitats, recreation environments, and production of commodities such as wood and forage. The Revised Forest Plan (USDA FS 2003, Page 4-29) identified a need to treat vegetation with the aspen, aspen/conifer, spruce-fir and mixed conifer forest types on the forest to maintain or move the forests toward properly functioning condition. A forest-wide assessment concluded that aspen communities as well as conifer, sagebrush and several other vegetation types are currently outside the historic range of variation, primarily related to the absence of naturally occurring fire in vegetation types that evolved with repeated fires. Spruce fir stands are probably not outside the range of variation since they have an extended fire return interval that is longer than the fire interval for other conifer types. However, the continuous old spruce-fir forests on the landscape may be uncharacteristic due to fire suppression and a resulting poor representation of younger age classes.

Following an outbreak of spruce bark beetles in the early 1990's in the Meadow and Humpy Creek areas, and discussions of current aspen and conifer forest conditions, the Evanston Ranger District initiated a landscape assessment of the larger West Bear drainage. This analysis was completed in February of 2002 (USDA, FS 2002). It described existing forest conditions and potential management actions to move the landscape toward a desired future condition. A Notice of Intent to Prepare an EIS for the West Bear Vegetation Management Project was published on March 20, 2002. Public scoping and an open house were held shortly after that. The East Fork Fire during the following summer changed priorities, so a notice was published in the Wasatch-Cache NF quarterly update deferring the West Bear Vegetation Management Project. A Revised Notice of Intent to prepare an EIS was published on February 11, 2005. Public scoping was re-opened with a comment period ending on March 7, 2005. Twenty one comments were received during the second comment period. Issues raised include:

- Forest canopy removal and erosion following log skidding, prescribed burning, and road construction could lead to adverse effects on runoff quantity/timing/peak flow, water quality, wetlands and flood plains.
- Log skidding, prescribed burning, and road construction could lead to detrimental soil disturbance including soil displacement, soil erosion, compaction, and soil hydrophobicity (water repellence) due to severe fire effects.
- Forest tree removal, log skidding, prescribed burning, and road construction could lead to adverse effects on aquatic species stream, wetland, and riparian habitat from reduced shade, woody debris recruitment and sedimentation.

- Timber harvest, prescribed burning, and road construction could affect Bonneville cutthroat trout and their habitat.
- The forest in this area may still be in a properly functioning condition. If it is not, timber harvest may not be the best means of restoring properly functioning forest conditions and may intervene in natural disturbance processes and result in additional fragmentation and loss of biological diversity and ecological integrity.
- The cumulative effects of past, present, and future timber harvest could reduce the amount of old forest.
- Timber harvest, prescribed burning, and road construction could increase noxious weed invasion.
- Timber harvest, prescribed burning, and road construction could affect sensitive plants in the area.
- Timber harvest, prescribed burning, and road construction could increase noise disturbance, create barriers to wildlife movement, fragment forest habitat, and have adverse effects on migratory birds and their habitat.
- Timber harvest, prescribed burning, and road construction could affect Canada lynx denning and foraging habitat and prey species, bald eagle roosting habitat, wolverine foraging habitat, goshawk nesting and foraging habitat, three-toed woodpecker nesting and foraging habitat, boreal owl nesting and foraging habitat.
- Timber harvest, prescribed burning, and road construction could affect goshawk nesting and foraging habitat, snowshoe hare cover and foraging habitat, beaver dam building material and other beaver habitat.
- Browsing by wildlife and domestic livestock could retard or eliminate aspen regeneration in timber harvest and prescribed burn units.
- Timber harvest, prescribed burning, and road construction could affect or conflict with recreational use in the analysis area.
- Alternative combinations of timber harvest, prescribed burning, and road construction as well as size and timing of offerings and size of material available for harvest could have different levels of economic efficiency in returns to the government and in efficiency of operations for timber purchasers.
- Prescribed burning without removal of merchantable timber on accessible ground could result in a loss of timber values and difficulty in achieving objectives of the burn.

These issues were similar to issues identified during the initial scoping. They led the agency to develop an alternative to the proposed action (Alternative 2) and no action alternative (Alternative 1):

An alternative (Alternative 3) that would reduce road construction and emphasize prescribed fire without mechanical pretreatment is being considered. It would treat approximately 1,387 acres within 28 tentative treatment units. It would require construction of approximately 1.9 miles of temporary roads, 0 miles of intermittent service system road, and relocation of approximately 300 feet of an existing system road to reduce sedimentation and improve drainage. Temporary roads would be recontoured/rehabilitated after harvest as with the proposed action. An estimated 6.4 miles of firelines would be needed to accomplish the prescribed burning.

Major conclusions include:

- The alternatives would have no significant impact on Canada lynx habitat.
- The alternatives would change the structure of old spruce-fir and mixed conifer habitat, but these changes would be temporary and would comply with Forest Plan Standards.

Based upon the effects of the alternatives, the responsible official will decide:

- The extent and timing, if any, of timber harvest, prescribed burning, road development, relocation, or decommissioning.

- Where and how activities would be conducted (including silvicultural practices) if they are implemented.
- Any access management changes needed.
- Management requirements and mitigation measures.
- Appropriate monitoring requirements if needed to evaluate project implementation.
- Whether or not a site-specific Forest Plan amendment is required for implementation, the nature of the amendment, and whether the amendment would be a significant change to the Forest Plan.

A notice of availability of the Draft Environmental Impact Statement (DEIS) was published in the Federal Register on July 22, 2005. A revision of notice was published in the Federal Register on September 16, 2005 extending the comment period from September 5, 2005 to September 30, 2005. Comments received from the public and other agencies were considered and were used to improve the analysis and to clarify documentation in the Final Environmental Impact Statement. Changes in each chapter are listed on the back of the cover page for the chapter.

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