



**DECISION NOTICE  
AND  
FINDING OF NO SIGNIFICANT IMPACT**

**IRON SPRINGS VEGETATION IMPROVEMENT  
AND SALVAGE PROJECT**

USDA Forest Service  
Dixie National Forest  
Escalante Ranger District  
Garfield County, Utah

**INTRODUCTION**

The Environmental Assessment (EA) for the Iron Springs Vegetation Improvement and Salvage Project documents and analyzes a proposal to apply vegetation improvement treatments within an 8,306-acre area on the Dixie National Forest. Treatments would involve a range of vegetation improvement actions including intermediate harvest treatments, salvage of timber killed by or dying as a result of beetle infestation, regeneration of aspen, and reforestation of previously harvested areas that do not meet required stocking levels. Not all lands within the project area would be treated. Treatments would be applied only to those lands where a demonstrated need exists. The proposal also includes re-routing of 200 feet of a forest road to prevent resource damage.

Three alternatives were selected for detailed analysis in the EA. These were (1) No Action, (2) the Proposed Action, and (3) Alternative A. The No Action alternative is required by the National Environmental Policy Act (NEPA), and provides a basis for comparing the effects on the project area if no action were taken against the effects of implementing either of the action alternatives. The effects of all alternatives are disclosed in Chapter 3 of the EA.

This Decision Notice (DN) and the accompanying Finding of No Significant Impact (FONSI) are based on a review of the EA, specialist reports and related scientific literature, the Dixie National Forest Land and Resource Management Plan (1986, as amended, herein referred to as the Forest Plan) and the comments submitted in response to the 2010 Scoping Notice and to the 2011 Notice and Opportunity to Comment. The EA is available for public review at the Escalante Ranger District located in Escalante, UT, and on the Forest Service (FS) website at <http://www.fs.fed.us/nepa/fs-usda-pop.php/?project=31526>.

A project record is available upon request that contains the information considered in the analysis and decision. The project record includes the Forest Plan, other applicable guidance, the specialist reports, applicable scientific literature, and other pertinent data and information.

## PROJECT LOCATION

The proposed 8,306-acre Iron Springs Vegetation Improvement and Salvage Project is situated in the Dixie National Forest on the Aquarius Plateau approximately 15 miles northwest of Escalante, Utah, along National Forest System Road 140. The project area is within the headwaters of three watersheds: Coyote Hollow-Antimony Creek, North Creek, and Upper North Creek, and covers portions of Township 33 South, Range 1 West, and Township 33 South, Range 1 East of the Salt Lake Base Meridian, Garfield County, Utah. See Map A – Vicinity Map.

Elevations range from 9,000 feet to 10,750 feet. Terrain is slightly rolling to level. The forest type is primarily spruce/fir, with scattered aspen clones. No Inventoried Roadless Areas (IRAs) are located within the project area. The Box Death Hollow Wilderness Area, located 12 air miles from the project area, is the nearest designated wilderness area. Most of the project area is classified in the Forest Plan as Management Area 7A, Wood Production and Utilization.

## DECISION

Based on my review of the Iron Springs Vegetation Improvement and Salvage Project EA and the project record, I have decided to implement the Proposed Action, as it best meets (1) the purpose and need identified in the EA, and (2) the goals and objectives of the Forest Plan for the Iron Springs project area.

The EA and accompanying specialist reports included in the project record document the findings and conclusions upon which this decision is based. The project record also includes the scientific literature, data, Forest Service guidance, and other materials upon which this decision is based.

## PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose and need for the project was determined through a review of various ecological and socioeconomic considerations.

### 1. Ecological Considerations

The review of ecological considerations focused on the condition and potential improvement of spruce/fir stands and aspen stands. The ID team considered a range of ecological factors including forest stand composition and condition, old growth characteristics, hydrology, and wildlife. The purpose of the review was to define “desired future conditions” for spruce/fir stands and for aspen stands within the project area and to identify the gap between existing conditions and desired future conditions. First, the forest characterized existing conditions in both aspen and spruce/fir stands. Second, “properly functioning conditions” (PFC) were identified. The third step was to use the knowledge gained from characterizing PFC, the guidance from the Forest Plan, and other relevant considerations to define desired future conditions for each vegetation type. Finally, the forest looked at the difference between existing conditions and the desired future conditions. This comparison indicated the need for the

proposed treatments to transform the area from its current condition to the desired future condition.

The spruce/fir analysis found that stand density is higher than desired and that age class diversity is lower than desired. Stocking is low in historic clearcut areas. The Forest Vegetation Report details that all stands are moderately susceptible to mortality by spruce beetle. The aspen analysis found that 80 percent of the aspen is in the mature to over-mature class, with the bulk of the aspen being greater than 80 years old. Most of the aspen clones are succeeding to spruce/fir and are at risk of being replaced by conifer.

Based on this ecological review, ecological purposes and needs were identified.

#### A. Spruce/fir stand improvement

For spruce/fir, the project purpose is to create a healthy forest and move vegetation toward desired conditions, that is, improve the balance of age class, improve vegetation structure stage (VSS) distribution, decrease stand densities, and perpetuate aspen presence within the spruce and fir-dominated forest. This would create stand conditions that do not promote spruce beetles or disease and that would increase the long-term sustainability of large-diameter trees. Related to this purpose, there are two needs within spruce/fir stands: first, a need to reduce stand densities to increase tree growth and vigor, and create stand conditions less conducive to infestation by spruce beetles and other diseases, and second, a need to maintain old growth characteristics, as described in Hamilton, et al. (1993).

#### B. Aspen stand regeneration and improvement

For aspen, the project purpose is to create a healthy forest and move vegetation toward desired conditions, that is, improve the distribution and balance in age-class for aspen clones. There are two needs within aspen stands: first, a need to reduce the percent of aspen stands in mature and over-mature size classes and create younger seedling/sapling age classes, which results in a better VSS distribution, and second, a need to reduce conifer encroachment into aspen clones.

## 2. Economic and Public Benefit Considerations

The review of economic and social considerations focused on two topics: providing forest products and minimizing fire risk. The U.S. Forest Service Organic Act (1897) calls for the Service to “furnish a continuous supply of timber for the use and necessities of the people of the United States.” The Forest Plan sets harvest targets (outputs) under this mandate. On December 21, 2010, in a memorandum to staff entitled “Taking Stock and Looking to the Future”, Forest Service Chief Thomas Tidwell identified five focus points for the Forest Service’s future, one of which, “Communities”, included service to communities: “We will engage communities to help America reconnect to the outdoors, expand on recreation benefits and create a wide range of opportunities for economic expansion. We will do everything we can to put America back to work.”

The Forest inventoried potential harvest opportunities that would provide a meaningful and useful product for the public while promoting a healthy forest. The potential for commercial

harvesting of trees affected by bark beetles was also reviewed. Adequate merchantable timber was identified to warrant commercial harvest. Also, high stand densities and extensive downed material led to conditions for both large and fine fuel loadings that are above desired levels.

Based on this review, economic and public benefit purposes and needs were identified.

#### A. Delivery of forest products

One project purpose is to provide valuable commercial forest products to benefit the local and regional economy, and to recover value from merchantable timber from trees affected by bark beetles. The specific need is to harvest both green and dead and dying timber for public use, and to do so in a manner that responds to the ecological purposes and needs.

#### B. Fire risk

Another project purpose is to reduce the long term risk of large-scale fires. The specific need is to reduce the long-term risk of large scale crown fire through the reduction of stand densities and rearrangement of ladder fuels to surface fuels.

### ALTERNATIVES CONSIDERED

Three alternatives were considered in detail and are described below: No Action, the Proposed Action, and an additional action alternative termed Alternative A.

#### 1. No ACTION

The No Action alternative is a requirement of the National Environmental Policy Act and provides a basis for comparing the Proposed Action and Alternative A to what would occur if neither of these alternatives were implemented. Under the No Action alternative, current management of the Iron Springs project area would continue. Fire risk would not change. No silvicultural treatments would be implemented to reduce stand densities and improve resiliency, to remove dead and dying Engelmann spruce/subalpine fir, to regenerate and maintain aspen, or to reforest under-stocked spruce/fir stands. The project design features listed below in Table 3 would not be implemented. The proposed 200-foot re-routing of forest road would not occur.

#### 2. THE PROPOSED ACTION

The Proposed Action is designed to use a variety of treatments to improve the condition of both spruce/fir stands and aspen stands, provide wood products for the local forest products industry, and reduce the long term risk of large scale crown fire. For a graphic representation of the Proposed Action, see Map B – Proposed Action. See Table 1 for a summary of vegetation treatments for the Proposed Action, Table 2 for a summary of transportation requirements for the Proposed Action, and Table 3 for a description of project design features related to the Proposed Action.

## Treatments within Engelmann spruce/subalpine fir stands

Within the project area, there are 5,240 acres of Engelmann spruce/subalpine fir. Approximately 3,603 of these acres would be commercially thinned to reduce stand densities while maintaining a variety of tree sizes. Individual tree marking would designate trees that would be harvested. In addition to the commercial thin, there would be salvage and sanitation harvest of pockets of Engelmann spruce killed or infested with spruce beetle.

Approximately 381 acres of the 3,603 acres of treated spruce/fir stands would also be pre-commercially thinned to remove trees less than 5-inches diameter that exceed stand density objectives or species mix. Trees greater than 5-inches diameter would be removed commercially. Trees between 5- and 7.9-inch diameter size class that cannot be sold commercially will be included in the pre-commercial treatment. Approximately 388 acres of scattered aspen clones within spruce/fir stands would receive aspen cleaning through hand felling of conifer. Within aspen clones commercial-size conifer would be removed; non-commercial-size conifer and some aspen would be cut and left on site to discourage browsing by larger ungulates, primarily deer, elk, and livestock.

Under the criteria in “Characteristics of Old-Growth Forests in the Intermountain Region” (Hamilton et al. 1993) and a 2007 Regional Office letter (USDA 2007) clarifying meaning and intent in Hamilton et al. 1993, 2,058 acres of spruce/fir within the project area have old growth characteristics. This determination was made based on an evaluation of existing stand data and new data collected during field surveys. These data and findings are included in the project record. Thinning is needed in these stands to reduce the risk of timber loss due to beetle kill and to forestall the spread of beetle activity to additional trees. Thinning in these areas will be done from below, and will be restricted to trees between 5- and 18-inches diameter.

Of the 2,058 acres with old growth characteristics, 131 acres would not receive treatment. Of the 1,927 acres treated, approximately 1,541 acres would retain old growth status following treatment. Thus, of the 2,058 acres with old growth characteristic, approximately 1,672 acres would retain old growth characteristics. The Forest Plan requires that 7 percent to 10 percent of each drainage be managed as old growth. Retention of 1,672 acres as old growth exceeds the Forest Plan requirement in each drainage within the project area. Details are provided in the Forest Vegetation Report.

Spruce beetle-infested or killed trees throughout the project area would be removed using sanitation/salvage timber harvest and commercial removal. Some stands that contain infested or killed subalpine fir would also be commercially removed. Merchantable, dead standing, and down spruce and fir would be harvested.

Approximately 366 acres in the spruce/fir stands are currently at the desired density. These 366 acres would receive commercial sanitation/salvage treatment only.

Finally, approximately 154 acres would be planted with Engelmann spruce seedlings using hand tools or augers. These areas are conifer strips in the south half of the project area that were clearcut in the 1960s and that do not contain the desired tree stocking.

### Treatments within aspen stands

Of the 256 acres of aspen stands in the project area, approximately 152 acres would receive commercial clear-fell coppice treatment designed to regenerate aspen. In smaller stands, the entire stand would be treated. In larger stands, some areas of mature aspen would be left in groups or strips between coppice treatment areas. Under the Forest Plan (page IV-40), “The maximum size of openings created by the application of even-aged silviculture will be 40 acres regardless of forest cover type.”

Aspen stands receiving regeneration treatment would be monitored for aspen browsing. If, after one year, heavy ungulate browsing is evident, these areas may be fenced until stocking requirements are met and average height is 6 feet. For this purpose, heavy browsing is defined as less than 500 stems per acre remaining unbrowsed.

### Treatments common to both spruce/fir and aspen stands

All commercial logging within spruce/fir and aspen stands would utilize ground-based skidders. The Forest Service would designate and approve skid trails and landings. Slash treatments within pre-commercial thinning units would include lop and scatter throughout cutting units and machine piling and burning of slash on landings. Burning of slash must be in accordance with an approved burn plan. Prior to burning, fuel wood removal from landings may be allowed if material is available and this activity does not increase the risk that beetles may be spread to new areas.

Table 1 contains a summary of the Proposed Action’s vegetation treatments. A combination of Forest Service crews, commercial timber sales, service contracts, stewardship contracts, and personal use permits may be used to accomplish the various treatments.

**Table 1. Summary of vegetation treatments for the Proposed Action.**

Treatment	Acres
Commercial Aspen Regeneration (AR)	152
Commercial Conifer Thinning (CT)	3,603
Commercial Conifer Sanitation/Salvage (SS)	366
Aspen Cleaning (AC)	388
Pre-commercial Conifer Thinning (PT)	381
Planting of existing low stocked areas	154
<i>TOTAL</i>	5,044

## Transportation Needs for the Proposed Action

The transportation network needed for the Proposed Action is shown on Map B – Proposed Action. See Table 2 for a summary of the transportation needs for the Proposed Action.

Two types of roads are considered here: National Forest System (NFS) roads (roads that are components of the Dixie National Forest's Motorized Travel Plan) and temporary roads (roads that would be constructed and used for project purposes and then closed).

**National Forest System roads.** Approximately 36.16 miles of existing National Forest System roads would be used as haul roads. Roads that could be used as haul roads for this project include National Forest System roads 140, 152, and 153 and Forest Highway 17. Also included is 0.42 miles of National Forest System road 31375, classified as an administrative road, which is outside of the project area. Also included is 0.23 miles of an existing motorized trail (an ATV trail) that is an extension of NFS road 31375. These 0.23 miles would revert to a motorized trail upon project completion. To accommodate hauling, some road segments may require maintenance, which might include adding fill, changing grade, and/or adding or improving drainage structures. The purpose of such maintenance is to meet haul standards, not to create an upgrade to a higher class of road. To prevent resource damage to a seasonally wet area, approximately 200 feet (0.04 mile) of National Forest System Road 1369 near the junction with National Forest System Road 140 will be rerouted to a drier upland area.

**Temporary roads.** Construction of 9.61 miles of new low-standard temporary roads is proposed. Of these the 9.61 miles, 0.76 miles needed to access an old dike and a borrow pit may be eliminated if access to the dike can be made over snow. (For the purpose of effects analyses it was assumed that this temporary road construction would be required.) Included in the 9.61 miles of temporary roads are 2.35 miles of roads closed by the 2006 Griffin Springs Travel Management Decision and later incorporated into the Dixie National Forest's Motorized Travel Plan. These 2.35 miles would be temporarily re-opened to provide access to the project area. None of the temporary roads would be added to the permanent National Forest System. Following harvest activities, all temporary roads would be obliterated and/or closed using barricades. These roads will not become part of the National Forest System.

**Road fill.** Fill used for road work would be excavated from three existing borrow pits, an old dike site and one new borrow site in an old well pad within the project area. One existing borrow pit just north of the project that was associated with the Recap Timber Project would also be used. These borrow pits are depicted on Map B. Access to three of these borrow pits would be from existing National Forest System roads. Access to the remaining two would be from temporary roads. At the completion of the project, the temporary roads leading to borrow pits would be closed. These roads would not become part of the National Forest System.

### **The transportation system following project completion.**

With the exception of the 200-foot re-route, the transportation system remaining after project implementation will be the same as it is under the 2006 Griffin Springs Travel Management Decision and the April 2009 Record of Decision for the Motorized Travel Plan. No new roads would be added to the system and no roads would be reclassified. Following project completion, roads improved for project purposes would not be maintained to a higher standard than before the project. Temporary roads would be decommissioned following completion of the project, and

would be obliterated and/or closed using barricades. The total number of miles of system roads before the project and after project completion would be the same. Table 2 presents a summary of transportation actions for the Proposed Action.

**Table 2. Summary of transportation actions for the Proposed Action.**

<b>Road Type</b>	<b>New Construction</b>	<b>Existing Roads or Motorized Trails to be used as Haul Roads</b>	<b>TOTAL</b>
System (in project area)	0 miles	35.74 miles	35.74 miles
System (off project area)	0 miles	0.42 miles	0.42 miles
Motorized Trail	0 miles	0.23 miles	0.23 miles
Temporary (to be obliterated or blocked following project completion)	9.61 miles	0 miles	9.61 miles
System road reroute	0.04 miles	0 miles	0.04 miles
<b>TOTAL</b>	<b>9.65 miles</b>	<b>36.39 miles</b>	<b>46.04 miles</b>
Post-project system roads in the project area			35.74 miles
Post-project (off project area)			0.42 miles

## Project design features for the Proposed Action

The Proposed Action includes the design features shown in Table 3.

**Table 3. Project design features for the Proposed Action.**

<p><b><i>Range and Noxious Weeds</i></b></p>
<p><u>RNW-1</u> Reseed landings following the activity to take advantage of the seedbed and discourage the establishment of noxious weeds. Seed mixes would include species that germinate rapidly to provide quick cover of vegetation (the “nurse crop” technique). Seed mixes used for rehabilitation purposes would be noxious weed-free certified.</p>
<p><u>RNW-2</u> If used for rehabilitation purposes, only certified noxious weed-free hay, straw, and mulch would be used.</p>
<p><u>RNW-3</u> Should these become established, control noxious weeds on all disturbed areas as per direction in the Forest Service Handbook (2080.5), the 1999 Executive Order on Invasive Species, the Forest Service’s 2000 Guide to Noxious Weeds Prevention Practices, and the January 2000 Dixie National Forest Environmental Assessment for Noxious Weed Management.</p>
<p><u>RNW-4</u> Maintain all range improvements in the same condition as at the time of treatment.</p>
<p><b><i>Hydrology/Soils</i></b></p>
<p><u>HS-1</u> Project design features intended to protect soil and hydrologic resources are listed in a Soil and Water Conservation Practices Appendix to the Hydrology Specialist Report. (There are 40 identified as applicable to this proposed action.) These design features will be attached to the contract during implementation.)</p>
<p><b><i>Forest Vegetation</i></b></p>
<p><u>FV-1</u> Within conifer treatment units, protect residual trees through the designation of skid trails and landings, directional felling, and limiting off-trail skidding to 1 to 2 passes. Over-snow operation may be used. Mechanized harvest equipment may also operate off skid trails. Designated skid trails should be located approximately 100 to 150 feet apart, depending on terrain.</p>
<p><u>FV-2</u> In aspen regeneration treatment units, protect aspen root systems through the designation of skid trails and landings, directional felling, and limiting skidding equipment to approved skid trails and only 1 to 2 passes off trail. If soils are frozen or are covered with 18 inches of snow, skidding equipment may operate off designated trails. To provide sufficient protection to aspen regeneration from excessive browsing, slash and logs not meeting utilization standards or adding to beetle risk shall be left throughout cutting units. If heavy browsing occurs, fences may be installed to restrict large ungulates (deer, elk, and livestock) until average seedling height exceeds 6 feet.</p>
<p><u>FV-3</u> To prevent spruce beetle spread, all Engelmann spruce cut prior to September 1 shall be removed before the end of the same year, and all Engelmann spruce cut after September 1 shall be removed before the end of the following year.</p>
<p><u>FV-4</u> To prevent spruce beetle spread, all live or recently killed Engelmann spruce felled or pushed over which exceed 14-inches diameter and 18 inches in length shall be skidded to a designated landing for disposal.</p>
<p><u>FV-5</u> To minimize additional fuel loading from harvest activities, ground-based skidding operations shall utilize whole-tree harvesting techniques.</p>

<p><u>FV-6</u> Landings shall not be located any closer than 100 feet from National Forest System road 30140.</p>
<p><b>Wildlife</b></p>
<p><u>WL-1</u> Project activities shall cease which "May Affect" threatened, endangered, or proposed species discovered within or adjacent to the project area during project layout or implementation that has not been addressed within the environmental analysis until the potential affect is removed or until consultation with the U.S. Fish and Wildlife Service is concluded. Also, project implementation shall cease if any sensitive species is discovered within or adjacent to the project area that has not been addressed within the environmental analysis until an assessment can be made to determine the impact and potential adverse effects to the species.</p>
<p><u>WL-2</u> To maintain hiding cover for big game within forested ecosystems, retain a minimum of 50% of the perimeter of natural openings, aspen regeneration treatments, and meadows, and 75% of the edge along arterial and collector roads, as described in DNF S&amp;G IV-34.</p>
<p><u>WL-3</u> To maintain habitat for a variety of wildlife species all forested landscapes shall be managed for no less than 300 snags per 100 acres in the spruce/fir cover type and 200 snags per 100 acres in the aspen cover type. Guidelines in the goshawk amendment to the Forest Plan guideline F (USDA Forest Service 2000, p. CC-21) are to be followed.</p>
<p><u>WL-4</u> To provide for the needs of a wide variety of wildlife, an average of 100 tons per 10 acres of coarse woody debris in the spruce-fir cover type and 30 tons per 10 acres in the aspen cover type shall be retained following the guidelines outlined in the goshawk amendment to the Forest Plan, guideline G (USDA Forest Service 2000, p. CC-22).</p>
<p><u>WL-5</u> If new raptor nests are found within or adjacent to the project area, a buffer shall be placed around the nest, and a timing restriction will be established if the nest area is occupied. Buffer size, timing restrictions, and restrictions of harvest activities will be made on a case-by-case basis taking into consideration site-specific raptor needs and utilizing raptor protection guidelines from the U.S. Fish and Wildlife Service (2002). If goshawk nests are found, the requirements in the Forest Plan are to be followed to protect the species.</p>
<p><u>WL-6</u> To maintain perching habitat for foraging peregrine falcons from a known eyrie, a foraging buffer shall be applied to the foraging area. Snags must not be removed from forested stands within 100 feet of the meadow/forest edge, as identified by the Peregrine Falcon Forage Buffer map located in the project record.</p>
<p><u>WL-7</u> To avoid impacts to successful breeding and nest site/territory use of known raptors, buffer size and timing restrictions for occupied nests will be applied during harvest activities. In applying the timing restriction, raptor protection guidelines from the U.S. Fish and Wildlife Service (2002), will be used in conjunction with site-specific raptor needs (e.g., high elevation influence on territory activities).</p>
<p><u>WL-8</u> To avoid impacts to known Utah prairie dogs within the project area, maintain a 350 foot no-treatment buffer around the active colony and apply a seasonal timing restriction from April 30 to September 14 in the adjacent stands. An extension of the timing restriction will occur if prairie dogs are observed above ground during or after an evaluation of the colony at the end of the restriction period. The restriction will last until prairie dogs have gone underground for the year. The buffer area and adjacent stands with the associated timing restriction is identified by the Utah Prairie Dog Buffermap located in the project record.</p>
<p><u>WL-9</u> To avoid impacts to breeding northern goshawks, timing restrictions will be applied to all activities within the PFAs if nests are active as outlined in the goshawk amendment to the Forest Plan (USDA Forest Service 2000). No activities are proposed in known goshawk nest areas.</p>

<p><u>WL-10</u> To provide habitat for the goshawk and its prey, the percent of the group acreage covered by clumps of trees with interlocking crowns should typically range from 40-70% in post-fledgling and foraging areas, as described in USDA Forest Service (2000, p. CC-22). No activities are proposed in known goshawk nest areas.</p>
<p><b>Recreation</b></p>
<p><u>R-1</u> Restrict hauling on FR 154 (the north-south forest road that passes Posey Lake Campground) on weekends and holidays between Memorial Day and Labor Day.</p>
<p><b>Scenery</b></p>
<p><u>S-1</u> Cut stumps within 6 inches of the ground within sight distance of FR 140. (This is a scenic backway, and therefore has a concern level of one.) Cut stumps within 6 inches of the ground within 150 feet of the Gap Trail. (This trail has a concern level of two.)</p>
<p><u>S-2</u> 90% of slash on landings adjacent to trailheads or open roads will be disposed of by burning, chipping, firewood removal, or other suitable method.</p>
<p><u>S-3</u> Utilize whole tree harvesting within 150 feet (or sight distance whichever is longer) of FR 140.</p>
<p><u>S-4</u> Utilize whole tree harvesting within 150 feet of the Gap Trail, existing and proposed trailheads, and all roads designated to be left open.</p>
<p><u>S-5</u> Locate no log landings adjacent to FR 140 or the Gap Trail.</p>

### 3. ALTERNATIVE A

Alternative A was designed to respond to a key issue relating to old growth harvest. This alternative reduces the amount of harvest within Engelmann spruce/subalpine fir old growth stands in the project area, while improving the condition of both spruce/fir stands and aspen stands, decreasing large scale crown fire risk, and providing wood products for the local forest products industry. For a graphic representation of Alternative A, see Map C – Alternative A. See Table 4 for a summary of vegetation treatments for Alternative A, Table 5 for a summary of transportation requirements for Alternative A, and Table 3 for a description of project design features related to both the Proposed Action and Alternative A.

#### Treatments within Engelmann spruce/subalpine fir stands

Under this alternative, only old growth stands that have the highest risk of beetle outbreak would be treated. The methods used to identify which stands have the highest risk is described in the Forest Vegetation Report. The areas with the highest risk of bark beetle outbreak are the commercial conifer thinning areas on Map C. Thinning is needed within these stands to reduce the risk of loss from additional beetle activity. Consistent with “Characteristics of Old-Growth Forests in the Intermountain Region” (Hamilton et al. 1993) and a 2007 Regional Office letter (USDA 2007) clarifying meaning and intent in Hamilton et al. 1993, there are 2,058 acres within the project area that were identified as having old growth characteristics. Under Alternative A,

374 acres of the 2,058 acres would be treated. As with the Proposed Action, thinning would be from below and emphasize the small to intermediate sizes. This would be accomplished by commercially removing trees between 5- and 18-inches diameter. Following treatment, these 374 acres would still be classified as old growth under Hamilton. Under Alternative A, there would be no change in the number of acres with old growth characteristics. This is consistent with Forest Plan requirements.

Under Alternative A, approximately 1,544 acres would receive a commercial thinning treatment. This treatment would be designed to reduce stand densities, while maintaining a variety of tree sizes. Individual tree marking would designate trees that would be harvested. In addition to the commercial thinning, there would be salvage and sanitation harvest of pockets of Engelmann spruce killed or infested with spruce beetle.

Approximately 134 acres of spruce/fir stands would receive pre-commercial thinning to remove trees less than 5-inches in diameter that exceed stand density objectives or species mix. Trees greater than 5-inches diameter would be removed commercially. In the event that trees in the 5- to 7.9- inch diameter size class cannot be sold commercially they would be included in the pre-commercial treatment.

Approximately 388 acres of scattered aspen clones within the spruce/fir stands would receive aspen cleaning through hand felling of conifer. Commercial-size conifer would be removed; non-commercial-size conifer and some aspen would be cut and left on site to discourage browsing by larger ungulates (deer, elk, and livestock). Sanitation/salvage timber harvest would remove spruce beetle-infested or killed trees throughout the project area. Stands containing infested or killed subalpine fir would also be commercially removed. Under this treatment, merchantable, dead standing, and down spruce and fir would be harvested. Approximately 363 acres within the spruce/fir stands are currently at the desired density. These 363 acres would receive commercial sanitation/salvage treatment only.

Finally, approximately 154 acres would be planted with Engelmann spruce seedlings using hand tools or augers. These areas are conifer strips that were clearcut in the 1960s and that do not contain the desired tree stocking.

### Treatments within aspen stands

Of the 256 acres of aspen stands in the project area, approximately 152 acres would receive commercial clear-fell coppice treatment designed to regenerate aspen. In smaller stands the entire stand would be treated. In larger stands some areas of mature aspen would be left in groups or strips between coppice treatment areas. In no case would an opening exceed 40 acres, the maximum allowable size for clearings as per the Forest Plan.

Aspen stands receiving regeneration treatment would be monitored for aspen browsing following existing Forest Plan guidance. If, after one year, heavy ungulate browsing was evident, these areas may be fenced until stocking requirements are met and average height is 6 feet. For this purpose, heavy browsing is defined as less than 500 stems per acre remaining unbrowsed.

## Treatments common to both spruce/fir and aspen stands

The treatments described below are the same as for the Proposed Action:

All commercial logging within spruce/fir and aspen stands would be implemented using ground-based skidders. The Forest Service would designate and approve skid trails and landings.

Slash treatments within units receiving pre-commercial thinning would include lop and scatter throughout cutting units and machine piling and burning of slash on landings, in accordance with an approved burn plan. Also, to reduce beetle risk, damaged non-commercial trees would also be lopped and scattered. Prior to burning, fuel wood removal from landings may be allowed if material is available and this activity does not increase the risk that beetles may be spread to new areas.

Table 4 presents a summary of Alternative A vegetation treatments. A combination of Forest Service crews, commercial timber sales, service contracts, stewardship contracts, and personal use permits may be used to accomplish the various treatments.

**Table 4. Summary of vegetation treatments for Alternative A.**

Treatment	Acres
Commercial Aspen Regeneration only (AR)	152
Commercial Conifer Thinning (CT)	1,544
Commercial Conifer Sanitation/Salvage (SS)	363
Aspen Cleaning (AC)	388
Pre-commercial Conifer Thinning (PT)	134
Planting of existing low stocked areas	154
<i>TOTAL</i>	2,735

## Transportation needs for Alternative A

The transportation network needed to implement Alternative A is shown on Map C – Alternative A. See Table 5 for a summary of transportation needs for Alternative A. As with the Proposed Action, with the exception of the 200-foot re-route, the transportation system remaining after project implementation would be the same as it is under the 2006 Griffin Springs Travel Management Decision and the April 2009 Record of Decision for the Motorized Travel Plan. Following project completion, roads improved for project purposes would not be maintained to a higher standard than before the project.

As with the Proposed Action, two types of roads are considered here, National Forest System roads (roads that are components of the Dixie National Forest’s Motorized Travel Plan) and temporary roads (roads that would be constructed and used for project purposes and then closed).

**National Forest System roads.** Approximately 36.16 miles of existing National Forest System roads would be used as haul roads. Roads that could be used as haul roads for this project include National Forest System roads 140, 152, and 153 and Forest Highway 17. The 36.16 miles includes 0.42 miles of National Forest System road 31375, classified as an administrative road, which is outside of the project area. Also included is 0.23 miles of an existing motorized trail (an

ATV trail) that is an extension of NFS road 31375. These 0.23 miles would revert to a motorized trail upon project completion. If a section of an existing road needs maintenance, this would include adding fill, changing grade, and adding or improving drainage structures. To prevent damage to a meadow, approximately 200 feet (0.03 mile) of National Forest System road 1369 near the junction with National Forest System road 140 would be rerouted from the edge of the meadow to a drier upland area nearer the trees. Otherwise, no new permanent roads would be constructed or added to the system.

**Temporary roads.** Construction of 6.31 miles of new low-standard temporary roads is proposed, including 0.76 miles of temporary road needed to access an old dike and a borrow pit. It may be possible to access the dike on frozen ground or over snow, alleviating the need for road construction. (The effects analysis included this 0.76 miles as temporary road construction.) Included in the 6.31 miles of temporary roads are 2.35 miles of roads closed by the 2006 Griffin Springs Travel Management Decision and later incorporated into the Dixie National Forest's Motorized Travel Plan. These 2.35 miles would be temporarily re-opened to provide access to the project area. None of the temporary roads would be added to the permanent National Forest System. Following harvest activities, these roads would be obliterated and/or closed using barricades.

**Road fill.** Fill used for road work would be excavated from three existing borrow pits, an old dike site, and one new borrow site in an old well pad within the project area. One existing borrow pit just north of the project that was associated with the Recap Timber Project would also be used. These borrow pits are depicted on Map C. Access to three of these borrow pits is from existing National Forest System roads. Access to the remaining two would be from temporary roads. At the completion of the project, the temporary roads leading to borrow pits would be closed.

**The transportation system following project completion.** With the exception of the 200-foot re-route, the transportation system remaining after project implementation would be the same as it is under the 2006 Griffin Springs Travel Management Decision and the April 2009 Record of Decision for the Motorized Travel Plan. No new roads would be added to the system and no roads would be reclassified. Following project completion, roads improved for project purposes would not be maintained to a higher standard than before the project. The total number of miles of system roads before the project and after project completion would be the same. Table 5 presents a summary of transportation actions for Alternative A.

**Table 5. Summary of transportation actions for Alternative A.**

Road Type	New Construction	Existing Roads or Motorized Trails to be used as Haul Roads	TOTAL
System (in project area)	0 miles	35.74 miles	35.74 miles
System (off project area)	0 miles	0.42 miles	0.42 miles
Motorized Trail	0 miles	0.23 miles	0.23 miles
Temporary (to be obliterated or blocked following project completion)	6.31 miles	0 miles	6.31 miles
System road reroute	0.04 miles	0 miles	0.04 miles
TOTAL	6.35 miles	36.39	42.74
Post-project system roads in the project area			35.74 miles
Post-project (off project area)			0.42 miles

**Project design features for Alternative A**

Alternative A would incorporate all of the project design features listed for the Proposed Action. See Table 3.

**COMPARISON OF ALTERNATIVES**

Tables 6 and 7 compare the three alternatives in terms of acres treated and transportation systems. Considering vegetation treatments, the primary differences between the Proposed Action and Alternative A are in the number of acres treated with commercial and pre-commercial thinning. Alternative A would treat 43 percent of the acres proposed to be treated under the Proposed Action, and would conduct pre-commercial thinning on only 35 percent of the acres proposed for thinning in the Proposed Action. Concerning the transportation system, the differences between these two alternatives are relatively minor, with the Proposed Action and Alternative A both using the same amount of system roads, and the Proposed Action requiring 3.3 more miles of temporary roads than is the case with Alternative A. For both vegetation treatments and roads, the major distinction is between the action alternatives (the Proposed Action and Alternative A) and the No Action Alternative, as the No Action Alternative involves no treatments and no road use.

**Table 6. Comparison of proposed vegetation treatments for each alternative.**

Vegetation Treatments	No Action	Proposed Action	Alternative A
Commercial Aspen Regeneration only (AR)	0 acres	152 acres	152 acres
Commercial Conifer Thinning (CT)	0 acres	3,603 acres	1,544 acres
Commercial Conifer Sanitation/Salvage (SS)	0 acres	366 acres	363 acres
Aspen Cleaning (AC)	0 acres	388 acres	388 acres
Pre-commercial Conifer Thinning (PT)	0 acres	381 acres	134 acres
Planting of existing low stocked areas	0 acres	154 acres	154 acres
<b>TOTAL</b>	0 acres	5,044 acres	2,735 acres

**Table 7. Comparison of proposed transportation actions for each alternative.**

Road Type	No Action	Proposed Action	Alternative A
System (in project area)	0 miles	35.74 miles	35.74 miles
System (off project area)	0 miles	0.42 miles	0.42 miles
Motorized trail	0 miles	0.23 miles	0.23 miles
Temporary	0 miles	9.61 miles	6.31 miles
System road reroute	0 miles	0.04 miles	0.04 miles
<b>TOTAL</b>	0 miles	46.04 miles	42.74 miles
Post-project (on project area)	0 miles	35.74 miles	35.74 miles
Post-project (off project area)	0 miles	0.42 miles	0.42 miles

## ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

Two other alternatives were considered based on issues identified during public comment periods. Each of these alternatives was ultimately eliminated from further consideration. The section below describes these two alternatives and the reason or reasons they were eliminated from consideration.

1. Prescribed fire was proposed as a vegetation treatment to reduce fuels. It was eliminated from further consideration because spruce/fir is not fire tolerant, the risk of stand replacement is high, and it would be less likely that the desired VSS class distribution would be achieved. Also, use of prescribed fire would not meet the purpose and need since it does not provide wood products to the forest products industry to benefit the local and regional economy.

2. A new alternative termed the “Joint SMU Alternative” was proposed in the June 4, 2010 comment letter from UEC et al. This letter is in the project record. This alternative called for (a) recognition of a proposal for wilderness designation developed by a coalition of wilderness advocacy organizations, and alternative prescriptions aimed at preserving wilderness attributes

within areas covered by that proposal, (b) systematic and detailed monitoring, (c) aspen regeneration and targeting root causes of undesirable trends in aspen clones, (d) conifer sanitation/salvage within 150 feet of roads, (e) spruce planting in areas not meeting specified thresholds, and (f) preserving late successional forests. This alternative was eliminated from detailed study for the reasons stated below.

The proposal to recognize the proposed wilderness and manage accordingly was not considered further because the Forest Service does not have the authority to designate specific areas as proposed or designated wilderness areas. Under the Wilderness Act, such classifications can only be made by the U.S. Congress.

With regard to monitoring, the Dixie National Forest has a robust and scientifically valid monitoring and evaluation program (Forest Plan, pp. V-3 to V-12). This monitoring program is consistent throughout the Forest, and it allows for systematic monitoring of multiple areas. Imposing a new monitoring program for this site would be duplicative and expensive, and the results would not be consistent with current forest-wide monitoring data. For these reasons, this portion of the proposal was eliminated from further consideration.

Regarding aspen regeneration, the Proposed Action and Alternative A fully address this subject. Both action alternatives include provisions to monitor ungulate browsing and to take action if needed. Finally, the aspen analysis considered the findings of scientific literature on this subject. It also considered the findings of the Utah Forest Restoration Working Group (*Guidelines for Aspen Restoration on the National Forests in Utah, 2010*). However, in the final analysis, the Forest Plan provides the essential guidance for aspen management. Given that aspen regeneration is being fully addressed in the Proposed Action and Alternative A, and that, as described in the Forest Vegetation appendix to the EA, aspen-related actions proposed under these two alternatives are consistent with the Forest Plan, a new aspen management alternative is not needed.

Regarding other provisions of the proposed SMU alternative, and as described earlier, the Proposed Action and Alternative A already incorporate sanitation/salvage along some authorized routes, planting of spruce in low stocked areas, and conservation of late successional forests. Thus consideration of an additional alternative to address this issue was determined to be unnecessary.

## **RATIONALE FOR THE DECISION**

In making this decision I considered comments and concerns from interested individuals and organizations. In response to the May 2010 Scoping Notice, a commenter raised a concern about the effects of the project on old growth in the project area. I considered this as a key issue and had the Interdisciplinary Team analyze Alternative A to address it. Under IV-35 of the Forest Plan, “a proportion of each drainage should be in each age class. Seven to ten percent should be managed as old growth . . . .” The effects analysis in the Forest Vegetation Report concluded that both the Proposed Action and Alternative A would retain substantially more old growth than required by the Forest Plan.

In response to the April 2011 Notice and Opportunity to Comment document a commenter suggested that the Forest Service should halt work on the EA and prepare an environmental

impact statement (EIS). In accordance with Sec. 1508.13 of the Council on Environmental Quality Regulations, if a proposed action will not have a significant effect on the human environment, an EIS need not be prepared. The conclusion to prepare an EA rather than an EIS was determined in the preparation of the EA and this DN/FONSI. My formal finding on the need for an environmental impact statement is included in the FONSI section of this document.

The same commenter raised concerns with the potential effects of the project on forest resources. Chapter 3 of the EA and the specialist reports in the project record considered the project's effects on the full range of forest resources, including wildlife, plants, hydrology, soils, cultural resources, recreation, scenery, and undeveloped character. In each case the analyses found that the effects of both the Proposed Action and Alternative A would be within acceptable limits as defined by the Forest Plan and other legal guidance.

This commenter also questioned the science used to analyze and draw conclusions regarding effects on goshawk. Specifically, the commenter asserted that Reynolds et al. (1992) is no longer considered to be the best available science, and that the Goshawk Amendment's recommendations were only to be relied upon "for no more than a few years." The facts are as follows: The Forest Plan was amended in 2000 to incorporate the Utah Northern Goshawk Project. The amendment recognizes both management recommendations from Reynolds et al. (1992), who conducted the longest running goshawk study (in Arizona), as well as those of Graham et al. (1999), who completed a goshawk habitat assessment for Utah and developed management recommendations specifically for Utah. In adopting the amendment, the Forest Service found both the Reynolds et al. (1992) and Graham et al. (1999) recommendations to be the most appropriate for managing goshawk habitat on National Forest System lands in Utah. The Forest Plan amendment of 2000 still represents the best available science for the Northern goshawk in Utah (Rodriguez, 2012). In addition to Reynolds et al. (1992) and Graham et al. (1999), this science also includes the Conservation Strategy and Agreement for the Management of Northern Goshawk Habitat in Utah (Utah National Forests et al., 1998). All of these documents are included in the project record.

In addition to public comments, I also considered the analyses described in the EA and related specialist reports. Chapter 4 of the EA distills the findings in the various specialist reports and describes how No Action, the Proposed Action, and Alternative A affect various resources within the project area. The effects of both the Proposed Action and Alternative A would be within the limits of the Forest Plan and other legal guidance.

Based on my review of comments and effects, I have determined that the Proposed Action best meets the project's purpose and need and the goals and objectives of the Forest Plan, without having significant adverse effects on the human environment.

Summarizing my reasons for selecting the Proposed Action, this alternative will have the following specific outcomes consistent with the project's purpose and need.

First, the Proposed Action will improve the balance of age class, improve VSS distribution, decrease stand densities, and perpetuate aspen presence within the spruce/fir forest. This will create stand conditions that do not promote spruce beetles or disease, increase long-term sustainability of large-diameter trees, and maintain species diversity.

Second, the Proposed Action will improve the distribution and balance in age class for aspen clones.

Third, the Proposed Action will retain old growth characteristics in each of the watersheds within the project area in accordance with Forest Plan requirements.

Fourth, the Proposed Action will provide valuable commercial forest products that can help to support the local economy and recover value from merchantable timber from trees affected by bark beetles.

Fifth, 200 feet of an existing system road will be rerouted to protect a seasonally wet area from potential damage from hauling activities.

Sixth, the Proposed Action will reduce the risk of large-scale stand replacement wildfires in the project area over the long term (>10 years) through the reduction of stand densities, promotion of aspen, and rearrangement of available fuels. When a wildfire occurs, these conditions will make it more likely that the fire will be a surface fire rather than a crown fire. As described in the Fire and Fuels Report, outside of areas that will have whole tree harvest, residue slash from thinning will in the short term (1 to 10 years) increase surface fuel loading, which may result in a more intense surface fire. However, surface fires are less complex to manage than stand replacement, crown fires. Although there will be a continued need for fire suppression to meet the goals and objectives of the Forest Plan, there will be increased safety for fire suppression crews because of the decreased probability of larger, stand replacement fires.

Seventh, the project area is primarily in a 7A Wood Production and Utilization management area, as determined by the Forest Plan. The types of vegetation management envisioned in the Proposed Action are consistent with the Forest Plan's objectives for 7A management areas.

Eighth, and finally, there are no other constraints to project implementation. There are no Inventoried Roadless Areas or other special designations that could constrain project implementation. Nor would project implementation affect cultural resources, adversely affect threatened or endangered species, or cause a trend toward federal listing for sensitive species. The analysis of environmental consequences in Chapter 4 of the EA did not identify any significant direct, indirect, or cumulative effects.

In sum, the project area is part of a working forest where vegetation treatments such as the Proposed Action are needed, will not cause significant effects to the human environment, and are entirely appropriate.

I did not select the No Action alternative as it does not fully meet the project's purpose and need and in some cases does not meet the goals and objectives of the Forest Plan, including the objectives of the 7A Wood Production and Utilization management area. The following are the specific issues that led me to reject the No Action alternative.

First, with No Action spruce/fir stands would remain overstocked, aspen would continue to be crowded out by conifers, and the forest would remain susceptible to spruce beetles and disease.

Second, with No Action the age-class of aspen stands would remain out of balance.

Third, with No Action no commercial benefit would be realized by local communities.

Fourth, consistent with the Fire and Fuels Report, the No Action alternative would forgo an opportunity to reduce the risk of large-scale stand replacement wildfire by not reducing stand densities, not promoting aspen (which can serve as a fire break and inhibit crowning), and not breaking up continuous fuels that are currently present in area stands.

While outcomes and the effects on the human environment are similar for both Alternative A and the Proposed Action, compared to the Proposed Action, Alternative A provides a lesser degree of benefit to forest health, increases stand replacement fire risk, presents conditions that put old growth forest characteristics at higher risk to beetle mortality, and provides fewer local jobs. Significantly, the benefits of Alternative A to conservation of old growth trees are not markedly superior to those provided by the Proposed Action. Accordingly, I did not select Alternative A.

## **PUBLIC INVOLVEMENT AND ISSUES**

This action was originally listed as a proposal on the Dixie National Forest Schedule of Proposed Actions on July 1, 2010 and has been updated periodically during the analysis. The public was invited to review and comment on the proposal through a Scoping Notice mailed to interested parties on May 5, 2010. The Scoping Notice was published on May 5, 2010 in *The Spectrum*, the newspaper of record located in St. George, UT. This initiated a 30-day comment period. Chapter 5 of the EA identifies agencies, organizations, and individuals consulted. Following the comment period the Forest Service prepared a comment analysis document that summarized written comments and how the Forest Service addressed these comments. This document, completed on July 26, 2010, is available through the project record, as are the Scoping Notice and comment letters received pursuant to this notice.

The Forest Service used public comments from the May 2010 scoping period as the means to identify issues. In accordance with the Council on Environmental Quality's NEPA regulations (Sec. 1501.7), issues were separated into two groups: key and non-key. Key issues are defined as those comments that lead to the development of a new alternative. Non-key issues were identified as those: (1) outside the scope of the Proposed Action; (2) already decided by law, regulation, Forest Plan, or other higher level decision; (3) irrelevant to the decision to be made; or (4) conjectural and not supported by scientific or factual evidence. The Interdisciplinary Team identified three potentially key issues: (1) that implementation of the Proposed Action would result in a negative impact to old growth characteristics, (2) that alternative methods to harvest, such as prescribed fire, should be used to treat tree stands, and (3) that a citizen-proposed alternative known as the Joint SMU Alternative, which includes a wilderness component, should be considered. Only the first of these three potentially key issues was considered to warrant development of a new alternative. This was Alternative A, which focuses on harvesting fewer acres in old growth areas. Disposition of the other two issues was described earlier in the "Rationale for the Decision" section.

During this time the Forest Service also refined and clarified the Proposed Action, while retaining its essential components.

On April 8, 2011 the Forest Service released a "Notice and Opportunity to Comment on the Proposed Action and Alternative A for the Iron Springs Vegetation Improvement and Salvage Project." It was mailed to those who had commented on the May 2010 Scoping Notice and

announced through a legal notice published on April 8, 2011 in *The Spectrum*. This initiated a formal 30-day comment period, during which the public had the opportunity to review and comment on the Proposed Action and Alternative A. Three comment letters were received. A “Response to Comments Received Pursuant to the April 8, 2011 Notice and Opportunity to Comment Document” was completed and is available through the project record, as are the Notice and Opportunity to Comment document and responses received during the comment period. The Interdisciplinary Team’s analysis of the comments identified no issues that would require new action such as rejection or revision of either action alternative, or development of a new alternative. The description of the Proposed Action and Alternative A in the EA and in this document are essentially the same as presented in the Notice and Opportunity to Comment document.

## **FINDING OF NO SIGNIFICANT IMPACT**

A Finding of No Significant Impact (FONSI) determines whether a previously prepared EA can be used as the analysis document for a Federal action, or, alternatively, whether an EIS must be prepared prior to taking action. In the FONSI the significance of environmental impacts must be considered in terms of context and intensity. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human and national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. In the case of a site-specific action, significance usually depends upon the effects in the locale rather than in the world as a whole. Intensity refers to the severity or degree of impact (40 CFR 1508.27).

### **Context**

The physical and socio-economic context for the 8,306-acre Iron Springs Vegetation Improvement and Salvage Project is described below. The project area is situated on the Aquarius Plateau in Garfield County, Utah. It is in the Dixie National Forest approximately 15 miles northwest of the City of Escalante. Garfield County is rural and the economy depends on agriculture, tourism, services, and forestry.

The proposed forest vegetation treatments are limited to approximately 5,000 acres of the Dixie National Forest. This is a site-specific action. To put this in perspective, the Forest is composed of approximately 2 million acres of public land, almost half of which is in an essentially “unmanaged” condition, that is, wilderness areas, research natural areas, or inventoried roadless areas. The Iron Springs proposal includes treatments that constitute less than 0.5 percent of the Forest’s area. Moreover, as referenced in the Forest Vegetation Report, implementation of treatments would not result in deforestation or land-use changes, which are the primary large-scale impacts to forest vegetation resources of regional or global concern.

Economic and other off-Forest effects will likely be restricted to Garfield County and Wayne County, located immediately north of Garfield County. The people who will experience effects from the project include residents and businesses of surrounding communities in Garfield and Wayne counties, and visitors to the Forest. Residents of surrounding communities will feel

effects of the project both as visitors to the project area and as recipients of any economic stimulus that might occur.

The Recreation, Scenery, and Roadless and Undeveloped Areas Report concluded that effects on visitors would be short-term and minor. This would be the same for visitors from the local area and from further away.

## Intensity

The intensity of effects was considered in terms of the following:

- 1. Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that, on balance, the effect will be beneficial.** Consideration of the intensity of environmental effects was not biased by beneficial effects of the action, and my finding of no significant environmental effects is not biased by the beneficial effects of the action. The intensity of effects on the environment is described in Chapter 4 of the EA. That chapter demonstrates that none of the Forest's environmental resources will receive significant adverse effects. The effect of proposed treatments on forest vegetation and fire risk within the project area would be "beneficial," but not generally considered "intense." These benefits are described in the Forest Vegetation and Fire and Fuels Report and in the Forest Vegetation and Fire and Fuels sections of Chapters 3 and 4 of the EA. My finding of no significant environmental effects was based on the findings of the specialist reports and the EA, with support from the scientific literature.
- 2. The degree to which the Selected Action affects public health or safety.** Treating the forest vegetation resource in the Iron Springs project area will not affect public health or safety. Public health will not be adversely affected as the project will not have a significant effect on either air or water quality. The effects on water quality are described in the hydrology report and Chapter 4 of the EA. Public safety likewise is unlikely to be affected. This is because (a) the Forest Service has adequate procedures in place to protect the public during treatment, and (b) treatment will be a short-term activity and treatment will therefore not create any long-term effects related to public safety. As stated in the Fire and Fuels Report, in the long-term public safety may actually improve due to the lowering of the risk for large-scale fire.
- 3. Unique characteristics of the geographic area, such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.** No parklands, prime farmlands, wetlands, wild and scenic rivers or rivers that are eligible/suitable for designation, or ecologically critical areas are associated with the project area. Nor is the project area within a designated wilderness or an Inventoried Roadless Area (see the Recreation, Scenery, and Roadless and Undeveloped Areas Report). Forest Service correspondence with the Utah State Preservation Office indicates that the project area has been surveyed for historic and cultural resources and the project will not affect historic or cultural resources. Documentation of these findings can be found in Chapter 4 of the EA, in the applicable specialist reports, or, in the case of historic and cultural resources, the correspondence with the Utah State Preservation Office located in the project record.

4. **The degree to which the effects on the quality of the human environment are likely to be highly controversial.** The effects of implementation of any alternative on the quality of the human environment are not likely to be highly controversial. The project area is a managed forest, the proposal is limited in scope and standard management requirements are demonstrably effective in reducing impacts to national forest resources. The environmental effects of the project on the human environment are not significant and will not generate controversy on the part of the general population. Public comments on the Scoping Document (2010) and the Notice and Opportunity to Comment document (2011) are contained in the project record.
5. **The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.** The conditions present within the project area and the treatments that make up the Proposed Action are similar to those of forest vegetation treatment projects that have been implemented on the Dixie National Forest in the past. Potential effects from such projects are routinely considered, documented, and monitored by Forest personnel. The effectiveness of project design features in minimizing or eliminating risks from forest management has been demonstrated. Effects on the human environment are described in Chapter 4 of the EA. That analysis shows the effects are not uncertain, and do not involve unique or unknown risk.
6. **The degree to which the action may establish a precedent for future actions with significant effects, or represents a decision in principle about a future consideration.** This proposal does not set a precedent for any other vegetation management projects that may be implemented to meet the goals and objectives of the Dixie Forest Plan. Any decision to treat the forest vegetation in Iron Springs applies to this project only and does not represent decisions about future actions. Thus, this action does not set a precedent for future actions or represent a decision in principle about a future consideration. Future actions will be analyzed on their own merits in compliance with NEPA. Prior experience on the Dixie National Forest with similar projects supports this conclusion.
7. **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.** The cumulative impacts are not significant. The specialist reports and Chapter 4 of the EA include a list of potential past, ongoing and foreseeable future actions that may create cumulative effects. Applicable specialist reports provide lists of past vegetation treatment activities in the project area and evaluate the effects of the Proposed Action in combination with these projects. In general, those projects were designed, like the Iron Springs proposal, to have beneficial silvicultural effects to managed forests. Those incremental benefits are accounted for in the specialist reports and in Chapter 4 of the EA. The cumulative effects analyses in Chapter 4 of the EA confirm that the action alternatives would not result in significant cumulative effects.
8. **The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed, or eligible for listing, in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.** As articulated in Forest Service correspondence with the Utah State Preservation Office, this proposal will not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic

Places because none exist within or near the project area. The proposal will cause no loss or destruction of significant scientific, cultural, or historic resources because no significant scientific, cultural, or historic resources have been identified within the project area. If any of these resources are identified in the future the Forest Service has policies that require the agency to conserve these resources. The lack of cultural or historic sites has been documented by the Dixie National Forest archaeologist in a letter to the Utah State Preservation Office archived in the Dixie National Forest headquarters in Cedar City, Utah.

9. **The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.** Endangered or threatened species potentially found in the project area include Mexican spotted owl and Utah prairie dog. The required Biological Assessment (BA) has been completed to document analysis of potential effects of this project on endangered and threatened species and their critical habitat and on proposed and candidate species and their habitats. These conclusions are also included in the Vertebrate and Plant Report and wildlife section of Chapter 4 of the EA. As stated in those reports, the project “may affect but is not likely to adversely affect the Mexican spotted owl,” and “may affect but is not likely to adversely affect the Utah prairie dog.” The USFWS has issued its concurrence with the BA. The Vertebrate and Plant Report and Chapter 4 of the EA also document that the project does not have suitable habitat for any endangered or threatened plant species.
10. **Whether the action threatens to violate Federal, State, or local law or requirements imposed for the protection of the environment.** The action alternatives comply with Federal, State, and local laws and requirements related to protection of the environment. Key Federal laws and requirements with which the action alternatives comply are listed below in the Findings Required by Other Laws and Regulations section. The Utah State Preservation Office has determined that the project is consistent with historic and cultural resource requirements. The action alternatives also comply with the State of Utah Air Quality Rule.

Reports and other information referenced in the above declarations are included in the project record.

## **Finding Regarding the Significance of Environmental Impacts**

In accordance with the National Environmental Policy Act, at the completion of an EA the deciding official must (1) reject the EA and not implement the project, (2) make a Finding of No Significant Impact, or (3) determine that the project will have a significant effect on the quality of the human environment and proceed to prepare an environmental impact statement. After considering the effects of the actions analyzed, in terms of context and intensity, I have determined that these actions will not have a significant effect on the quality of the human environment. Therefore, an environmental impact statement is not needed and will not be prepared.

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

As determined through a review of the EA, specialist reports and applicable laws and regulations, this decision is consistent with the following Federal laws, executive orders, and interagency agreements:

- National Environmental Policy Act
- National Forest Management Act
- Clean Water Act (including the National Pollutant Discharge Elimination System (NPDES) permit program)
- Clean Air Act
- Endangered Species Act of 1973, as amended
- American Antiquities Act of 1906 and Historic Preservation Act of 1966
- Executive Order 11990 of May, 1977 (Wetlands)
- Executive Order 11988 of May, 1977 (Floodplains)
- Executive Order 12898 of February, 1994 (Environmental Justice)
- Executive Order 13186 of January, 2001 (Migratory Bird Treaty Act (MBTA))
- Strategy for Implementing MBTA and EO 13186 on National Forest Lands in Utah
- MOU between USFWS and the FS of December 2008 (MBTA)

No significant effects are expected on wilderness, critical habitat, or farmlands. This action does not pose any unusual risks to public health and safety and there are no known significant effects on civil rights, women, or minorities. I believe this project will enhance the natural and social environments in and surrounding the Dixie National Forest. This project will not have a significant adverse effect on subsistence resources and opportunities.

## **Consistency with the Forest Plan**

This decision is fully consistent with the Dixie National Forest Land and Resource Management Plan (1986), as amended. The wildlife and forest vegetation specialist reports each contains a specific analysis of the extent to which the Proposed Action complies with wildlife and forest vegetation standards and guidelines of the Forest Plan, including the March 14, 2000 Goshawk Amendment. Both reports concluded that the Proposed Action is consistent with the Forest Plan.

The hydrology and soils reports contain specific analyses of the extent to which the Proposed Action complies with the Forest Service Handbook's Soil and Water Conservation Practices and conclude that the Proposed Action is consistent with these requirements.

### **Consideration of Best Available Science**

My decision is based on a review of the record. The record includes a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgement of incomplete or unavailable information. The scientific literature consulted in the development and analyses of the proposed project is included in the project record. For a discussion of the best available science, see the specialist reports. The Forest Vegetation Report and Appendix C to the EA include a detailed discussion of the best available science as it relates to vegetation treatments. The analysis was conducted in a manner that is consistent with applicable Forest Service and Dixie National Forest guidance concerning best available science, including Forest Service Manual 1921.81, the Washington Office's directive dated June 20, 2007, and the Forest-specific guidance entitled Dixie NF Consideration of Best Science. All of these are included in the project record.

Relevant and responsible opposing views were considered in the comment analysis and, as appropriate, were integrated into the specialist reports. While opposing views were fully considered in the analysis, they did not surface areas of substantial scientific uncertainty or risk, and no incomplete or unavailable information was identified that was necessary for this analysis.

### **Administrative Review (Appeal) Opportunities**

#### Appeal standing

Pursuant to 36 CFR 215.11, on April 8, 2011, a legal notice in *The Spectrum* newspaper announced a Notice and Opportunity to Comment on the Proposed Action and Alternative A. This initiated a 30-day comment period. Individuals or organizations submitting written or oral comments during the 30-day comment period established "standing" to appeal this final decision.

#### Appeals information

This decision is subject to appeal pursuant to Forest Service regulations at 36 CFR 215. Appeals must meet the content requirements of 36 CFR 215.14. Only individuals or organizations who submitted comments or otherwise expressed interest in the project during the official comment period may appeal. Appeals, including attachments, must be in writing, fully consistent with 36 CFR 215.14, and must be postmarked or received by the Appeal Deciding Officer within 45 days of the publication of the legal notice of this decision in *The Spectrum* newspaper. The publication date is the exclusive means for calculating the time to file an appeal. Timeframe information from other sources should not be relied on.

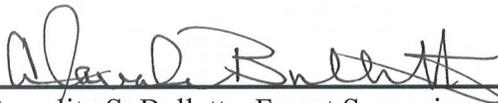
The Appeal Deciding Officer is the Regional Forester. Appeals must be sent to: Appeal Deciding Officer, Intermountain Region USFS, 324 25<sup>th</sup> Street, Ogden, Utah 84401; or by fax to: 801-625-5277, or by email to: [appeals-intermtn-regional-office@fs.fed.us](mailto:appeals-intermtn-regional-office@fs.fed.us). Emailed appeals must be submitted in rich text format (rtf) or Word (.doc or .docx) and must include the project name in the subject line. Appeals may also be hand delivered to the above address during regular business hours of 8:00 a.m. to 4:30 p.m., Monday through Friday, excluding holidays. The appeal must have an identifiable name attached or verification of identity will be required. Names and addresses of appellants will become part of the public record. A scanned signature may serve as verification on electronic appeals.

### Implementation

If no appeal is received, implementation of this decision may occur on, but not before, five business days from the close of the appeal filing period. If an appeal is received, implementation may occur on, but not before, the 15<sup>th</sup> business day following the date of the last appeal disposition. Implementation of this decision is expected to begin in the summer of 2013.

### Contact

A decision record of the EA is available upon public request at the Escalante Ranger District office, 755 West Main Street, PO Box 246, Escalante, Utah 84726-0246. For further information concerning this project and decision, contact the Interdisciplinary Team Leader, Kevin Zeman, at the above address or (435) 826-5400.

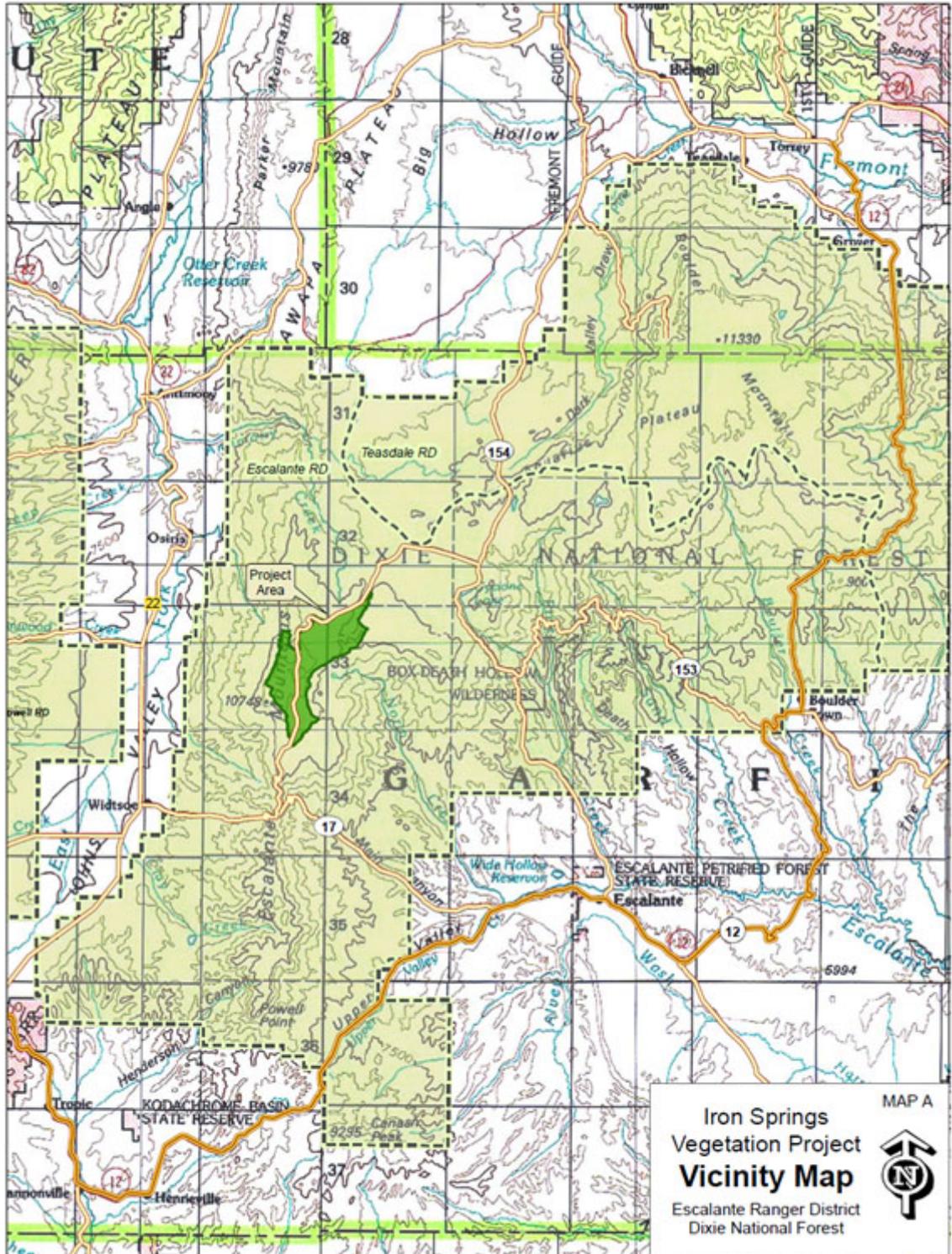
  
Angelita S. Bulletts, Forest Supervisor

March 8, 2013

Date

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Map A – Iron Springs Vegetation Project Vicinity



Map B – Proposed Action

