



**DECISION NOTICE AND FINDING OF NO SIGNIFICANT IMPACT
NORTH HEBER SALVAGE PROJECT**

**USDA Forest Service
Heber-Kamas Ranger District, Uinta-Wasatch-Cache National Forest
Wasatch County, Utah**

T1N and T1S, R11W; T1N, R10W, USM, T4S, R7E and R8E, SLM.

1. INTRODUCTION

This document details my decision regarding the proposed North Heber Salvage Project, which includes the salvage harvest of dead Engelmann spruce within past timber sale units and the closure/obliteration of the existing logging roads that will no longer be needed. The actions were developed at the onset of the project and are based on site-specific needs and preliminary issues. In accordance with the National Environmental Policy Act (NEPA) and Forest Service regulations on its implementation, the potential environmental impacts of this proposal were assessed and documented in an environmental assessment (EA) released concurrent with the draft decision as part of the objection process found at 36 Code of Federal Regulations 218. The EA is incorporated herein by reference.

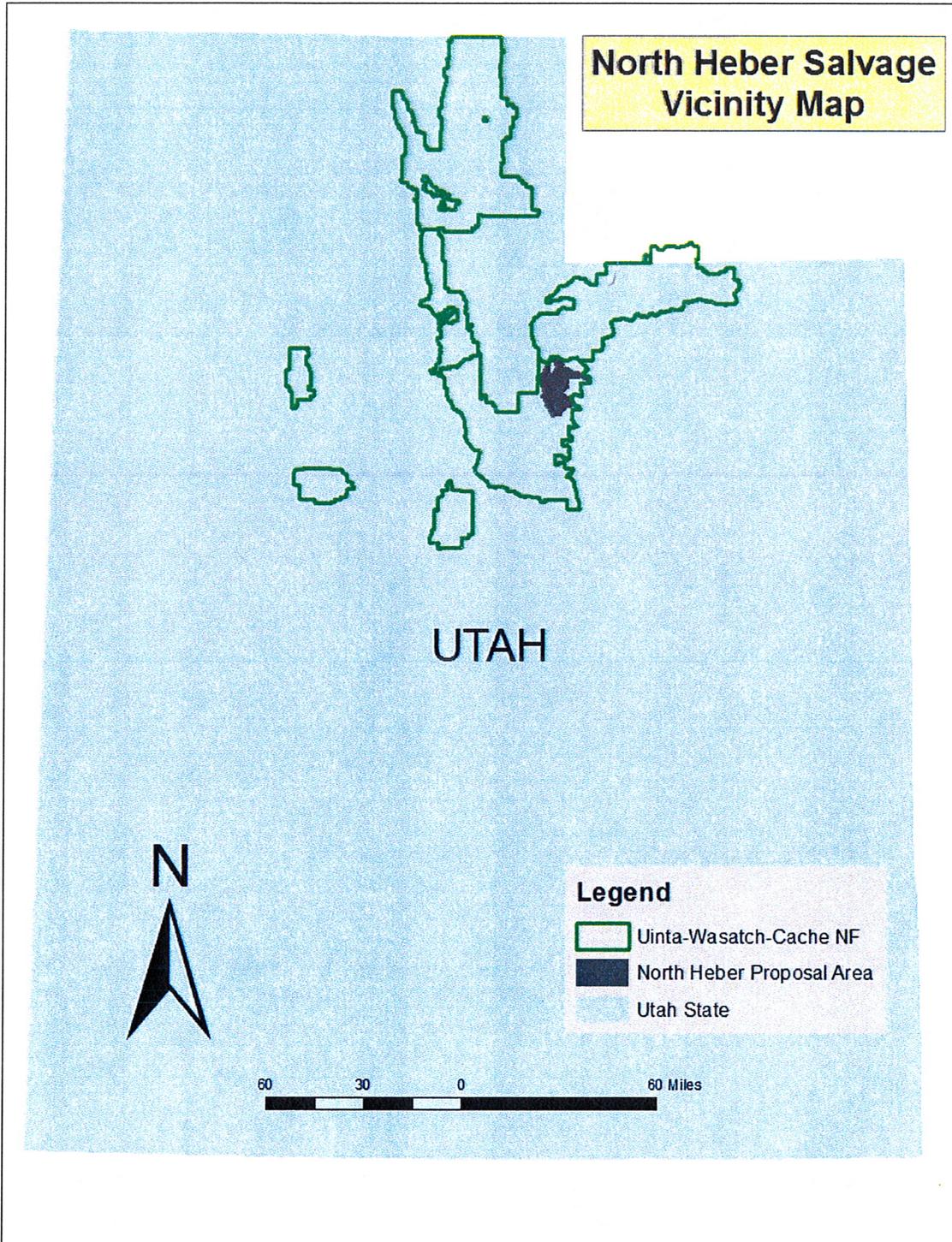
2. BACKGROUND

The North Heber Salvage Project is located in Wasatch County, Utah, on the Uinta-Wasatch-Cache National Forest east of Heber City (Figure 1). The project area includes about 3,730 acres of previously harvested timber units located across a 92,260 acre portion of the Heber-Kamas Ranger District. The area is heavily used for camping, hiking, hunting, grazing and scenic driving. Winter use includes snowshoeing, skiing and snowmobiling.

Spruce-fir stands located on the Heber-Kamas Ranger District have been heavily impacted by spruce bark beetle activity for several years. The result has been almost complete mortality of spruce trees larger than about six inches in diameter.

This action will move the forestlands and watersheds toward conditions that more closely represent the historic vegetative composition and structure by creating acres of young forest (early to mid-seral structural stages) and reducing road density and erosion potential.

Figure 1: North Heber Salvage Project General Vicinity Map.



3. DECISION

My decision is to authorize the proposed action (Alternative 2), which consists of salvage harvest of dead Engelmann spruce, followed by tree seedling planting on about 3,730 acres, and obliteration / rehabilitation of about 29 miles of road prisms within the units that remain from past sales. About 18 miles of user created unauthorized routes that have developed within these units will also be obliterated. This will move forestlands toward conditions that more closely represent the historic vegetative composition and structure and reduce erosion potential from the old roads in the watersheds. The proposed action and the alternatives considered in detail are described in Chapter 2 (Section 2.2.2) of the EA.

My conclusions are based on the scientific analyses in the EA and supporting project record that demonstrate a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgement of incomplete or unavailable information. The analysis identifies techniques and methodologies used, considers current and accurate science, and references scientific resources relied upon. The analysis includes a summary of scientific evidence relevant to evaluating reasonably foreseeable impacts.

4. DETAILS OF THE DECISION

The following information provides specific details of my decision to authorize the North Heber Salvage Project.

Alternative 2: The Proposed Action – Full suite of timber and road obliteration activities.

Harvest:

Use several timber sales to harvest the merchantable dead trees within the previously harvested units. Sales would be offered over a period of four to six years and each would last approximately three years. Mechanical tracked feller bunchers as well as hand chainsaw falling would likely be used along with rubber tired grapple skidders. Skid trails would be approved and designated by the sale administrator prior to use and would primarily follow routes used during the previous entry. Existing road prisms would be reutilized for access and then obliterated and rehabilitated following use. The following table shows the possible sales that could be organized and offered out of the proposed units. The final mix of sale packages may be grouped differently depending in part on future timber market needs and demand.

Sale Name	Acres	Year (CY)
Little South	673	2015
Mill Hollow	523	2016
West Fork	984	2017
Roundy Basin	478	2018
Wolf Creek	1071	2019

Based on the riparian habitat conservation area (RHCA) information in GIS, areas that are within the buffer limits but were part of the original sale area have been removed from the proposed action. These boundaries will be observed on the ground and possibly adjusted (if wet soils or stream channels differ from the GIS) during the layout of the individual units.

Trees to be removed would be individually marked/designated by Forest Service crews or contract provision and would include all merchantable dead spruce greater than eight inches in diameter at breast height (DBH) or dead lodgepole pine greater than seven inches in DBH where basal area of the dead exceeds approximately 20 square feet per acre. Below this basal area, it would not be economical to remove trees and would result in excess ground disturbance and damage to the residual stand due to long skids.

These low volume areas will contribute to meeting the snag requirements of 300 stems per 100 acres. In addition, islands of dense standing dead will be left in patches of about 0.25 acre. Where possible these patches will be centered on areas with live subalpine fir or spruce in order to provide both live and dead trees in the group. Any live spruce greater than eight inches DBH will be left for future seed recruitment unless they need to be removed for operational safety reasons or will likely blow down. Smaller trees of any species would also be left on the site.

In many cases and where feasible and agreed to by both parties, past landings will be reused, however new landings will also be created. The following table is an estimate based on GIS mapping of the number of and location of potential landings and assumes an average size of 0.25 acre; some will be larger and some will be smaller. Landings by contract provision are agreed upon by both the purchaser and the Forest Service. Landing needs vary also between purchasers and depend on the style and scale of the logging operations. Table 2 shows the estimated number of landings and associated acreage, based on the GIS analysis, for each of the sale areas. These sale areas are shown on Figure 2.

Table 2: Estimated landings.		
Sale Name	#Landings	Acres of Landings
Little South Fork	21	5.25
Mill Hollow	34	8.5
West Fork	36	9.0
Roundy Basin	32	8
Wolf Creek	64	16

Landing slash will be piled, and the piles burned. It can be expected that there will be some piles at each landing where any log processing occurs. Smaller landings (approximately less than 0.25 acre) where trees are only decked for loading will likely have the slash that occurs scattered. Dead spruce trees tend to lose a lot of the branches during falling and skidding and so be less slash is expected than in a green sale. Larger landings where trees are topped and cull wood sorted will have machine made piles to burn. Piles should average in the 0.1 to 0.2 acre size range in these cases.

Table 3: Estimated haul traffic on major roads.		
Route	Miles	# Loads
70026	1.99	600
70054 *	22.57	500 – 1,800
70055	2.69	50
70060	0.33	400
70080	0.17	5
70083	4.79	400
70091	8.39	120
70096	8.52	400
70171	0.45	30
70172	0.71	250
70237	0.52	50
70283	0.21	75
70284	1.72	75
70293	1.43	75
70316	1.56	75
70535	2.25	10
70560	1.03	250
70901	0.81	75

* This route is the main road from Mill Hollow, over Lake Creek Summit, to Current Creek and as such will see most of the sale volume across it. By the bottom section through Mill Hollow most of the sale volume, except for that near Wolf Creek, will pass over it.

Following harvest, tree seedlings will be planted in areas where regeneration is not established or sufficient to meet the 285 trees per acre prescribed by the 2003 Land and Resource Management Plan for the Uinta National Forest (Forest Plan). Spacing will be variable in order to account for existing trees and provide for microsite protection for the seedlings. Trees will be hand planted using augers or hoedads with 18 inch scalps to remove competing vegetation from the planting spot.

Funds would be collected from timber sale receipts to cover reforestation activities. Other area improvement activities identified in the NEPA could also be funded if revenues are available.

Road Closure:

After completion of harvest activities, roads approved for closure will be obliterated and/or rehabilitated. These roads were left in place assuming a harvest entry about every 30 years. Due to the almost complete removal of merchantable size timber during this entry, and the establishment of seedling/sapling size stands following, it is likely that future harvest will not occur in these stands for over 100 years.

The level and type of road closure will vary considerably depending on the condition of the road. Roads that are reopened and used for timber operations will be returned to original slope contour,



at least at the end sections, mostly using a track hoe. Culverts would be removed and stream channels restored to the original shape and depth. Exposed soil would be seeded with an appropriate seed mix.

There are also old logging roads in the units (both level 1 and non-system) that will not be used during this removal. If an old logging road prism is well vegetated (including cut and fill) and correctly sloped to prevent erosion, it will not be treated. However, if the prism is not well vegetated, it will be rehabilitated.

Possible work items for all road closures include, but are not limited to:

1. Remove drainage structures. Reshape the channel and stream banks at crossing sites to pass expected flows without scouring or ponding, minimize potential for undercutting or slumping of stream banks, and maintain continuation of channel dimensions and longitudinal profile through the crossing site.
2. Implement suitable measures such as ripping or pocking to promote infiltration of runoff and intercepted flow and desired vegetation growth on the road prism and other compacted areas (i.e. sub-soil prism).
3. Re-contour to original slope and stabilize cut slopes and fill material. Place woody debris and rock (if available) on the prisms to increase ground cover and reduce the likelihood of unauthorized motorized use.

My decision also includes the project design features and mitigation for resource protection described in Section 2.2.4 of the EA and as listed in Appendix A of this decision. The design features include relevant Forest Plan standards and guidelines. Items needed to ensure compliance with laws and regulations, Forest Plan goals, objectives and standards, and to address resource management concerns are included.

5. DECISION RATIONALE

In making the decision to authorize the salvage harvest, reforestation and road obliteration, I have reviewed the existing environmental conditions and the direct, indirect, and cumulative effects for both of the alternatives. I have also considered comments received from the public. I gave careful consideration of how well the alternative 1) met the purpose and need, and 2) responded to public concerns and the issues, as follows.

1) Purpose and Need

The purpose of this project is to:

1. Recover the economic value through removal of bark beetle killed timber while it still has economic/product value;
2. Supplement the existing regeneration of the spruce-fir component in the area to meet Forest Plan prescribed minimum stocking rates of 285 trees per acre and to promote development of early and mid seral spruce stands to move the landscapes towards properly functioning condition; and
3. Restore or improve watershed function by obliterating and re-vegetating the old road prisms, temporary roads, and skid trails that are no longer needed.

The proposed action is needed now because the affected trees are rapidly losing their value and use as a timber product; sites that will support tree growth are becoming occupied by shrubs and grasses (due to the increase in light with the dead overstory) which will make future recruitment of natural regeneration difficult; and the old road prisms are eroding and causing sediment to accumulate in nearby streams.

My decision to select Alternative 2 best addresses the stated purpose and need. First, it salvages the dead timber. Second, it supplements the existing young age classes in the spruce-fir community within the proposal area. This moves the watershed overall to a more diverse condition in terms of age and structural class distributions by removing some acres of mature size (though dead) forest. The action also obliterates and rehabilitates no longer need road prisms and in particular addresses the stream crossings for these and puts these into a natural condition.

2) Response to Public Concerns and the Issues

Based on comments received during the scoping and comment period, the Forest Service Interdisciplinary Team developed the list of issues for the proposed project. The issues were then used in development of alternatives and in the analysis of environmental effects. In making my decision I considered how well each of the alternatives address and resolve the issues. The issues considered in the analysis included the following:

Table 4: Issues	
Issue	Statement
Sediment Delivery to Water	1) Road building/decommissioning activities as well as timber harvest create sediment that can get into the streams. 2) Improperly closed roads from past harvest currently are causing sediment delivery, particularly where culverts and other drainage structures have failed.
Big Game Security	Road closure would reduce access to these areas and improve the size of refugia for big game, especially during calving and hunting seasons.
Aquatic and Threatened, Endangered, and Sensitive Species (TES)	TES populations can be directly impacted by harvest activities, through trampling and vehicle disturbance, if not excluded from treatment.
Access	Future use/access of level 1 roads if they are closed and re-contoured. Administrative use and fire prevention capability would be reduced. Currently cattle trailing, foot, and horse traffic are the primary uses.

Sediment Delivery to Water: Short term impacts created through timber sale and road obliteration impacts should be mitigated through two things. One is the filtering provided by the RHCAs that are excluded from the logging activity. The other is the placement of protection measures such as silt fences or straw wattles during the road obliteration activity. There will be some sediment into the streams however during the removal of culverts and reshaping stream banks. Long term the improvement from removal of these structures and re contouring roads will reduce sediment over current levels. This is detailed in the hydrology specialist report in the project record.

Big Game Security: There will be some short term displacement of big game during logging operations. Closure of roads that currently are used during the hunting season, particularly the Trapper Hollow Road will increase big game security into the future. This is detailed in the wildlife and recreation specialist reports in the project record.

Aquatic and TES: There will be minimal impact to aquatic organisms. TES plant and animal species will also be minimally affected as detailed in the biological evaluation and biological assessment in the project record and concurred with in the U.S. Fish and Wildlife Service letter dated 03/31/2015

Access: This is detailed in both the recreation and transportation specialist reports in the project record. There will be some loss of foot and horse access along these closed routes. Vehicle access is currently not allowed behind the closed gates, however there is unauthorized use of some of these. The intent of leaving most of these was for future timber removal. With this harvest removing almost all of the merchantable timber it will be at least 100 years before roads are needed for timber removal.

Many of these do not currently provide vehicle access due to barriers or removed culverts so fire suppression access will not be significantly changed.

Road closure related effects will be experienced as 0.47 miles of the Trappers Hollow Road is decommissioned and rehabilitated after timber activities. While this route is not part of the Forest Service road system or motor vehicle use maps, the public has in recent years been allowed access beyond the gate. This access has generally been used for firewood cutting and roadside hunting. This action will likely be perceived by some members of the public as a closure, because in the past they were allowed (or rather not barred from) use of the route. Physically closing this route will help meet the plan set forth by the Forest Service motor vehicle use map, increase big game security, and reduce sediment delivery into the nearby East Fork of the South Fork of the Provo River.

6. OTHER ALTERNATIVES CONSIDERED

In addition to the proposed action, the EA analyzed the no action alternative as described below and an alternative that treated the timber stands but returned the roads to level 1 storage rather than obliteration of the prisms.

Alternative 1 - No Action Alternative

The “No action” alternative is included to meet requirements of the National Environmental Policy Act (40 CFR 1502.14 (d)) which stipulates that “in addition to the proposed action, the no action alternative shall always be fully developed and analyzed in detail.” Under this alternative, none of the activities described in under Alternative 2 (The Proposed Action) would occur in the project area.

Alternative 3 - Timber activities then roads returned to level 1 status and treated accordingly

After completion of harvest activities, all system roads would be returned to the previous level 1 status, not obliterated or reclaimed. Non-system roads used would be reclaimed as in the proposed action.

Possible work items include but are not limited to:

1. Remove drainage structures. Reshape the channel and stream banks at crossing sites to pass expected flows without scouring or ponding, minimize potential for undercutting or slumping of stream banks, and maintain continuation of channel dimensions and longitudinal profile through the crossing site.
2. Implement suitable measures such as ripping or pocking to promote infiltration of runoff and intercepted flow and desired vegetation growth on the road prism and other compacted areas (i.e. sub-soil prism). Road prisms would be left intact for future use.
3. Implement suitable measures to effectively restrict unauthorized motor vehicle use of level 1 or rehabilitated roads. Measures could include installation of gates, rock barricades, or earthen berms.

Alternatives Considered but Eliminated from Detail Study

Federal agencies are required by NEPA to rigorously explore and objectively evaluate all reasonable alternatives and to briefly discuss the reasons for eliminating any alternatives that were not developed in detail (40 CFR 1502.14).

The interdisciplinary team considered the alternative of road closure only, without any harvest treatments. This was eliminated from consideration. With full analysis of the no action, harvest, and road closure alternatives, there is sufficient information to select any or all of the separate pieces of the proposal. A no harvest decision could in fact be selected out of the analysis without full consideration of this as an alternative.

7. PUBLIC INVOLVEMENT

The Heber-Kamas Ranger District initiated scoping concurrent with formal notice and comment on this project on August 28, 2014. The scoping document was sent to the public and other agencies listed on the Heber-Kamas District general NEPA mailing list. This document described the proposed actions, preliminary issues identified by an interdisciplinary team, who to contact for additional information, and how and where to send comments. The proposal was also listed in the schedule of proposed actions, posted on the UWCNF website at <http://www.fs.usda.gov/projects/uwcnf/landmanagement/projects> and made available on CD or in hard-copy form to anyone requesting it.

A legal notice requesting comments was published in the *Provo Daily Herald* on September 3, 2014. In response, three comment letters were received from the public. Using the comments received from the public, other agencies and from within, the interdisciplinary team developed a list of issues to address. A detailed listing of the public comments, along with Forest Service response, is provided in Appendix A of the EA. The scoping notice and notice of proposed action are available in the project record at the Heber-Kamas Ranger District office in Heber City, Utah.

Objection process. A legal notice notifying of the opportunity to object was published in the *Salt Lake Tribune* on April 15, 2015. At that time the final environmental assessment and the draft decision notice and finding of no significant impact were posted on the Uinta-Wasatch-Cache National Forest web site. A letter was also sent to persons who responded during the comment period.

Implementation. No objections were received on the draft decision notice and finding of no significant impact. Therefore the project can be implemented immediately upon my signature.

8. FINDING OF NO SIGNIFICANT IMPACT

This finding of no significant impact incorporates by reference the project record, including specialist reports and the biological evaluation and biological assessment. After carefully considering the environmental effects described in the EA, I have determined that my decision will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared. I base my finding on the following:

1. The beneficial effects of the action do not bias my finding of no significant environmental effects.
2. There will be no significant effects on public health and safety. Design features have been included in the decision to reduce the risk to visitors to the area.
3. There will be no significant effects on unique characteristics of the area. No unique characteristics were identified during project analysis. A survey was conducted and the forest archeologist made the determination that this decision will not significantly affect cultural resources in the project area. There will be no impact on historic or cultural features (EA, Section 1.9.1). There are no permanent effects to parklands, prime farmlands, wetlands, ecologically critical areas, or wild and scenic rivers (EA, Section 3.10). Consultation on this project has occurred with the Utah State Historic Preservation Office through formal letter and their concurrence was obtained on June 25, 2014 and is filed in the project record.
4. The effects on the quality of the human environment are not highly controversial. There is no known scientific controversy over the impacts of this project (EA, Chapter 3).
5. The environmental analysis shows the effects are not uncertain (EA, Chapter 3) and do not involve unique or unknown risk.
6. The decision will not establish a precedent for future actions with significant effects (EA, Chapter 3).
7. The cumulative impacts are not significant (EA, Chapter 3).
8. This decision will have no significant adverse effects on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historical Places. This action will also not cause loss or destruction of significant scientific, cultural or historical resources (EA, Section 1.9.1).
9. The decision will not adversely affect threatened or endangered species or habitats determined to be critical under the Endangered Species Act of 1973 (EA sections 3.2, 3.9 and 3.11 as well as the biological assessment prepared for this project. The U.S. Fish and Wildlife Service concurred with this finding).

10. The decision will not violate federal, state, and local laws or requirements for the protection of the environment.

9. FINDINGS REQUIRED BY OTHER LAWS AND REGULATIONS

My decision to select Alternative 2 for implementation is consistent with the intent of the Forest Plan. The project was designed in conformance with Forest Plan standards and incorporates appropriate land use and resource management plan guidelines.

My decision is consistent with the following key laws, regulations, and requirements:

National Environmental Policy Act – This act requires public involvement and consideration of potential environmental effects. This decision notice is in compliance with NEPA and the Council on Environmental Quality (CEQ regulations 40 CFR 1500 to 1508) for implementing NEPA. The effects of the proposed action and alternatives were analyzed and were disclosed in the EA which was available for public review.

Clean Water Act of 1977 – My decision will not affect the existing high quality water flowing through the area.

Executive Order 11990 – My decision will have no adverse effects to wetlands and therefore complies with this executive order.

Executive Order 11988 – My decision will have no adverse effects to floodplains and therefore complies with this executive order.

Endangered Species Act of 1973 – This act directs that all federal departments and agencies shall seek to conserve endangered, and threatened (and proposed) species of fish, wildlife and plants. This obligation is further clarified in a National Interagency Memorandum of Agreement (dated August 30, 2000) that states our shared mission to “enhance conservation of imperiled species while delivering appropriate goods and services provided by the lands and resources.”

Based on information disclosed in the EA (Section 3.2, 3.9 and 3.11) in the biological assessment (available in the project record) I have determined that my decision will not have adverse effects to populations of endangered, threatened, and candidate species of fish, wildlife and plants. This is because there is no suitable habitat within the project area, the species are not found within the project area, and/or the effect from the number of acres of salvage harvest relative to populations is minor and will have no effect on population. A determination of **may affect, but not likely to adversely affect** was made for the Canada lynx. Concurrence from the US Fish and Wildlife Service was obtained February 12, 2015 (letter in the project record).

Wild and Scenic Rivers Act – The Wild and Scenic River Suitability Study for National Forest System lands in Utah Record of Decision and Forest Plan Amendments did not recommend any rivers or segments within the analysis area as suitable for inclusion in the National Wild and Scenic Rivers System. Therefore, there will be no effect and my decision is in compliance with the Wild and Scenic Rivers Act.

Executive Order 13186 – Chapter 3, section 3.11 of the EA discloses the effects of type of treatments on migratory birds, primarily as related to the effects on their habitats, including



sagebrush communities and riparian areas. Based on this information and information in the project file concerning migratory birds, my decision is in compliance with this executive order.

Executive Order 13112 – Invasive species: This executive order directs that federal agencies should not authorize any activities that would increase the spread of invasive species. My decision includes noxious weed management to effectively reduce the spread of existing and new infestations of noxious weeds and invasive plant species. Therefore, my decision is consistent with this order and will not increase the spread of invasive species.

American Antiquities Act of 1906 and the National Historic Preservation Act of 1966: A survey was conducted and the forest archeologist made the determination that the proposed treatments in the North Heber Salvage Project will not significantly affect any cultural resources in the project area; no historic or cultural features will be impacted (EA, section 1.9.1). The State Historic Preservation Office concurred with this finding. Therefore, my decision is in compliance with these acts.

Prime Farmland, Rangeland and Forest Land – There is no prime farmland or grazing allotments affected by the project.

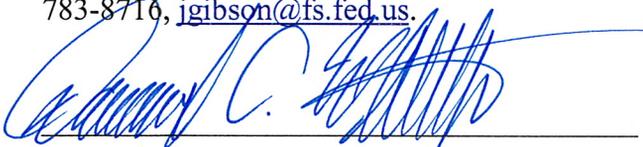
Civil Rights Act of 1964 – There would be no adverse effects to groups or individuals protected under the federal Civil Rights Act.

Executive Order 12898 – No minorities or low-income populations were identified during public involvement activities that would be affected by this decision.

Violating Federal, State and Local Laws – My decision does not violate any federal, state or local laws or requirements for the protection of the environment.

10. CONTACT

For additional information about this decision or to obtain project-related documents contact Jim Gibson, Heber-Kamas Ranger District, 2460 South Highway 40, Heber City, UT 84032, (435) 783-8716, jgibson@fs.fed.us.



DAVID C. WHITTEKIEND
Forest Supervisor
Uinta-Wasatch-Cache National Forest

5 June 2015

Date

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APPENDIX A TO THE DECISION NOTICE AND FONSI

Project Design Features and Mitigation for Resource Protection

In response to public comments and resource specialist reports on the proposal (see Appendix A of the EA), design features and mitigation measures were developed to minimize or eliminate any potential adverse effects from the proposed action to any of the resources in the project area. Design features and mitigation that apply to the project include the following:

Watershed and Soil Resources

1. Apply all National and Regional Core Best Management Practices relevant to the North Heber Salvage Project (Watershed and Soil Resource Reports 2015).
2. Ground-based skidding would be limited to slopes less than 40%.
3. Designated skid trails would be used in any material removal. Where feasible, skid trails from past harvest or other user created travel ways would be utilized to minimize surface area impacted.
4. Water bars would be installed on skid trails.
5. Skid trails, staging, and landing areas would be scarified or roughened to alleviate soil compaction where these occur on newly disturbed acres. Staging areas or landings at a trailhead parking, for example, would not be scarified.
6. As soon as possible following the completion of harvest operations, not to exceed one year, landings will be re-contoured to the original surface contour, ripped, and seeded with an approved Uinta-Wasatch-Cache National Forest native grass seed mix. Coarse woody debris will be spread on site to provide for long-term soil productivity.
7. On temporary roads, sediment-buffering devices such as silt fences or straw wattles will be installed below all fill slopes within 300 feet downhill distance of streams or drainage.
8. Soils within the project area should not be subjected to vehicle or surface disturbance when soils are extremely dry or when the soils are wet. During these periods any skidding, hauling, or use of a feller-buncher will be prohibited by provision in the timber sale contract.
9. Scatter, distribute, or spread timber/brush slash and litter over the treated areas to protect the soil surface from erosion and to maintain organic matter on site.
10. A minimum of 50 down logs per 10 acres, with a minimum 12 inch mid-point diameter and eight-foot length, would be retained across the treatment units. If the minimum size is unavailable, the largest logs available on site would be retained.
11. Burn piles should be located at least 25 feet from the outer edge of channels, springs, seeps, and waterbodies.
12. Trees adjacent to stream channels that provide bank stability or contribute to channel integrity will not be removed. Removal of hazard trees will be permitted.

Cultural Resources

1. If previously unknown cultural resources are uncovered during management activities, work would be suspended until USFS archaeologists evaluate the findings.
2. If any historic properties are identified within the Area of Potential Effect (APE), the Heber-Kamas Ranger District has agreed to place a 100-foot buffer (or less as agreed upon by USFS archeologist and timber sale administrator) around the identified boundary of the property and mitigate effects through avoidance. There may also be situations where it is beneficial to the resource to remove dead trees within the 100-foot buffer as agreed on by the archeologist and sale administrator.

Fisheries

1. To ensure natural and beneficial volumes of large woody debris, downed dead trees should not be removed from fish-bearing streams.
2. Required buffers for the operation of heavy equipment in RHCAs are implemented to maintain ground cover in order to limit erosion and runoff into streams.
3. Operation, storage, and fueling of chainsaws and heavy equipment would occur outside RHCAs in accordance with all applicable Forest Plan Standards and Guidelines.
4. Minimize disturbance of riparian areas in known occupied boreal toad habitat during the active breeding season (4-5 weeks following snowmelt).

Recreation

1. Minimize or halt treatment activity, and prohibit hauling during major holiday and opening weekends of general deer and elk hunts.
2. Accomplish treatment activity in a way that lessens the impacts on the dispersed camp sites and trails.
3. Remove all debris and slash piles away from snowmobile or hiking trails at least 25 feet.
4. Following harvest activities the upper .37 miles of the Little South Fork Trail, which currently follows an old logging road prism will be returned to a trail prism in place of the existing logging road prism.
5. Attempt to lessen the expansion of new or existing dispersed campsites by placing physical barriers near the existing boundaries of campsites and/or new areas within 150 feet of Forest Service system roads within the project area.
6. Traffic controls (signing) shall be in place on single lane road corridors where vehicles are incapable of passing during active treatments. These will follow MUTCD or EM 7100-15 criteria and will be included in the timber sale "road package".
7. Prohibit snow plowing on haul routes from November 15th through May 15th to allow for snow trail grooming and recreational winter trail use. Hauling will also be prohibited when it would cause excessive damage (rutting) to the road surface as defined in the timber sale contract.
8. Stumps should be no higher than 12 inches.

9. Inform and educate the public of the purpose of these treatments through press releases, social media, and informative signs on site.
 - a. Ensure that proper and permanent closure of temporary roads is implemented after project completion to prevent illegal vehicle and ATV activity. Temporary roads should be monitored during logging activity.
 - b. Conduct log hauling activity during weekdays, not including holidays throughout the summer months
 - c. Minimize or halt log hauling activity during weekends of general deer and elk hunts.
 - d. Accomplish logging activity in a way that lessens the impacts on the dispersed camp sites.
 - e. Attempt to lessen the expansion of new or existing dispersed campsites by placing physical barriers near the existing boundaries of campsites and/or new areas within 150' of Forest Service system roads within the project area.
 - f. Traffic controls should be in place on single lane road corridors where vehicles are incapable of passing oncoming logging trucks.
 - g. If snow removal during shoulder seasons occurs, coordination will need to occur with the Utah Department of State Parks as this area is within their groomed snowmobile path.
 - h. Existing designated snowmobile trails will need to be cleared of hazards prior to end-of-season operations.

Wildlife

1. In order to minimize conflicts with migratory birds, activities will not be performed between April 1st and June 30th each operating season.
2. If any wildlife nesting trees are found, the appropriate buffer and timing restrictions will be established and protected.
3. Active Northern Goshawk nests would be evaluated by August 15. If the birds have fledged and left the area, and at the discretion of the district biologist, timber operations may occur.

Noxious Weeds Management

1. Avoid driving, walking, skidding, landing, and/or hauling through noxious weeds.
2. Minimize soil disturbance during forest management operations and seeding skid trails, landings, and other disturbed sites.
3. Monitor for noxious weeds after sale activity and treat noxious weeds as needed.
4. Equipment and vehicles used for project work shall be cleaned prior to entry onto National Forest System Lands. Where logging activity on planned or existing timber sales may contribute to the encroachment of noxious weeds, consider Sale Area Improvement (KV) collections to control or prevent the encroachment of noxious weeds within sale areas.

Engineering / Roads

1. Timber sale packages will include work items to complete road maintenance sufficient to protect the forest system road network. Items will include blading, shaping, gravel placement, drainage structures and other tasks as suggested by the forest engineering staff via the contract road package.