

DECISION MEMO

SOUTH RUBY HAZARDOUS FUELS REDUCTION PROJECT

USDA Forest Service
Humboldt-Toiyabe National Forest
Ruby Mountains Ranger District
White Pine County, Nevada

Introduction

This memo documents my decision to treat, with prescribed fire and mechanical methods, approximately 4,420 acres of pinyon (*Pinus monophylla*) and juniper (*Juniperus occidentalis*) on the southern end of the Ruby Mountain Range. The South Ruby Fuels Reduction Project has been identified as an area that would benefit from fuels reduction through the use of prescribed fire.

Location

The South Ruby project area is located on the southwest corner of the Ruby Mountain Range in NE Nevada. This area is in White Pine County, north of Overland Pass. The legal description for the project area is Township 25N, Range 56E, Sections 1-3, 9-11, 14-16, 21, 22, and Township 25N, Range 57E, Sections 6, 7, 18.

Purpose and Need for Action

There is a need to reduce vegetative fuels and thereby reduce the potential for large-scale catastrophic wildfires within the project area. This area is in Fire Regime Condition Class 2 (high) indicating significant departure from natural and historical conditions for the fire regime of this vegetation type.

The purpose of this project is to reintroduce fire in response to the need for action – to reduce the amount and spatial distribution of pinyon and juniper. These tree species have become abundant, and in doing so are displacing the other vegetation types, especially the sagebrush communities with their associated grasses and forbs. This project will also contribute towards scientific knowledge of vegetation treatment in sagebrush vegetation communities through participation in a research study conducted by the Rocky Mountain Research Station.

The desired result of this project is to contribute towards a broader spatial distribution of the herbaceous grasses and forbs over the landscape, interspersed with pockets of pinyon, juniper, and other sagebrush dominated communities typical of earlier successional stages.

The high density of trees that currently occurs within the project area has increased the competition for water and sunlight, resulting in the ongoing displacement of the grass and brush vegetation types.

Goals and Objectives

One of the primary goals for this project is to reduce the risk of severe wildfire in the area. This will be accomplished by reducing the amount of juniper encroachment on other vegetation types by reducing the amount of departure from natural conditions typified by similar ecosystems.

Objectives for the South Ruby project area include:

1. Reducing the amount of live juniper trees per acre.
2. Restoring and maintaining the normal distribution of pinyon and juniper for this area.
3. Creating a mosaic of openings within the pinyon and juniper for grass/forb release.
4. Reducing the continuum of fuels (sagebrush-juniper-pinyon) that increase the risk for large-scale fire.

The prescribed fire is designed to result in a mosaic in which pockets of live vegetation are left unburned among tracts of burned areas. A mosaic burn will increase the amount of vegetation edges that are beneficial to wildlife and minimize habitat fragmentation. The unburned portions maintain a seed source and provide quality habitat for wildlife such as sage grouse and deer. A mosaic of burned and unburned sections allow for a quicker recovery of the site through on-site seed dispersal. The percentage of landscape within the units to be burned is 30-80%. This range will provide a balance of habitat diversity and fuel reduction while minimizing impacts.

Background

The project area consists of pinyon-juniper stand with Mountain Big sage and mountain brush community type. Much of the juniper areas are approaching a threshold of closed canopy and an absence of understory grasses and forbs typical for this vegetation type in the absence of fire. The South Ruby project area is above the edge of a Wyoming sagebrush community type. Most of this area would benefit from reintroduction of fire. Mountain Big sage is becoming very dense in draws and juniper is starting to spread beyond its normal range. This is exemplified by relatively younger trees spreading out and encroaching on the lower elevation sage community.

This area and elevation (6200-8350ft.) were selected for its potential resource benefits that are at risk from uncontrolled wildfire. This area consists of a large amount of Phase Two Pinyon-Juniper that will be the primary focus for treatment. Phase Two indicates a substantial canopy cover while still maintaining an understory. As this vegetation type transitions into Phase Three, the understory grasses and forbs are lost and canopy cover

of these tree species closes. This allows for higher intensity and severity wildfire which can be detrimental to the landscape and require substantial rehabilitation efforts. The higher elevation of this project was also selected to reduce opportunities for cheat grass (*Bromus tectorum*) and other invasive plant species to thrive.

Proposed Action

The proposed action for treating the designated project area is to use prescribed fire to reduce pinyon and juniper tree density and distribution to improved desired ecological conditions. Prescribed fire would reduce the risk of high severity wild fire and lead to faster re-establishment of the native grasses and forbs. It will also reduce the number of younger, outlying juniper that is typically reduced by natural wildfire while leaving the older and more mature trees.

The preferred ignition method to be used for this project will be through the use of a helitorch. The use of a helitorch is preferred because it will accomplish two objectives for this project. It will minimize impacts on the ground that would otherwise occur from mechanical equipment in the project area. It will also minimize cost for implementation by increasing efficiency for targeting specific areas. Hand ignition methods may also be used if necessary to achieve project objectives.

Mechanical treatment will be by chainsaw. Vehicles will remain on existing roads. Mechanical treatment within the study plot will be limited to less than 50 acres. Trees that are cut will be left on-site. If any other mechanical treatment is found to be necessary or helpful for the safe implementation of this project, review by the resource specialists will occur to ensure that activities will not adversely affect important cultural and biological resources. Resource specialists include an archeologist, wildlife biologist and other specialists as needed.

This project is planned to reduce overstory vegetation (primarily tree species) by 30-80% over approximately 4450 acres.

Grazing by domestic livestock of this area will be excluded until this area has recovered sufficiently. Recovery time for this type of treatment should be approximately two years and is in accordance with the Humboldt Forest Plan. Improvements such as fences and cattle guards are minimal, mostly metal and should not be affected. Any wooden improvements will be avoided. However, if improvements are affected they will be repaired or replaced.

This project and project area was identified in consultation with the Nevada Division of Wildlife (NDOW). It has been identified as an area that provides deer winter range. Maintaining and restoring the herbaceous grass and forb component is critical to meet the habitat needs of these ungulates.

The project area also lies within the Cherry Springs Wildhorse Territory. Any horses within the project area should not be affected. This project area is open to migration to safe areas.

The use of fires is planned for moderate weather conditions to minimize the intensity and severity of the fire. Implementation of this project is planned for late August-October, depending on preceding and recent precipitation. Weather will determine when this project will be in prescription and other times of the year may be determined to be favorable. Firefighting resources, including engines, would be present to ensure full containment of the prescribed fire within the project area.

The burn will be patrolled as needed to monitor for flare-ups and escaped fires. This project will be monitored to ensure that vegetative recovery is occurring and to ensure objectives are met. Items to be monitored will include vegetation recovery and trends including invasion of any potential non-natives and noxious weeds. New occurrences of noxious weeds and non-natives would be treated and controlled to minimize spread.

Roads within the project area will be closed to the public for the brief time that operations are in progress. Proper signs will be posted as will a notification through proper media (i.e. television, radio and newspapers). Local residents will be notified by personal contact. The project area will also be checked and cleared of any campers, hunters and any other recreational users. These actions will ensure the safety of both the public and project personnel.

Elko and White Pine County Roads 719/1000, also known as the Elko Hamilton Stage Line will not be affected. This is the main corridor between Overland Pass and State Road 228 (Jiggs/Harrison Pass).

Related Research

This project is part of a research project conducted by Rocky Mountain Research Station (RMRS). The goal of this research project is to study differences in the distribution and dominance of how pinyon and juniper change their response to the different types of vegetation manipulation.

This study project will consist of three plots, approximately 50 acres each, two of which will be within the area to be treated.

One plot will be treated by prescribed fire. The second plot will be mechanically thinned using chainsaws, using a fall and leave on the contour method. This method removes aerial fuels (standing trees which would promote running crown fires) by cutting trees and placing them on the ground. This mechanical method is fast, and is the most cost effective.

The third plot will act as a control plot with no treatment to be performed and will be outside of the treated area.

Decision To Be Implemented

I have decided to approve the South Ruby Hazardous Fuels Reduction Project as described above.

The Chief of the Forest Service has identified specific actions that may be categorically excluded from documentation in an environmental assessment or environmental impact statement if there are no extraordinary circumstances.

The proposed action falls within category #10 – Hazardous fuels reduction activities using prescribed fire, not to exceed 4,500 acres, and mechanical methods for crushing, piling, thinning, pruning, cutting, chipping, mulching, and mowing, not to exceed 1,00 acres).

The Categorical Exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects which may significantly affect the environment. I considered the following resource conditions in reaching my decision:

- **Federally listed threatened or endangered species or designated critical habitat, species proposed for federal listing or proposed critical habitat, or US Forest Service sensitive species**

The Endangered Species Act requires that federal activities do not jeopardize the continued existence of any species federally listed or proposed as threatened or endangered, or result in adverse modification to such species' designated critical habitat. All sites have been evaluated for federally listed or proposed species, and for critical habitat. There will be no effect to any federally listed threatened or endangered species or designated critical habitat, species proposed for federal listing or proposed critical habitat. Forest Service sensitive species will also not be impacted by this project.

- **Floodplains, Wetlands, or Municipal Watersheds**

Floodplains - Executive Order 11988 is to avoid adverse impacts associated with the occupancy and modification of floodplains. Floodplains are defined by this order as "... the lowland and relatively flat areas adjoining inland and coastal waters including flood prone areas of offshore islands, including at a minimum, that area subject to a one percent [100-year recurrence] or greater chance of flooding in any one year". The project is not located in or near floodplains. This has been validated by map and field review of the project area.

Wetlands - Executive Order 11990 is to avoid adverse impacts associated with destruction or modification of wetlands. Wetlands are defined by this order as "... areas inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil

conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds". All of the project activities will take place in upland sites. No effects to wetlands will occur, either directly or indirectly.

Municipal Watersheds - Municipal watersheds are managed under multiple use prescriptions in land and resource management plans. No municipal watersheds are located within or adjacent to the project area.

- **Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas**

The project is approximately 20 miles south of the Ruby Mountains Wilderness. Impacts to the character of the wilderness will not occur. The project provides for the protection of designated wilderness consistent with Forest Plan direction.

- **Inventoried Roadless Areas**

The Eastern portion of the project is located within the southern portion of the Pearl Peak Inventoried Roadless Area (IRA.) Only prescribed burning would occur within the IRA as the mechanical treatment unit is outside of the IRA. Any impacts to the Inventoried Roadless Area will be minimal and short-term and are consistent with Forest Service interim direction for roadless area protection. Actions will not alter the roadless character of the Inventoried Roadless Area to the degree that it would no longer qualify as a roadless area. No road construction will occur, and activities associated with this decision do not include cross country travel by motorized vehicles. Allowing these operations within the roadless area will not prevent this area from being considered for designation as wilderness in the future.

- **Research Natural Areas**

The Pearl Peak Research Natural Area is located approximately ten miles to the north and will not be affected. No Research Natural Area lies within or adjacent to the project area.

- **American Indian and Alaska Native religious or cultural sites**

The federal government has trust responsibilities to Tribes under a government-to-government relationship to insure that the Tribes' reserved rights are protected. Consultation with Tribes helps insure that these trust responsibilities are met. The Forest consulted with potentially affected Tribes. The intent of this consultation was to remain informed about Tribal concerns. Tribal concerns were identified for this project and have been resolved.

- **Archeological sites, or historic properties or areas**

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effect of a project on any district, site, building, structure, or object that is included in, or eligible for inclusion in the National Register. Section 106 also requires federal agencies to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. The Archaeological Resources Protection Act covers the discovery and protection of historic properties (prehistoric and historic) that are excavated or discovered on federal lands. The Native American Graves Protection and Repatriation Act covers the discovery and protection of Native American human remains and objects that are excavated or discovered on federal lands.

This act encourages avoidance of archaeological sites that contain burials or portions of sites that contain graves in situ preservation, but may encompass other actions to preserve these remains and items.

Heritage resource surveys have been completed for this project. The State Historic Preservation Office concurred with the United States Forest Service that with the mitigation measures to be taken, the proposed project will not pose an adverse effect.

The project record supports my conclusion that there are no extraordinary circumstances potentially having effects which may significantly affect the environment. The record documents a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgement of incomplete or unavailable information, scientific uncertainty, and risk. The record includes all comments submitted by the public during the 30-day Notice of Proposed Action comment period, as well as a description of the Forest Service consideration of those comments.

Public Involvement

This project was listed in the July 2006, October 2006, January 2007 and April 2007 Schedule of Proposed Actions.

The proposal was provided to the public and other agencies for comment in a scoping letter dated May 10, 2006.

An article regarding the project was published in the Elko Daily Free Press on May 5, 2006.

The Notice of Proposed Action was mailed to interested parties on April 30th, 2007 for a 30-day public comment period.

The Notice of Proposed Action was published in the Elko Daily Free Press on May, 4th, 2007

Tribal Involvement

The following tribal governments were contacted for their input on April 30, 2007: Te-Moak Tribe of Western Shoshone, Elko Band Council, Battle Mountain Band Council, Wells Band Council, South Fork Band Council, Duckwater Shoshone Tribe, Yomba Shoshone Tribe, Shoshone-Paiute Tribes of Duck Valley, and Ely Shoshone Council.

Findings Required By Other Laws

This decision is consistent with the Humboldt Land and Resource Management Plan (as amended) as required by the National Forest Management Act.

This decision is consistent with the Clean Water Act of 1972 as amended. A Hydrology Specialist's Report has been prepared for this project. Impacts to both water quality and quantity in project area drainages are expected to be minimal and short-term.

This decision is consistent with the National Historic Preservation Act of 1966, as amended. A cultural survey and report was completed for this project. Consultation with the State Historic Preservation Office also completed. There will be no adverse affects to historic properties in the project area.

This decision is consistent with the Migratory Bird Treaty Act of 1918 and Executive Order 13186. This act and subsequent executive order and memorandum of understanding between the USDI Fish and Wildlife Service and USDA Forest Service provide for the protection of migratory birds. This project may result in an unintentional take of individuals during prescribed burn operations. However, the project complies with the US Fish and Wildlife Service Director's Order #131 related to the applicability of the Migratory Bird Treaty Act to federal agencies and requirements for permits for "take". In addition, this project complies with Executive Order 13186 because the analysis meets agency obligations as defined under the January 16, 2001 Memorandum of Understanding between the US Forest Service and US Fish and Wildlife Service designed to complement Executive Order 13186. If new requirements or direction result from subsequent interagency memoranda of understanding pursuant to Executive Order 13186, this project will be evaluated to ensure that it is consistent.

This decision is consistent with the Endangered Species Act of 1973. A Biological Assessment and Evaluation has been completed for this project. There will be no adverse effect to any listed species, or to any species proposed for listing.

Administrative Review Or Appeal

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 comment period may appeal. Appeals must be postmarked or received by the Appeal Deciding Officer within 45 days of the publication of the Notice of Decision for this project in the Elko Daily Free Press.

This date is the exclusive means for calculating the time to file an appeal. Timeframe information from other sources should not be relied on. Incorporation of documents by reference is not allowed. The Appeal Deciding Officer is the Forest Supervisor. Appeals must be sent to: Appeal Deciding Officer, Intermountain Region USFS, 324 25th Street, Ogden, Utah 84401; or by fax to 801-625-5277; or by email to: appeals-intermtn-regional-office@fs.fed.us. Emailed appeals must be submitted in rich text (rtf), Word (doc) or portable document format (pdf) 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 Federal holidays.

Implementation Date

If no appeals are filed within the 45-day time period, implementation may occur on, but not before, 5 business days from the close of the appeal filing period. When appeals are filed, implementation may occur on, but not before, the 15th business day following the date of the last appeal disposition.

Contact Person

Additional information about this decision can be obtained from Albert Flores at the US Forest Service Ranger Station in Elko (2035 Last Chance Road, Elko NV 89801); Voice: 775-778-6121; Fax: 775-778-6199.

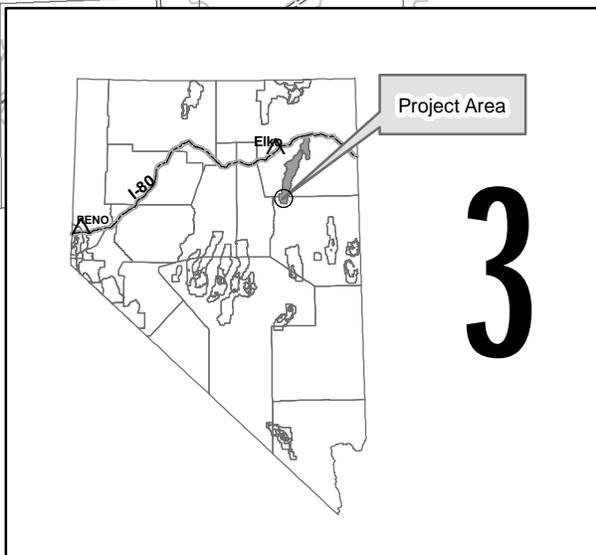
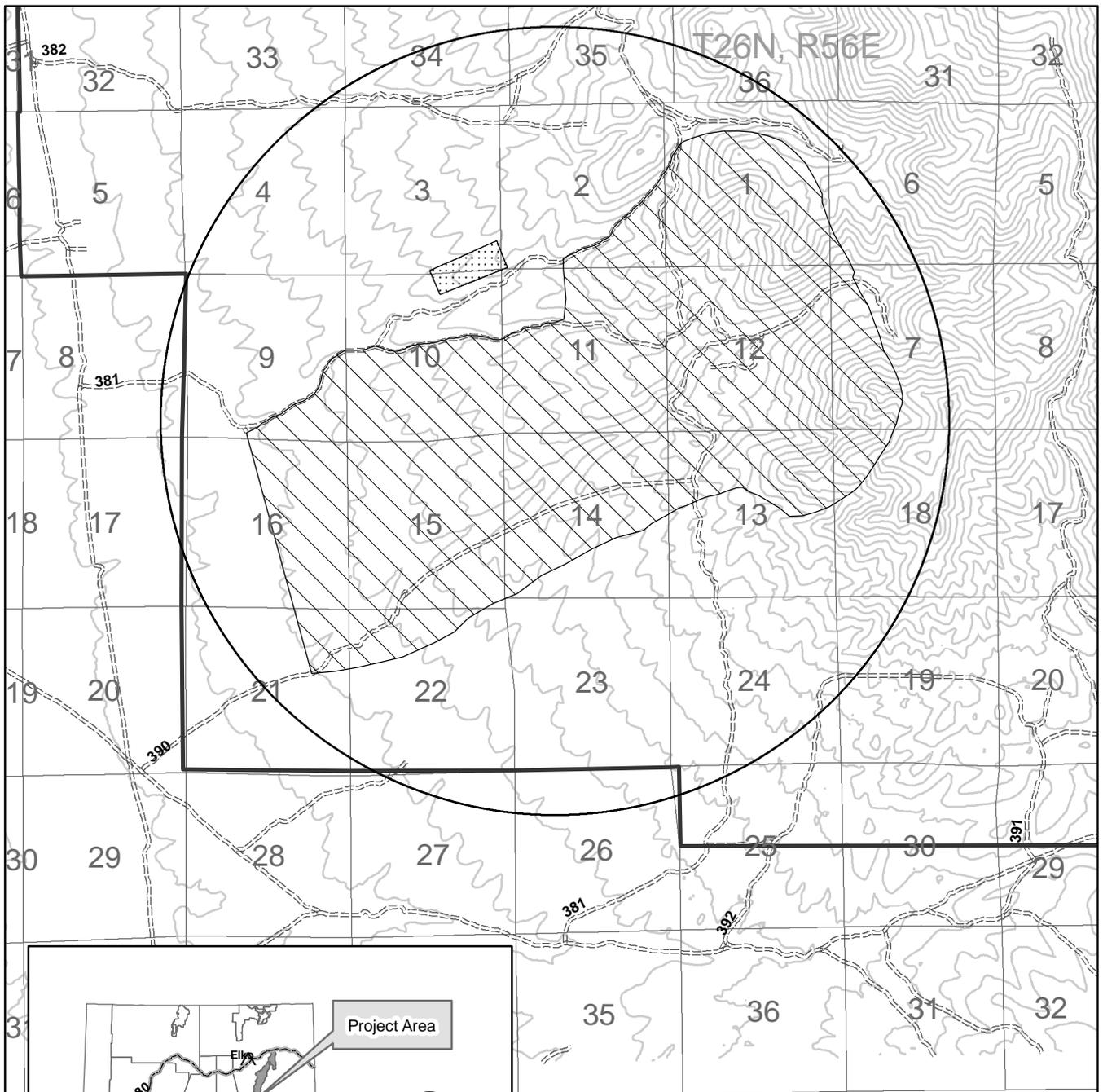
/s/ Terry A. Chute
TERRY A. CHUTE
District Ranger

8/21/2007
Date

This document will also be made available on the Humboldt-Toiyabe National Forest web site: <http://www.fs.fed.us/r4/htnf/projects>

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Proposed Fuels Reduction Project Ruby Mountains Ranger District



Legend

Project Area	Roads
Mechanical Plot	Sections
Acres 47.82	District Boundary
Acres 4370.92	

This GIS product was compiled from various sources and may be corrected, updated, modified, or replaced at any time. For more information contact: Elko Zone Office, Elko, Nevada (775) 738-5171.