

DECISION MEMO
Beartooth Face Hazardous Fuels Reduction Project

USDA FOREST SERVICE
Shoshone National Forest
North Zone/Clarks Fork Ranger District
Park County, Wyoming

T57N, R103W, 6th PM Sections 3, 4, 9, 10, 14, 15; T58N, R103W, 6th PM Sections 15, 21, 22, 27, 28,
33, 34

Summary of Decision

It is my decision to implement the Beartooth Face Hazardous Fuels Reduction Project. The decision only involves prescribed burning. The Shoshone National Forest (SNF) is implementing this project as part of the Land and Resource Management Plan (Forest Plan) for the primary purpose of fuel reduction. In order to protect resources, life, and property, the project will reduce fuel continuity and fuel accumulations near the Forest boundary, in holdings and other private lands. The project is west of Clark, Wyoming (*see* Figure 1).

Modifications have been made since the original proposed project. Because of the 2003 Deep Lake fire burning acres intended for prescribed burning, the current proposal is substantially downsized in acres. The two units for treatment are the Line Creek Unit (656 acres), and the Little Rock/Bennett Creek Unit (660 acres). The Clarks Fork Canyon Units North (120 acres) and South (163 acres) are dropped from the project through this decision.

The decision is to prescribe burn 1,316 acres in two designated burn units within an approximately 3,800-acre project area. These acres would be burned through the application of low to moderate intensity prescribed fire that would actually burn in a mosaic pattern. It is proposed to implement the project over a three to six year period beginning in 2004 or 2005. Only a portion (30 to 60%, or 400 to 800 acres) would actually be burned within the burn units. The project burn units are shown on the map to give a better understanding of the proposal (*see* Figure 2). Burning will occur when weather conditions allow (usually the spring or fall), but could occur at other times of the year.

The intent of the project is to use prescribed burning to remove hazardous fuels. The project will reduce the risk of wildland fire to developments in the wildland-urban interface (WUI) area and provide for improved public and firefighter safety. The need for the project is to reduce fuels and change fire behavior that has been compounded by drought, insects and disease. I considered the input and concerns of the interdisciplinary team and the comments from the public and other government agencies in my decision.

Fuels targeted to burn include down and dead litter accumulation and encroaching conifers such as junipers, limber pine, and Douglas-fir into sagebrush and grassland areas. No commercial timber harvesting or road building is involved.

Commercial livestock grazing allotments and range improvements were considered in project design. Deferred grazing through rest/rotations will be coordinated with permittees; range improvements such as fences and water developments will be protected. At a minimum, there will be one full growing season of rest from livestock grazing following the burn to allow maximum plant reestablishment.

The public will be notified in advance of the implementation of the project. Before ignition, the public in the Clark area and surrounding areas will be notified of the anticipated time and location of the prescribed

fire. Notification methods are identified in the burn plan and include who will be contacted, how, and when. Signs will be placed at access points to project area to alert forest users of burning operations.

This action is categorically excluded from documentation in an environmental impact statement or an environmental assessment because it meets WO Interim Direction for FSH 1909.15 –Environmental Policy and Procedures Handbook Chapter 30 (Section 31.2) in Category 10 for Hazardous Fuels Reductions and because no extraordinary circumstances were identified (Section 30.5).

The authority exists to categorically exclude actions that do not individually or cumulatively have a significant effect on the human environment (Federal Register, June 5, 2003). The planning process for the project used procedures that reduce the need for lengthy documentation and are intended to expedite planning so that hazardous fuels reduction can be implemented quickly. Activities conducted under these categorical exclusions must be consistent with Departmental and agency procedures, with applicable land and resource management plans, and with all applicable Federal, State, and Tribal laws and regulations for protection of the environment.

Background

Under the National Fire Plan, the Shoshone National Forest has proposed numerous fuels and vegetation management projects on the North Zone to address growing concerns related to fire and fuels and the wildland-urban interface. The focus is on these areas where private land and developments abut the National Forest System boundary; priority project areas were identified to protect values at risk in the wildland-urban interface. This project was analyzed as a categorical exclusion, and a project record and Decision Memo prepared. Background materials are located at the Wapiti Ranger District, Cody, Wyoming.

This project will increase the margin of safety to the public, reduce threats to dwellings, structures, improvements, and create areas of defensible space, providing a safer environment for fire-fighters when fires do occur. Defensible space refers to an area with a lower amount of vegetation and fuels where fire is less likely to burn intensely, and where firefighters have a better chance of stopping a fire.

The project was in the process of an environmental assessment being prepared when the Deep Lake wildfire occurred in the project area in the summer of 2003. Also, in the summer of 2003, President Bush's Healthy Forest Initiative (HFI) resulted in new administrative procedures for implementing the National Environmental Policy Act (NEPA) and Council of Environmental Quality (CEQ) regulations. The administrative changes established new categories for which a project may be categorically excluded from documentation in an environmental assessment or EIS.

One of the new categories is for hazardous fuels reduction activities, which is the rationale for the proposed action for the Beartooth Face Hazardous Fuels Reduction Project. A review of the project's purpose and need and the potential environmental effects indicated that it was consistent with the HFI and met the criteria for the newly established category for hazardous fuels reduction activities.

Description of Decision and Project Design

Location. The project would occur on the Shoshone National Forest, Clarks Fork Ranger District. No other land jurisdictions are involved. The prescribed burn involves designated burn units in the vicinity of Clark, Wyoming. The project area is located along the east face of the Beartooth Mountains, approximately 25-30 miles north-northwest of Cody in northwest Wyoming (Park County). The legal description of the entire project area is: T57N, R103W, 6th PM Sections 3, 4, 9, 10, 14, 15; T58N, R103W, 6th PM Sections 15, 21, 22, 27, 28, 33, and 34.

Project Design. I have decided to implement the project as described, including project design to minimize environmental effects. The purpose of project design is to reduce potential impacts and ensure that the proposed fuel reduction treatments are consistent with the management objectives for a variety of resources (e.g., wildlife, watershed, fisheries and botanical). Project design includes the management direction of the Shoshone Forest Plan, as amended (to which the project is tiered), pertinent best management practices, and the expertise of the interdisciplinary planning team.

An interdisciplinary team of resource specialists was involved with project design, and reviewed and analyzed the planned action for compliance with the limitations for categorical exclusions, extraordinary circumstances, applicable laws and commensurate with the issues and concerns raised from the scoping, public involvement and collaboration process.

Soils, topography, slope and aspect, elevation, access, recreation, wildlife and other environmental considerations are part of the project design for the planned action, along with additional concerns and issues identified through scoping.

Project design includes protection of threatened, endangered, and sensitive species habitat, avoidance of all known historic and prehistoric sites, invasive plants, soil and water and visual resources as described in Appendix B. All required conservation measures and practices for grizzly bear conservation would be implemented. These design features would carry over into any applicable contracts, agreements and implementation.

Prescribed Burning. Prescribed burning is the only action being implemented. The specifics of the proposed action and project implementation include project design for compliance with laws and state requirements, and resource protection methods to minimize environmental effects include the following descriptions. Under the management actions, the project area would receive fuel reduction treatment by the use of prescribed fire (broadcast burning). Actions would enhance natural fuel breaks such as rock areas, meadows, or other natural fire barriers. Areas with hazardous fuel buildups would be reduced in strategic areas near the Forest boundary and near private lands and developments. Prescribed burns will occur in portions of RARE II area #02911 South Beartooth Highway.

Rationale for Decision

The Forest Service is obligated to provide fire protection on Forest Service managed lands. The challenge for fire managers is to manage fire efficiently and safely, while maximizing resource benefits. This section discusses the rationale and factors leading considered in the decision making process.

Under the goals and objectives of the National Fire Plan and the 2002 *10-year Comprehensive Strategy and Implementation Plan*, the Shoshone National Forest identified the Beartooth Face Hazardous Fuel Reduction Project to lessen fuel conditions that contribute to large, uncontrollable wildfires.

This project is in conformance with the Shoshone Forest Land and Resource Management Plan management area direction, including that contained under management prescription 2A, 4B, 4D and 9A (Chapter III, Forest Plan). It also is in conformance with and will implement key components of the National Fire Plan's *10-year Comprehensive Strategy and Implementation Plan* and *Healthy Forests – An Initiative for Wildfire Prevention and Stronger Communities* (www.fireplan.gov).

It is my decision to proceed with this project because it will result in improved safety and reduce resource risk. I feel that without active management, an unacceptable risk to human health and safety, and important resource values exists due to the current level of drought, insect-killed trees and high fuel accumulations.

I have reviewed the proposal and determined that no significant effects would occur from its implementation, including no adverse effects to actual extraordinary circumstances (FR Vol. 69, No. 108, page 33814). The effects of the actions, as determined through scoping and interdisciplinary input and review by a team of resource specialists that analyzed the proposal, are not highly controversial and are similar to other actions that have been implemented in the area. I find the planned action can be categorically excluded because there were no extraordinary circumstances identified by the interdisciplinary team of resource specialists that developed, analyzed or reviewed this project.

The effects on the human environment are not highly uncertain and the action does not involve unique risks. The planned action is a routine hazardous fuels treatment project; the Forest Service and others have been using prescribed burning for years with predictable results. The action is not related to any actions that would result in significant cumulative impacts. The project does not represent a decision in principle about future considerations and does not violate federal, state, or local laws or requirements for environmental protection.

Historically, recurring low to moderate intensity fires modified the species, age, density, and size of vegetation patterns and the associated amount of accumulated fuels. Due to fire suppression, these natural processes have been drastically modified in most areas of the Rocky Mountain West, including the Shoshone National Forest and the Beartooth Face.

Today, the forests and rangelands of the Forest have become unnaturally dense and ecosystem health has suffered substantially. When coupled with seasonal droughts and insect epidemics, these unhealthy forests and rangelands, overloaded with fuels, are vulnerable to unnaturally severe wildfires.

Field monitoring and assessments of fuel loading on the Forest have identified fire-adapted ecosystems that are in a condition that threatens their long-term resiliency, integrity, and sustainability. These assessments show that fire was an important disturbance that has been limited since the early 1900s due to aggressive fire suppression. These 90+ years of fire suppression have caused undesirable changes in the composition and structure (age and size) of forest and rangeland vegetation and contributed to hazardous fuels.

The Forest Service did project specific fuels inventory to collect field data during on-the-ground work in the summer of 2001. This site-specific analysis of the project area indicated that existing fuel conditions were not leading toward attainment of the desired conditions. Current fuel accumulations and fuel continuity have increased and are such that a wildfire start in the Beartooth Face area could develop into a large, uncontrollable wildfire that would threaten life and property on adjacent private lands, damaging resource values. I feel we have an opportunity to protect private property, structures, improvements, and other sensitive resources from serious loss or damage by carefully introducing prescribed fire under controlled conditions, rather than waiting for unplanned ignitions under adverse conditions such as occurred in the Deep Lake Fire.

The project is a preventive measure to reduce the potentially severe effects of future wildfires, specifically the risk of high intensity uncharacteristic wildfires in the project area. Prescribed burning will reduce wildfire hazards to the public and to fire fighters, along with potentially reducing fire suppression costs.

The burn units were identified as areas of fuel and litter accumulations that exceed desired standards for fuel loads (Condition Class 2 in Fire Regime III). This sets the stage for large, uncontrollable fires with a potential associated high level of damage to resource values. The project, using prescribed fire under specific, controlled conditions, would treat these areas to move units from a high-risk category to a lower risk category and/or maintain those areas that are already within desirable standards for fuel loads. Implementing the management actions would minimize the possibility of losing extensive acres to a large wildfire that may burn across the entire landscape with potentially negative results.

The proposal does not involve merchantable timber or the tentatively suitable timber base. Firewood cutting of fuels in the area has limited utility because of the lack of public access and roads, and the less desirable qualities of juniper and limber pine that are encroaching the burn units.

Category of Exclusion

The action falls under Section 31.2 (10) of the Forest Service Handbook 1909.15 Environmental Policy and Procedures (Interim Directive No 1909.15-2003-1). Notice of the issuance of this Interim Directive was published in the Federal Register on June 5, 2003 (68 FR 33814). This action is categorically excluded from documentation in an environmental impact statement or an environmental assessment because it meets WO Interim Direction for FSH 1909.15 –Environmental Policy and Procedures Handbook Chapter 30 Section 31.2 in Category 10 Hazardous Fuels Reductions:

- 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 1,000 acres.

The categorical exclusion is appropriate in this situation because it meets the above criteria. The IDT team took an extensive look at the criteria required for the Category 10 Categorical Exclusion, see Appendix A. Our analysis shows that the project meets the criteria.

Finding of No Extraordinary Circumstances

Under the Forest Service Handbook definition (1909.15 Chapter 30.3-30.5), extraordinary circumstances exist, only when *conditions* associated with the proposal are identified “as potentially having effects which may significantly affect the environment.” Scoping was conducted to identify any conditions associated with a normally excluded action as potentially having effects, which may significantly affect the environment. A botanist/soil scientist, hydrologist, wildlife biologist, fire and fuels specialists, range conservationist, riparian/fisheries biologist, archaeologist, landscape architect and NEPA/environmental coordinator provided interdisciplinary review of extraordinary circumstances and recommended project design features.

Extraordinary circumstances include, but are not limited to, steep slopes or highly erosive soils, threatened and endangered species or their critical habitat, wetlands and flood plains, municipal watersheds, inventoried roadless areas, Congressionally designated areas (such as wilderness, wilderness study areas, or National Recreation Areas), Research Natural Areas, or Native American religious or cultural sites, archaeological sites, or historic properties or areas.

Steep slopes and highly erosive soils. The project area has areas of debris flow and slump complexes (Case, 1989). Low intensity prescribed fire should not induce hydrophobic soil conditions, which would contribute to debris flow activity or major mass movements. The implementation will involve Best Management Practices and a low to moderate intensity fire applied to the landscape through prescribed burning under appropriate conditions. This will be done in strategic areas to reduce natural fuels accumulations that contribute to wildfire severity and intensity. In order to protect resources, life, and property, the project addresses fuel continuity near the Forest boundary and private lands.

Threatened and endangered species habitat. Areas proposed for treatment are outside of identified potential lynx habitat, and outside the grizzly bear recovery area. Project design would be implemented so that threatened and endangered species and critical habitat are protected. The potential impact to federally listed threatened and endangered species and species listed as sensitive and/or management indicator species for the Shoshone National forest were assessed. No adverse impacts were identified.

Wetlands, floodplains and municipal watersheds. Floodplains and wetlands within the analysis area are regulated by Executive Orders 11988 and 11990. Floodplain management, emphasizing protecting floodplains and avoiding building in the floodplain, is the primary intent of E.O. 11988. Floodplains are natural escape areas for floods that temper stages and velocities. The project would not adversely affect floodplains or wetlands (100-year floodwater surface) due to project design and the nature of the project and the fact that no wetlands were identified that could potentially be impacted. No municipal water supply watersheds were identified.

Wilderness, Research Natural Areas, and inventoried roadless areas. No timber harvest or temporary road construction is being proposed in RARE II areas, and no action is being proposed in designated Wilderness or Research Natural Areas. No permanent road construction is planned. With no temporary road construction planned for prescribed burning, and no handline construction, the effects would be little to no change to the existing undeveloped character and aesthetics in the long-term.

Congressionally designated areas (Wild and Scenic River). This project complies with the Wild and Scenic Rivers Act and the Forest Plan management direction; no units are included in the decision that involves the Wild and Scenic Clarks Fork of the Yellowstone. No timber harvest or temporary road construction is being proposed in the Clarks Fork Wild and Scenic River corridor. No permanent road construction is planned as part of the project.

Cultural sites. A Class III survey for cultural resources in the project area was completed. This field inventory resulted in one cultural resource site being located, which was determined not to be adversely affected by the project as planned. The Wyoming Department of State Parks and Cultural Resources State Historic Preservation Office (SHPO) reviewed the cultural resource survey. SHPO made a similar determination and concurred that no historic properties would be affected by this project and that the action would not adversely impact properties eligible or potentially eligible for the National register of Historic Places. The SHPO concurrence letter is under project control number 0302KLLK001.

Summary and Finding of No Extraordinary Circumstances. Through project design, the categorical exclusion is appropriate in this situation because there are no extraordinary circumstances identified through interdisciplinary review. No conditions associated with the project are identified “*as potentially having effects which may significantly affect the environment.*”

Public Involvement

Scoping/Collaboration. The project has been listed on the SNF Schedule of Proposed Projects (SOPA) since 2001. The project proposal was provided to the public and other agencies for comment during the scoping period. The scoping notice was also available online at <http://www.fs.fed.us/r2/shoshone>. Internal and external scoping was conducted to identify the issues and seek input relevant to this proposal.

Forest Service personnel sought agency and public comments to help plan and carry out the project. On September 21, 2001, a scoping letter describing the project proposal was sent to over 200 individuals, groups, private landowners, organizations, and Indian tribes to notify them of the proposal and that we would appreciate their views.

In trying to reach the public and provide an opportunity for comment, additional mailings were made for a total of 560 copies of the scoping statement being mailed out. This included three different mailings: 1) a mailing to 210 individuals, government agencies, organized groups and Indian tribes; 2) 210 box holders for the Clark, Wyoming mail route; 3) 140 individuals identified as landowners in the area, many of which are out-of-state residents and were not covered in the first two mailings. Other government agencies, including the U.S. Fish and Wildlife Service and Wyoming Game and Fish received a copy of the scoping and were asked to comment.

Results of the scoping were that 24 letters, inquiries, phone calls, or e-mails were received. Comments were carefully considered and the results of scoping are documented in the project file. Comments were both supportive of and opposed to the project proposal. The *Cody Enterprise* wrote an article in response to the scoping statement.

On October 10, 2001 the Forest Service met with approximately 60 residents of Clark to further explain the proposal and listen to the input of the group. Public comments were summarized and responses prepared, with a letter and public comment summary mailed out in December 2001 to those who wrote or attended the meeting.

Correspondence is retained in the project file, along with names and addresses for the mailing lists, meeting attendees, etc. All comments received through scoping and the public involvement processes were used in developing the issues and the analysis process. An ID Team of resource specialists provided input, reviewed the project proposal, and participated in issue identification. Efforts will be coordinated with Park County and the Community Wildfire Protection Plan as appropriate.

Key Issues

Through the internal and external scoping process and based on the evaluation of preliminary issues by the ID Team, the issue identified is whether the prescribed burn should be implemented, and if so, how best to address concerns over safety and visual resources:

Safety - How to protect human health and safety, property, and natural resources in a safe, cost effective manner?

Some of the public comments indicated that prescribed burning to reduce fuels would be inappropriate due to concern over Forest Service crews being able to control the fire and the possibility of an escaped burn threatening private land and/or structures. Many felt that the unpredictable, high winds common to the area created an unacceptable risk for implementing a prescribed burn. Residents wanted assurances that the Forest Service will address safety as a paramount concern with wind, control of any prescribed burns, and adequate fire-fighting resources on-site. Many suggested the need for a contingency plan and the availability of stand-by resources in the event of an escaped fire.

In response to the safety issue, the Forest Service safely conducts prescribed burning on million of acres each year nationally; the Shoshone National Forest conducts approximately 4,000 acres annually and has the experience and ability to conduct these burns safely.

Safety and implementation of prescribed burns are identified in a Burn Plan. Prescribed burning would be planned and implemented to take advantage of favorable fuel moisture, weather, air temperature, and relative humidity conditions conducive to producing low to moderate intensity fire. Additionally, atmospheric conditions would be monitored to determine conditions most favorable for smoke dispersion. On-site conditions may be monitored by a Remote Automated Weather Station.

On all days of the prescribed burns, a spot weather forecast will be requested from the National Weather Service (NWS). The weather report received from the NWS is specific to the area being burned and forecasts the ground level wind speeds and direction, transport wind speeds and direction, smoke dispersal rating and mixing height of the smoke. If any of the parameters or constraints are not met, then the burn will be postponed to a day that meets all the required parameters.

Effects to Visual Quality - How to reduce continuous fuel concentrations that may contribute to a catastrophic fire, while maintaining or enhancing aesthetic values and protecting visual quality?

Many comments were that fire could potentially negatively affect the aesthetics and/or natural beauty of the project area.

In response to the visual quality issue, the Forest Service would limit mechanized ground disturbing equipment (vehicles) use off existing roads and trails and mechanized fireline construction as much as possible. The project would primarily use natural terrain breaks, snow, and existing roads, to contain the fire within the project area and limit ground disturbance. Fuel break edges and burned areas would be kept irregular to maintain natural mosaic patterns and all vegetation is not entirely consumed. Prescribed burning would be conducted when adequate soil moisture exists and at a low to moderate intensity to limit mineral soil exposure.

The proposal was provided to the public and other agencies for comment during scoping; other ongoing public involvement and collaboration efforts included:

- The ID Team examined potential effects of the proposed action and alternatives. Members of the ID Team made a field reconnaissance of the project area on February 8, 2002, a representative from Wyoming Game and Fish also accompanied the group. Subsequent visits to the site were made by specialists to gather needed information, including as recently as June 25th, 2004.
- District Ranger occurred on local radio show and discussed fuels projects (December 16, 2003)
- District Ranger met with Park County Commissioners (December 17, 2003)
- Articles and open house notices in Cody and Powell newspapers regarding fuels projects
- Open house held on December 17, 2003 on the North Fork Hazardous Fuels Reduction projects, including the Beartooth Face project area, with 30 in attendance
- In addition to the general public and interested parties, these agencies, organizations and persons were contacted over the last several years concerning hazardous fuels reductions through scoping, open houses, or other means: Yellowstone National Park, BLM, USFWS, State of Wyoming, Park County Commissioners, Cody Chamber of Commerce, congressional representatives, rural fire districts, land owners, recreation and tourism industry, user groups such as Backcountry Horsemen, Trout Unlimited and environmental groups.
- The project was discussed as part of the ongoing development of the Park County Community Wildfire Protection Plan; efforts are being made to integrate this project into the ongoing development of the County plan as appropriate.

Findings Required by Other Laws

Compliance with National Direction. Since this project tiers to National Fire Plan direction, it conforms and is compliant with the goals and objectives of the National Fire Plan and the 2002 *10-year Comprehensive Strategy and Implementation Plan*, as it is identified as a hazardous fuel reduction project to lessen conditions that contribute to large, uncontrollable wildfires that could threaten resources, life and property. This project is consistent with recommendations to create defensible space and implement vegetation treatments to reduce the risk and/or severity of wildfires.

Compliance with the Forest Plan. Mechanical treatments and prescribed burning are consistent with activities identified in the Forest Plan. The decision is consistent with the Shoshone Forest Plan as required by the National Forest Management Act. None of the acreage in the project is in the suited timber base. The project was designed in conformance with Forest Plan standards and incorporates appropriate Forest Plan guidelines (Forest Plan, pages III-19 to III-250). The project was designed in conformance with Plan standards and incorporates the appropriate management area direction for management areas 2A, 3A, 9A, and 10D.

Clean Air Act. The project would maintain air quality in the project area, surrounding airsheds, and local communities using a Smoke Management Plan. Site-specific burn plans are required for all prescribed

burns and include smoke management elements (FSM 5140). The plan would identify the appropriate weather conditions for conducting the prescribed fire to maintain air quality in the area.

Clean Water Act. The planned action would comply with the Forest Plan while pursuing project objectives. Proper implementation of Best Management Practices (BMPs) would minimize effects on water quality during and following project implementation.

National Forest Management Act. The planned action would meet Forest Plan direction while pursuing project objectives. Actions include project design and mitigation measures to conform to the Forest Plan direction.

National Historic Preservation Act/Section 106 Compliance. This decision was coordinated with the Forest archaeologist and the Wyoming State Historic Preservation Office (SHPO). If any previously undiscovered historic properties are encountered during project implementation, the forest archaeologist will be notified immediately and the area will be protected from further disturbance until a determination can be made on the newly discovered property (ies). A cultural resource inventory and the required coordination with the Wyoming State Historic Preservation Office (SHPO) were completed.

Administrative Review or Appeal Opportunities and Implementation

Implementation Date. This decision is not subject to administrative appeal in accordance with 36 CFR 215.4 and may be implemented immediately. Prescribed burning could begin as early as the fall of 2004, and will be conducted in appropriate burning periods over the next three to six years, weather allowing. Burning will be scheduled to minimally affect other uses of the area.

Contact Person. For additional information on this decision, contact: Marty Sharp, North Zone NEPA Coordinator, Wapiti Ranger District, 203A Yellowstone Ave., Cody, WY 82414 phone (307) 527-6921, Email: msharp@fs.fed.us.

/s/ David R. Myers

8/18/04

David R. Myers -District Ranger

Date

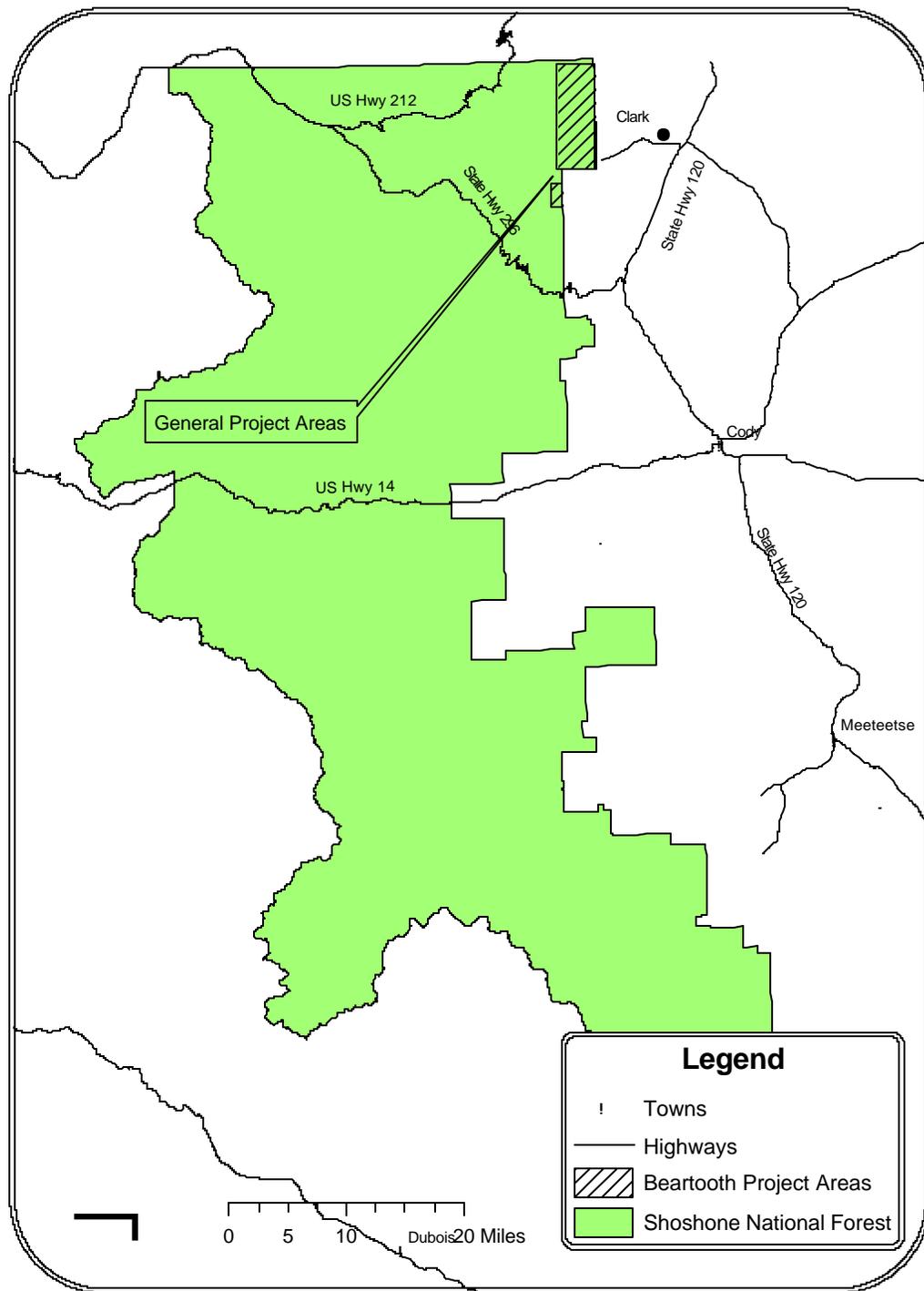


Figure 1. Vicinity map for the Beartooth Face Hazardous Fuels Reduction Project outside Clark, WY.

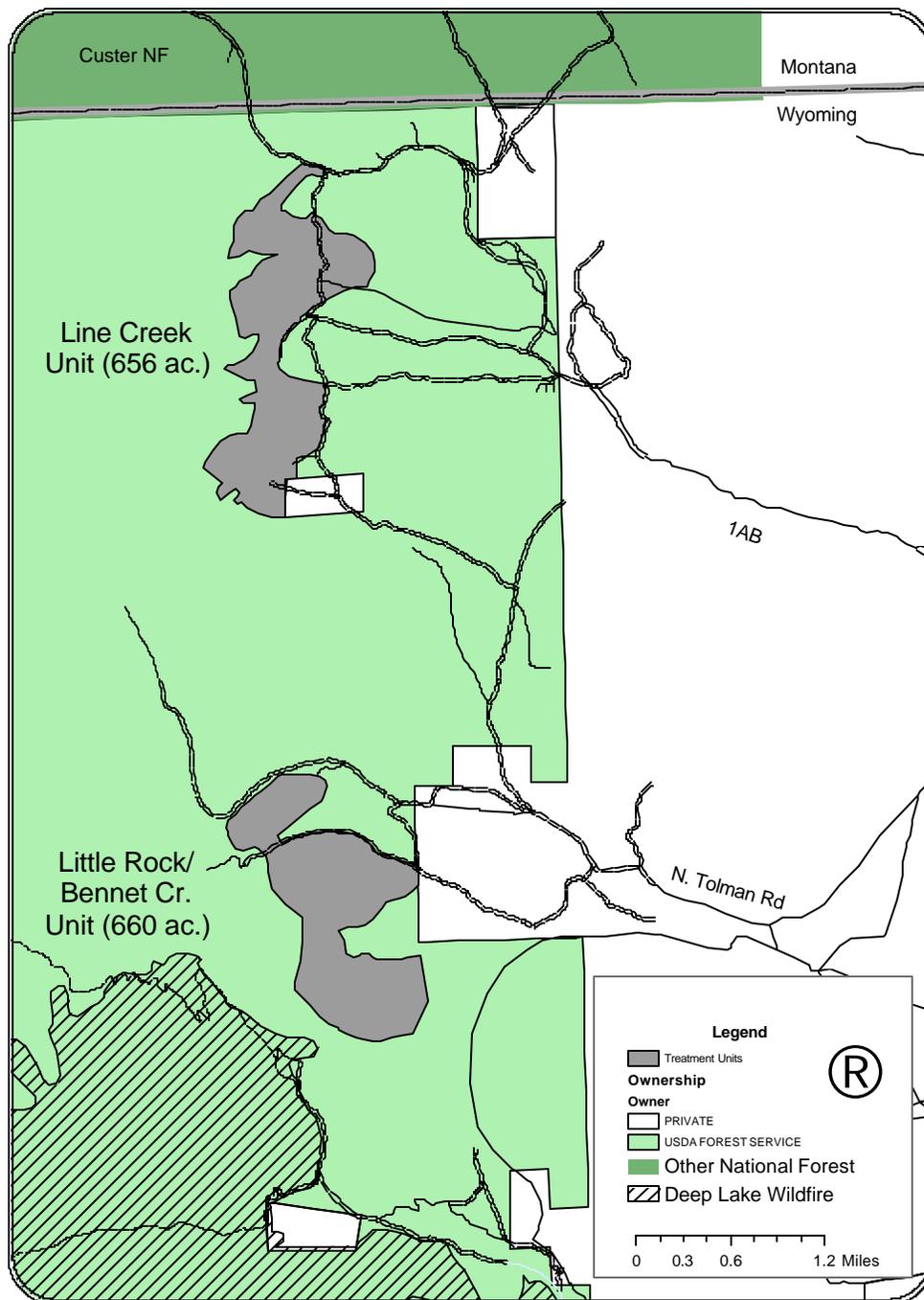


Figure 2. Treatment units for the Beartooth Face Hazardous Fuels Reduction Project.

Appendix A

Category 10 has these requirements for the use of a categorical exclusion:

Not to exceed 1,000 acres for mechanical activities or 4,500 acres using fire

- The Beartooth Face hazardous fuels project will have a maximum of about 1300-1400 acres of prescribed burning, which does not exceed the 4,500 acres limitation for prescribed fire.

Shall be limited to areas (1) in wildland-urban interface and (2) Condition Classes 2 or 3 in Fire Regime Groups I, II or III, outside the wildland-urban interface (grass, shrub, and forested vegetation altered from historical fire frequency).

- The Beartooth Face hazardous fuels project involves a wildland-urban setting with forested vegetation altered from historical fire frequency. It involves Condition Class 2 in Fire Regime Groups III.

Shall be identified through a collaborative framework as described in “A Collaborative Approach for Reducing Wildland Fire Risks to Communities and Environment 10-year Comprehensive Strategy Implementation Plan.”

- The project is compliant and the collaboration including scoping and SOPA listing, discussions with land owners, a legal notice for an open house and numerous newspaper articles. Public input was used to prioritize activities identified through working with the public, local governments, businesses, State agencies, Wyoming Congressional Representatives, and others with an interest in the project.

Not in wilderness areas or where wilderness study areas would be impaired

- The project is compliant through project design; wilderness areas, wilderness study areas and RARE II areas would not be entered with mechanical treatment methods. Prescribed burning would not occur in wilderness areas and would not impair wilderness characteristics of wilderness study areas or RARE II areas.

No herbicides or pesticides

- No direct herbicide or pesticide use is being proposed to modify vegetation as part of the proposal. Prescribed burning is the tool for fuels reduction/vegetation modification.

No new permanent roads or other infrastructure

- No new permanent roads or other infrastructure is being proposed as part of the proposal.

No timber sales unless hazardous fuels reduction is their primary purpose

- No fuels removal by use of timber sale contracts is planned.

Appendix B

Project Design. Project design features are guided by Forest Plan direction, research and monitoring studies, and state and federal laws and regulations [40 CFR 1508.25(b) 3; 1508.20; 1500.2(e)]. Measures to reduce these impacts were identified during the project planning (as project design measures) or defined during the analysis of effects summarized in this document (as mitigation measures). The actions/project design features are integral to the project to reduce potential impacts and provide the basis for analysis of extraordinary circumstances.

Prescribed burning could begin as early as the fall of 2004, and will be conducted in appropriate burning periods over the next three to five years, weather allowing. Burning will be scheduled to minimally affect other uses of the area.

Project activities associated with this project include the design and implementation of appropriate prescribed burn treatment methods during the specified season. In addition to fuel reduction through the use of prescribed fire under controlled conditions, an emphasis would be given to improving resource conditions where there is potential for improved diversity in vegetation and increased forage.

The ID team reviewed the management actions/project design features and found them appropriate. To reduce potential impacts, the project specifics and project design measures are integrated up-front into the project proposal and displayed as follows.

Fire Management And Fuels Treatment

Prescribed Burning. Under the management actions, the project area would receive fuel reduction treatment by the use of prescribed fire (broadcast burning). Actions would enhance natural fuel breaks such as rock areas, meadows, or other natural fire barriers. Areas with excessive tree mortality and hazardous fuel buildups would be reduced in strategic areas near the Forest boundary and near private lands and developments. Prescribed burns will occur in portions of RARE II area #02911.

A combination of aerial (helicopter) and ground (handheld torches) ignition systems will be utilized for safety and efficiency. All prescribed burning will be conducted under a Prescribed Burn Plan that will specify conditions under which the burn can safely occur.

Burn Plan. All aspects of the prescribed burning would follow a prescribed fire burn plan. This plan is written specifically for the project and considers resource objectives, weather parameters, fuel moisture parameters, pre-burn control actions needed, ignition plan, holding plan, contingency plan, public notification plan, equipment and coordination needs, smoke management plan, safety, risk analysis, and costs and monitoring plan. Each would be analyzed to identify the optimum burn parameters that would accomplish the projects safely. Only qualified burn personnel and resources would be utilized.

Acres and Fuel Types. The boundary of the project area contains 3800 acres, concentrating in areas of continuous fuels of grasslands, sagebrush and encroaching conifers. Areas of continuous fuels and encroaching conifers adjacent to the Forest boundary and private in-holdings/personal property (wildland-urban interface) are the primary focus areas for fuel reduction. Only a portion of these acres will actually be burned in a mosaic pattern to protect watershed and habitat values; 30 to 60% of the area may burn and the rest will remain unburned.

Burn Patterns. The intent of the burn strategy would be to create a mosaic vegetative pattern with some areas burning hot and intense while other areas are untouched by fire, giving the appearance of a natural appearing landscape. In non-timbered areas, the intent is to remove any encroaching conifers and/or set back succession for wildlife habitat with prescribed fire.

Air Quality and Smoke Management: A site-specific burn plan would be prepared for this project. A smoke management burn permit would be requested from Wyoming DEQ; the permit includes parameters that have to be met to limit smoke impacts to adjacent communities. Federal and state standards will not be exceeded.

Fire Suppression. Adequate personnel and equipment would be in place during burning. To minimize effects to the vegetation and soils, ground disturbing activities would be limited to hand tools. No mechanical fire line would be constructed.

Resource Protection. For protection of habitat and visual resources, controlling location, sequence, and timing of ignition points, as well as burn strip width, the shape, size, and location of all burns would approximate natural patterns in the characteristic landscape. A mosaic pattern composed of a variety of vegetative types and structures would be created.

Safety

Public Safety. The public will be notified in advance of the implementation of the project. Before ignition, the public in the Clark area and surrounding areas will be notified of the anticipated time and location of the prescribed fire. Notification methods are identified in the burn plan and include who will be contacted, how, and when. Signs will be placed at access points to project area to alert forest users of burning operations.

Safety and Wind. In the event of an escaped fire, contingency plans and resources identified in the burn plan would help assure public safety and protection of private property. On all days of the prescribed burns, a spot weather forecast will be requested from the National Weather Service (NWS). The weather report received from NWS is specific to the area being burned and specifics for the day requested, the ground level wind speeds and direction, transport wind speeds and direction, smoke dispersal rating and mixing height of the smoke. If the weather forecast meets the burn plan prescription then the burn will proceed. If any of the parameters are not met, then the burn will be postponed to a day that meets the prescription. On-site conditions may be monitored by a Remote Automated Weather Station

Rangeland/Commercial Livestock Grazing

Rangeland. Commercial livestock grazing allotments and range improvements were considered in project design. Deferred grazing through rest/rotations will be coordinated with permittees; range improvements such as fences and water developments will be protected. At a minimum, there will be one full growing season of rest from livestock grazing following the burn to allow maximum plant reestablishment and to improve plant vigor.

Aspen Monitoring. Monitor aspen to determine if additional actions are necessary, specifically:

Wildlife and livestock grazing. The treatment areas would be monitored for compliance with any specified grazing management practices, including any appropriate measures, e.g. electric fences, herding, etc. implemented to manage wildlife and/or livestock grazing/browsing associated with the treatment areas. If determined during monitoring that cattle or wildlife are unacceptably inhibiting aspen regeneration or retention, additional measures to meet aspen recovery would be implemented per Forest Plan directions, standards, and guidelines.

Deferred grazing through rest/rotations will be coordinated with permittees; range improvements such as fences and water developments will be protected.

Wildlife Habitat

Biologists were consulted for their expertise on bear/human interactions and how to best implement this action. The project area is outside the grizzly bear recovery area; project design criteria (conservation measures) contained in the Grizzly Bear Guidelines, Grizzly Bear Recovery Plan, the SNF Plan, and closure orders were integrated up-front in the design of this proposal to the extent that they did not conflict with the stated objectives of the proposal.

- A security area in excess of 5,000 acres would be maintained adjacent to the project (upper Little Rock and Upper Bennett Creek area).
- Burning activities would be concentrated in both time and space to the degree possible.
- Temporary cessation of activities would occur, if needed, to resolve potential or existing grizzly/human conflict(s).
- Food and garbage storage orders would be adhered to. Crews would be required to have available bear proof containers for storage of attractants such as lunches, garbage, and beverages, and would be required to remove attractants from the work area each day.

- All crews would be trained in measures to minimize grizzly/human conflicts as well as proper attractant storage, bear behavior, recommended human behavior in conflict situations, and the use of bear repellent spray.
- Disturbance stressors that initiate startling responses from wildlife would be avoided. Between April 20 and May 14, enter the burn area each day with ground vehicles to move all elk out of the burn area before arrival of any helicopters, as helicopters initiate very stressful reactions from most big game animals.
- Nesting/birthing season mortality would be minimized. On areas within the sagebrush/aspens/conifer fringe that are historically used by big game during the birthing period, and concentrations of nesting birds: 1) conduct prescribed burning as early in the spring as possible to avoid elk calving (complete burning between April 15th and May 15th and involve the wildlife biologist to evaluate the burn area prior to ignition) 2) avoid sagebrush burning between May 15 and June 20, 3) do not allow burning activity within 300' of any occupied raptor nest from 5/1 to 7/31 (FP III-53 5).
- To produce conditions that resemble the effects of the natural disturbance regime for the area:
 - Thirty to 60 percent of the sagebrush type would be maintained in later seral stages dominated by a higher percentage of sagebrush.
 - Thick, small clumps of taller sagebrush would be left interspersed within a patch, as these clumps (six to 20 feet in diameter) are preferred by several species of nesting birds.
 - Areas around seeps, springs, and wet meadows would be in early seral successional stages to provide an abundance of forbs and insects.
 - Some young sparse patches as well as some old dense stands of sagebrush, with some woodland patches interspersed (juniper, limber pine, and aspen) would exist.

An undulating edge would be provided by the burn pattern on the woodland/sagebrush fringe. The burn would be allowed to run up the ridges on south and east facing slopes on areas of higher potential site productivity in the upper and steeper reaches of the treatment area. The existing edge between sagebrush and bordering cultivated land or prairie land would be maintained.

The treatment of healthy stands of sagebrush with good herbaceous understory will be avoided in order to retain wintering mule deer habitat. Healthy, dense stands of timber will be maintained to provide thermal and hiding cover..

Guidelines for reducing bear/human conflicts will be incorporated into the project, to include compliance with the requirements of the Grizzly Bear Management and Protection Plan:

- Garbage and refuse handling and disposal procedures will be implemented.
- Human/bear conflict prevention procedures, and encounter procedures will be conducted.
- A security area in excess of 5,000 acres would be maintained adjacent to the project
- Burning activities would be concentrated in both time and space to the degree possible.
- Temporary cessation of activities would occur, if needed, to resolve potential or existing grizzly/human conflict(s).

Heritage Resources

A cultural survey was completed on all proposed areas before implementation to protect any historical resources. New sites discovered during project implementation would be protected while on-site evaluations of their significance and treatment are made in consultation with SHPO. SHPO recommended that the US Forest Service be allowed to proceed in accordance with state and federal laws subject to this stipulation: If any cultural materials are discovered during construction, work in the area should halt immediately and the USFS staff archaeologist and SHPO staff must be contacted. Work may not resume until the materials have been evaluated and adequate measures for their protection have been taken.

Visual Resources

Follow the general direction and standards and guidelines for visual resources (FP III/24-28). Mechanized ground disturbing equipment (vehicles) would be limited off existing roads and trails as much as possible. The project

would primarily use natural terrain breaks, snow, existing roads, and fireline construction to contain the fire within the project area and limit ground disturbance. Fuel break edges and burned areas would be kept irregular to maintain natural mosaic patterns.

Changes to the existing vegetation will create a mosaic of openings similar to those following a natural fire event. There is no road building, timber harvest or mechanical harvest of trees proposed, burning activities will meet the Forest Plan's visual quality objectives in the long-term. No developed campgrounds exist within the project area.

Riparian/Aquatic Resources. To help and protect aquatic resources, portions of riparian areas will be burned mimicking conditions in a fire-adapted community. Fire may back into or through these riparian areas. The low intensity burns would be irregular and create a mosaic. No mechanical or handline construction would occur within riparian areas.

Best Management Practices/Soil and Water Quality. Watershed specialists (hydrologist, soil scientist and fisheries biologist) were consulted on how to best implement this project, resulting in the selection of the appropriate Best Management Practices (BMPs).

No roads will be constructed as part of the project. Slopes identified as having severe or very severe erosion hazard will be avoided where practical. If burning is required on such slopes, attempts will be made to minimize the burn severity. Burns will be conducted in the spring or fall as cooler burns to protect soil health and may reduce the intensity and size of future wildfires and subsequent erosion events.

Mechanized ground disturbing equipment (vehicles) would be limited off existing roads and trails as much as possible.

Prescribed burning would be conducted when adequate soil moisture exists and at a low to moderate intensity to limit mineral soil exposure. Burning would create a mosaic pattern where all vegetation is not entirely consumed.

Sensitive Plants. There are no threatened and endangered plant species in the project area. For sensitive plant species, any areas with sensitive or rare plants discovered during project layout or implementation would be examined by the appropriate specialist(s) and necessary action taken.

Invasive Plants/Noxious Weeds Treatments. The burn will be conducted to minimize the threat of invasion by noxious weeds. Inspect burn units for cheatgrass, avoid burning within 1/8 mile of known cheatgrass infestations, and minimize travel through infested areas with vehicles.

Roadless Area Review and Evaluation II (RARE II) Areas. Only existing roads will be used for access to implement the project. The proposed burning will not affect wilderness characteristics in the long term.

Monitoring

Monitoring requirements of the Forest Plan can be found in Chapter IV (Monitoring and Evaluation, pages IV 1-10), and the Monitoring Amendment. Monitoring assesses whether the project was implemented as designed and whether it accomplished the project goals. Monitoring would be done to determine if plans, prescriptions, project design, and actions were implemented as intended and are in compliance with the project environmental assessment and the Forest Plan, and to determine if changes are needed to achieve project goals [40 CFR 1505.3; 1505.29(c)].

During implementation, the North Zone Fire Management Officer would monitor the project. The project area would be monitored to determine the effectiveness of project design measures and/or mitigation, the effects of management activities on various resources, the success in meeting project goals and the overall rate of recovery, and post treatment evaluation of the issue(s). Resource specialists would conduct monitoring related to their particular resources. Specific monitoring is identified below. Monitor to determine if burn prescription parameters were effective in meeting fuel reduction objectives. Vegetation recovery and fuel load changes will be monitored and compared with the type and condition of vegetation in the adjacent unburned areas and areas, which have been treated by prescribed fire in other areas of the SNF. Monitoring will be implemented in burned areas to determine whether plant species composition changes and the extent of the change (i.e., increase or decrease in noxious weeds, seral species, possible sensitive species). Future ignition locations and timing may be influenced based on monitoring results.

- **Fuels Monitoring:** The Forest Plan standards and guidelines specify that a historical record will be maintained with each prescribed fire plan, which documents the biological/physical effects and the fire behavior that produced the effects (FP-III-96).

As determined necessary, monitoring plots transects and photo monitoring will be established to monitor changes in species composition and fuel loading. Monitoring will be conducted at the following times: preburn, burning, and immediately following the burn. Burn units will be monitored one, five and ten years after the burn. In addition, fuel reduction activities will be monitored through project implementation for these values:

- ✓ Discovery of unknown cultural resources.
 - ✓ Discovery of previously undetected sensitive, threatened, endangered plant or animal species.
 - ✓ Ensure that project design measures for visual resource protection are applied.
 - ✓ Protection of water and soil resources.
- **Noxious Weeds Monitoring:** For up to five years after completion of the project, areas will be monitored for the presence of newly invading exotic species and to evaluate the effectiveness of any treatments or protection measures.
 - **Range/Vegetation Monitoring:** The project area will be monitored for compliance with the rest period, and appropriate measures, e.g., electric fences, implemented to keep livestock out of treatment areas. If it is determined, following monitoring, that cattle are damaging treatment units, additional measures to meet recovery will be implemented.
 - **Soil Monitoring:** Effects on compaction, displacement, and organic matter will be monitored during project implementation. If effects were occurring that are either unexpected or more severe than anticipated, the moisture criteria will be altered to limit effects to within soil quality standards (FSH 2509.18. FSM 2554).