

DECISION NOTICE
AND
FINDING OF NO SIGNIFICANT IMPACT
RATTLESNAKE II VEGETATION TREATMENT PROJECT
ENVIRONMENTAL ASSESSMENT

USDA Forest Service
Shoshone National Forest
North Zone/Wapiti Ranger District
Park County, Wyoming

I. INTRODUCTION

This Decision Notice documents the decision and rationale for the Rattlesnake II Vegetation Treatment Project, which was analyzed in an environmental assessment (EA). This decision document was developed in compliance with the National Environmental Policy Act (NEPA) and its implementing regulations (40 CFR 1501-1508).

This documents explains how issues and concerns were met, and how laws, environmental effects and other factors were balanced in making the decision for the Rattlesnake II Vegetation Treatment Project on the Wapiti Ranger District, Shoshone National Forest (SNF). It presents the alternatives considered, summarizes public involvement, discusses compliance with the Forest Plan and documents a Finding of No Significant Impact (FONSI) [Section XI, page 16]. At the end of this Decision Notice is information on the timing of implementation, information on how to appeal the decision, and who to contact for further information.

The vegetation treatment project is located in northwest Wyoming approximately 15 miles northwest of Cody, Wyoming in Park County. Ownership is entirely National Forest System lands. The project area is located in the Rattlesnake Creek drainage, a tributary to the North Fork of the Shoshone River (*see* Figure 1). The project is located on the SNF in the Wapiti Ranger District. Access is by Forest Service Road Number 402, which crosses private land to reach the project site. The legal description of the project area is portions of Sections 28, 29, 32, and 33, T54N, R104W, 6th PM, Park County.

II. DECISION AND RATIONALE

Based on the analysis documented in the EA and public input received throughout the project planning and analysis, I have decided to implement a combination of Alternative 2 and Alternative 3. My decision is to treat Units A and B in a summer operation time period (July 1 to September 30) as analyzed in Alternative 3. The decision will also include the harvest of the ten-acre Unit C (winter only) as analyzed in Alternative 2 of the EA.

I am making the decision to proceed with implementation of a combination of Alternative 2 and Alternative 3 (summer operation plus the winter harvest of Unit C), so that we may begin implementation of this multiyear project in 2002 or 2003.

For Units A and B, all activities (including log hauling operations and road work), would only occur in the summer between July 1 and September 30. The decision can be summarized as:

- **Only limited winter activity will occur in Unit C to treat ten acres during frozen conditions between December 1 and March 31.**
- **Roadwork and harvest activities for Units A and B will only occur in the summer months (July 1 to September 30).**
- **No spring use will occur to potentially affect spring grizzly bear use, ruffed grouse, and spring elk calving.**
- **The standards and guidelines for aspen regeneration (FP/111-155) would be implemented. Livestock salting shall occur away from harvest units. Require that the integrity of existing fences and gates be maintained during harvest activities and beyond; any fence in disrepair or damaged by the activities should be repaired or reconstructed with K-V, range, or multi-resource funding in a timely matter. Project design for range resource management in terms of treated aspen require:**
 - ✓ **Closely manage grazing by domestic stock in treated aspen stands until regeneration is six feet tall. Where there has been manipulation to induce aspen regeneration, do not allow aspen seedlings to be grazed by livestock more than one out of three years.**
- **Close and restrict road use as described in the EA; the necessary funds to implement the closure should be done with K-V or multi-resource funding.**
- **Implement Forest Plan standards and guidelines and project design (mitigation measures) as described in the EA and Appendix B of the Decision Notice.**

For the winter operation in Unit C, only a small area and volume will be involved and logs will be hauled out during the short operating window when treatment occurs in Unit C. Operations can only occur on frozen or snow covered conditions in the winter for Unit C to protect soil and water values.

My decision provides the greatest attainment of the project's purpose and need and provides the greatest protection for resource values in the project area, particularly threatened and endangered species (grizzly bears), wintering big game animals, spring elk calving, and soil and water. All the project goals will be accomplished with the implementation of my decision. It is a balanced approach and also the most responsive to agency and public comment.

Roadwork as described in the EA would be done in the summer operating period. Road closure and access management would be implemented as described on Page 7 of the EA, in Appendix C, P. 57 of the EA and in Appendix B of this Decision Document.

Based on review of the site-specific conditions and needs, I have selected this alternative because it best accomplishes the identified purpose and need and project goals for management of this area.

I have reviewed the comments of both the scoping and the comments from the 30-day EA public comment period. I also sat in and participated in the interdisciplinary team meetings and field tour, as well as the EA document development sessions and have considered this information in my decision.

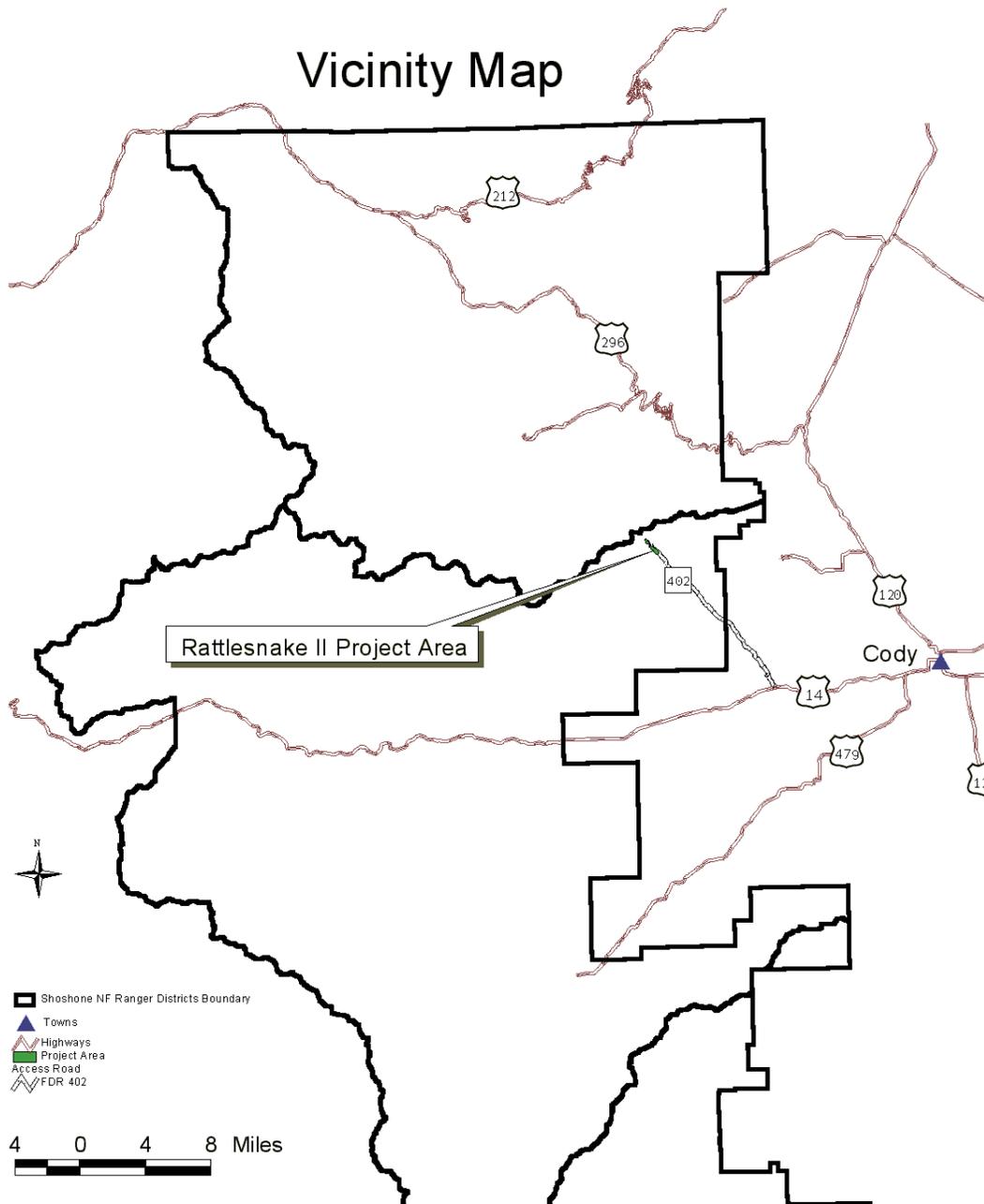


Figure 1

The Rattlesnake II Vegetation Manipulation Project is located approximately 15 miles west-northwest of Cody, WY.

III. PUBLIC COMMENTS

During on the 30-day public comment period for the EA, five letters were received. The comments are summarized below, along with the response.

Letter/Comment(s) #1: I am supportive of a combination of alternative 2 and 3. I feel that by doing the bulk of the project in the summer (alternative 3) you can lessen the impacts to wintering wildlife. I would also like to see you treat the remaining “wet” unit C during the winter as proposed in alternative 2 thus allowing for a larger area to be treated. By combining the two alternatives I feel the treatment will have the greatest benefit to the land, wildlife and the economy.

Response: This comment was considered and is reflected in the final decision, which is a combination of Alternatives 2 and 3 and allows for treatment of Unit C in the winter only.

Letter/Comment(s) #2: We are very much in favor of this project. Alternative 2 and 3 are fine with us, except if Alternative 3 is chosen, we want to be assured that Unit C would be treated the following winter. We agree that the soil conditions in Unit C do require a winter operation. However, with the conifer encroachment in Unit C, it is imperative that this be treated through timber harvest in order to regenerate the aspens that, historically, were in this area.

Response: Under the decision, all three units (A, B, and C) would be treated. Unit C would be treated in winter only and would be treated to enhance aspen that historically were in the area.

Letter/Comment(s) #3: (a) We favor the action alternatives over the no action alternatives. If we are to reach desired future conditions, we must begin to manage in accordance with the Forest Plan. In this case, the desired results of both alternatives can be realized by simply issuing a sale contract for two (2) years whereby all treatments can be treated within the general restrictions outlined in the EA. This would be our favored approach. (b) Section 2.4.2 found on page 16 is somewhat confusing. Will there be 80 or 90 acres of treatment?

Response: (a) This comment was considered and is reflected in the final decision (see page 19). Three years for a timber sale contract is typical. In the case of this sale, it is likely to be completed in two years or less. However, the three-year sale contract allows the needed flexibility in case operations are closed down due to weather conditions or other project design stipulations. (b) Wording in the EA and the Decision Notice was changed to help clarify that 90 acres is intended for treatment.

Letter/Comment(s) #4: (a) However, following the sale period, we support closure of the road through private land.
(b) In regards to bear and elk use of this habitat we prefer to see a combination of the Alternatives 2 and 3 in the decision so that the operating season will only allow timber cuts during the winter and then not haul out the timber until the summer months when wildlife are not wintering in the area.
(c) It is expected that USFWS consultation will be included to be able to mitigate the impacts of the timber sale. It's also expected that aspen regeneration project will improve the TES species habitat identified in hopes of providing improved opportunities for wildlife in the future.
(d) In the interest of protecting wildlife habitat, we expect that the Forest Service will follow the Forest Plan standards and guidelines so that livestock will not be allowed to reenter the area for five years after the treatment or until the aspen has reached six feet in height to insure there is adequate aspen regeneration.

Response: (a) The decision is to close and restrict FSR 402 as described in the EA. The closure would occur at the upper end of the private land.

(b) The decision is a combination of Alternatives 2 and 3 and it is felt that this would have the least affect as most of the activity would occur in the summer and avoid spring grizzly bear use, spring elk calving and spring ruffed grouse use. The short-term activity in Unit C would avoid grizzly bear use, as they would be hibernating. In the long-term aspen habitat enhancement in Unit C would benefit wildlife habitat.

(c) The project was designed up front with mitigating measures, timing of the project identified as an issue. The project occurs in a Grizzly Management Situation Area 5 and the project and decision avoids the spring use season to minimize any impacts. The USFWS was consulted and their concurrence letter is on file.

(d) The Forest Plan standard and guideline is integrated into the project as a design measure. The actual wording is “Closely manage grazing by domestic stock in treated aspen stands until regeneration is six feet tall. Where there has been manipulation to induce aspen regeneration, do not allow aspen seedlings to be grazed by livestock more than one of three years. This is what would be followed for project implementation; the standard does not require that “no livestock will not be allowed to reenter the area for five years.”

Letter/Comment(s) #5: [WyG&FD] The Environmental Assessment adequately addresses, in addition to other treatments that have been completed in the area, the wildlife habitat improvements in this drainage. The removal of diseased trees and regeneration of aspen stands are expected to enhance habitats for a variety of wildlife species, in addition to improving forest diversity and condition. Mitigations for grizzly bears appear to be adequate. An important part of this project is that there will be no net increase in roads, and the logging road will be closed to the public after the project is completed.

Alternative 2, which requires winter and spring timbering, would affect elk as well as grizzly bears and a variety of other species. While the timbering activity would occur in an area with little winter use by elk, trucks would be transporting logs through an area containing important spring habitat for elk, grizzly bear, and ruffed grouse. To minimize impacts to wildlife, it would be preferable to only have winter activity in Unit C, and to conduct most of the timbering and roadwork in the summer months.

Response: The decision to implement Alternative 3 in combination with winter only activity for Unit C would address concerns over spring wildlife habitat and minimize impacts to wildlife.

IV. PURPOSE AND NEED FOR THE PROPOSAL

Consistency with the Forest Plan- I have determined that the EA is appropriately tiered to and consistent with the 1986 Shoshone Land and Resource Management Plan and the programmatic EIS which accompanies it (*see* Section 1.3 and Section 1.4 of the EA, pages 3-6).

The EA is tiered to the 36 Code of Federal Regulations (CFR) for National Forest Management Act (NFMA) consistency and the Shoshone National Forest Land and Resource Management Plan. All management prescriptions for resource protection shall be consistent with the relative resource values involved, minimize serious or long-lasting hazards from flood, wind, wildfire, erosion, or other natural physical forces unless these are specifically excepted, as in wilderness (36 CFR 219.27).

The overall intent of the project is to move from the existing conditions to the desired future conditions in conformance with the goals described in the Shoshone National Forest Land and Resource Management Plan, pages III-6 through III-10. The Purpose and Need, Proposed Action, and project goals are found in Section 1.4.2 and 1.5, pages 6 to 7 of the EA. A summary of the purpose and need is:

- Manage Douglas-fir stands and increase other conifer species and aspen to restore diverse wildlife habitat while providing more insect and disease resistance and ecologically sustainable forest structures.
- Manage disturbance dependent plant communities, such as aspen/shrub habitats, to maintain and enhance their occurrence in this landscape and improve vegetation diversity where it is being changed by conifer succession.
- Provide wood products to facilitate vegetation management goals while providing wood products, jobs, and local economic stability.
- Provide appropriate road and access management to the project area.
- Other Forest Plan goals and objectives such as those associated with water quality and heritage resources would be met through the implementation of standards and guidelines.

Proposed Action. The proposed action and alternatives are discussed in detail in Chapter 2 of the EA.

Within the 133-acre project area, approximately 90 acres would be harvested. This harvest would produce 300-450 thousand board feet (MBF) of timber. The 90 acres would be treated with shelterwood, selection and aspen regeneration clearcuts to increase vegetation diversity and reduce conifer stands susceptibility to insect and disease infestation. In Unit A, approximately 34 acres would be treated for release/regeneration of lodgepole pine and removal of large diameter Douglas-fir that are most susceptible to insect and disease infestation. Unit B is 89 acres; approximately 46 acres would be treated to re-establish meadows being lost to encroachment, enhance aspen regeneration through conifer removal, and restore a park-like Douglas-fir stand to increase forage available for wildlife. An approximate ten-acre unit (Unit C) would be treated through timber harvest for conifer encroachment/aspen regeneration, when adequate snow depth or frozen ground conditions are present.

Direct Actions. Project activities associated with this proposed action include: Design and implement appropriate harvest and treatment methods during the specified season for insect and disease prevention (primarily the vulnerable older Douglas-fir) to enhance forest health. An emphasis would be given to areas where there would be improved diversity in structure, species, and age classes.

Mechanically removing conifers to:

- ✓ Promote suckering and revegetation of aspen patches.
- ✓ Increase species diversity, primarily by releasing existing, desirable lodgepole pine and regenerating lodgepole pine, to enhance habitat diversity for associated wildlife species.
- ✓ Enlarge small meadows within timbered areas to enhance forage production as well as to maintain the integrity of the meadow type.
- ✓ Favor shrub and deciduous species within riparian areas as a means of increasing diversity as well as enhancing the buffering function.

Road 402 would be physically closed with a locked gate on National Forest System land at the north end of the private land inholding (T54N, R104W, Sec. 33). The road would be closed to general public use. Motorized administrative use is allowed, as long-term access and the presence of the road is needed for timber and forest health issues such as insect and disease, motorized access for fuels reduction, prescribed burning and fire suppression, range administration and range project maintenance, wildlife and other multiple uses in the area.

The road would be maintained to standard. There would be no net increase in roads (Forest Plan amendment based upon the Oil and Gas Leasing EIS/ROD). Road closure and restrictions would be implemented as described above. The project would involve reconstruction of 2000-2500 feet of road to improve grade and drainage. Unarmored fords would be eliminated, as each of the three stream crossing fords would be armored as part of the project design and implementation. Consultation with

the Forest engineer would be required.

Mechanically pile and burn or jackpot burn slash on the treated acres in the late fall or winter.

Connected Actions. Project activities connected with the proposed action include:

Per project design/mitigation measures, closely manage grazing by commercial livestock in treated aspen stands until regeneration is six feet tall. Where there has been manipulation to induce aspen regeneration, do not allow aspen seedlings to be grazed by livestock more than one out of three years (page III-155). Additional measures include: 1) If overuse of aspen regeneration by livestock becomes a problem, treated areas would be fenced following sale closure. 2) Following post-sale monitoring, regeneration of aspens by cutting of mature stems would be implemented if the desired release of aspens were not realized.

Grazing permittees, special-use permit holders, and other agency personnel would need to obtain an authorization from the Forest Supervisor (III-89) for motorized access on FSR 402 where it is located on the Forest. Access permission off-Forest would be a continuation of the existing situation, that is, permission is needed from the landowner, as no public right-of-way exists.

The abandoned portion of the road resulting from relocation would have the surface ripped to reduce compaction.

V. OTHER APPLICABLE LAWS, REGULATIONS, AND POLICIES

Heritage Resources. A cultural resource inventory and the required coordination with the Wyoming State Historic Preservation Office (SHPO) was completed, as well as the cultural resource documentation called for in 36 CFR Part 800. A concurrence letter from the SHPO (Case Number 1201KLK004) is located in the project file.

Threatened and Endangered Species. I have concluded that the project “may effect, but is not likely to adversely affect” endangered or threatened species known or suspected to occur in the project influence zone. This is based on the biological evaluation process, conclusions, and determinations made by the North Zone Wildlife Biologist that concluded:

“It is my determination that the combination of alternative 2 and 3 in the decision “may effect, but is not likely to adversely affect” any proposed or listed species known or suspected to occur in the Rattlesnake II analysis area.

I have also concluded that this proposed action may impact individuals of Region 2 sensitive species known or suspected to occur in the Rattlesnake II analysis area, but is not likely to cause a trend to federal listing or a loss of viability of any of these species.

Long-term effects of this proposal contribute to attainment of desired conditions relative to Forest Plan management indicator species (MIS) that are known or suspected to occur in the Rattlesnake II analysis area”.

A concurrence letter from USFWS dated May 21, 2002 and received May 29, 2002 is located in the project file.

The biological evaluation process was included as an integral part of the EA (EA, Chapter 4, pages 24 to 54). Coordination with the United States Fish and Wildlife Service occurred regarding this project.

Management Indicator Species. Information on populations, habitats, and other background for Management Indicator Species for the Shoshone National Forest is summarized in the white paper titled “Shoshone National Forest Management Indicator Species (MIS) Version 1.0 (2002)”.

Watershed Regulatory Framework - The Forest Service is directed by five major federal laws, as amended, to protect watersheds through sound management. Other federal laws and regulations complement these five major laws. The Forest Service must also comply with the Wyoming Environmental Quality Act and regulations pursuant to it. Floodplains and wetlands within the analysis area are regulated by Executive Orders 11988 and 11990.

Findings Required by Other Laws and Regulations. This decision is consistent with requirements of other laws and regulations. The major applicable laws are the Organic Act, Multiple Use Sustained Yield Act, Endangered Species Act, Federal Land Management and Policy Act, National Environmental Policy Act, National Forest Management Act (NFMA), Clean Water Act and National Historic Preservation Act.

National Forest Management Act (16 USC 1600 et. seq.) The EA is tiered to the 36 Code of Federal Regulations (CFR) for National Forest Management Act (NFMA) consistency. All management prescriptions for resource protection shall be consistent with the relative resource values involved, minimize serious or long-lasting hazards from flood, wind, wildfire, erosion, or other natural physical forces unless these are specifically excepted, as in wilderness (36 CFR 219.27).

The proposed action and action alternatives were developed to move towards desired conditions for the initial treatment in the analysis area, as directed in the Forest Plan, while pursuing project goals and objectives. The proposed action and action alternatives would employ design features and mitigation measures to keep sediment and other resource impacts from activities to a minimum.

NFMA implementing regulations at 36 CFR 219.27 (C)(1) establish exceptions for harvest of timber from unsuitable lands. All recovery of forest products proposed in this analysis (from unsuitable lands) is designed to meet resource objectives (wildlife habitat, diversity, forage) other than timber production, and is therefore consistent with NFMA established exceptions.

Lands classified as suitable for timber production will be scheduled for one, three and (if necessary) five-year regeneration surveys to assure meeting the five-year NFMA standard for regeneration. Where even-aged vegetation management is used (i.e. clearcut or shelterwood) to treat vegetation, after the final cut regeneration surveys would be scheduled for the first, third, and fifth year.

NFMA Findings. The National Forest Management Act and implementing regulations require specific findings to be made when implementing the Forest Plan. In deciding on proposed management, the following findings must be made and documented at the project level.

Suitability for Timber Harvest and Vegetation Manipulation

Vegetation Manipulation-Provision to alter vegetation [Section 6 (g)(3)(F)(i)]. The proposed vegetation management (timber harvest) complies with this requirement and would occur on lands identified in the Shoshone Forest Plan as both suitable and unsuitable for timber production. If the units respond to treatment as prescribed, there would be no need to plant trees.

1. All proposed treatments meet a portion of the goals and objectives in the Shoshone Forest Plan for designated Management Areas and meet the purpose and need for action.
2. Adequate stocking of the units will be provided through natural regeneration. There are no unusual site conditions within the units that would lead me to believe that adequate regeneration would not occur.
3. Management prescriptions are not chosen primarily because they would give the greatest dollar return or the greatest output of timber. The Chapter 3 economics section in the EA describes economic effects by alternative.
4. The analysis considered the effects of management activities and practices on residual trees and adjacent stands in Chapter 3 of the EA.
5. The Chapter 3 of the EA analysis discloses the effect on vegetation and soil productivity and soil and water resources. I find that the project design, in relationship with the soil and

water conservation practices planned, will minimize impairment of site productivity and ensure conservation of soil and water resources. Project design, including Best Management Practices (BMPs) to be followed in the project are in Appendix C of the EA.

6. Desired vegetative resource conditions for the Rattlesnake II project area are described in the EA; other desired conditions are provided in the Forest Plan. Environmental effects are described in Chapter 3 of the EA. The project design measures described in the EA will have the desired effects and appropriate level of protection on water quality and quantity, wildlife and fish habitat, regeneration of desired tree species, forage production, recreation use, and aesthetic values.
7. The specified transportation and harvesting systems to be used in the implementation of this decision have been analyzed in combination with the other requirements of the management prescriptions/project design. Equipment and technology that are commonly available are prescribed. The preparation, logging, and administration are practical for achieving the resource objectives and progress toward the desired future condition in the project area.

Clearcutting and Even-aged Management

Silvicultural Practices-Provision Pertaining to Silvicultural Practices [Section 6 (g)(3)(F)(i)].

Silvicultural practices are part of the project and commercial timber harvest would occur. Timber harvest, even-aged logging practices and timber harvest transportation systems are part of the purpose and need for this project. NFMA requires that “for clearcutting, it is determined to be the optimum methodto meet the objectives and requirements of the relevant land management plan.” Clearcutting is generally considered the primary option for harvest and regenerating aspen in the Rocky Mountain Region and is consistent with the direction in the Shoshone Forest Plan, which specifies clearcutting for aspen in management areas 3A, management areas 4D and management areas 9A.

Clearcutting aspen in the Rattlesnake II area would effectively address a number of concerns, while meeting project goals and Forest Plan direction. It is anticipated to yield the greatest number of seedlings per acre following harvest, maximize growth and vigor of aspen in the new stand, and set back conifer-succession processes that could eventually lead to a loss of aspen in this area. This is based on experience with other aspen stands in similar areas treated in this manner on the Shoshone National Forest. In addition, by removing diseased aspen trees, the potential for diseased aspen or defective growing stock to develop in the new area would be minimized.

Consistency with the Forest Plan

Forest Plan Consistency. The Shoshone National Forest Plan establishes management direction for the Shoshone National Forest. This direction is described in Forest-wide and management area specific standards. Designing and implementing projects consistent with this direction is the means to move the forest towards the desired future condition as described in the Forest Plan.

Management area and Forest-wide direction established sideboards for the development of the proposed action and alternatives while responding to public issues. Integration of the Shoshone National Forest Plan, FEIS, and Record of Decision have been referenced in the EA and tiering to Forest Plan direction is referenced by specific page numbers.

NFMA and NEPA provide general land management and environmental analysis direction and were followed in EA preparation. After reviewing the EA, I find that this decision is consistent with the Forest Plan’s (as amended) standards, goals, and objectives.

Resource Protection, Riparian Areas, Soil and Water, and Diversity. The project was developed with resource protection in mind to minimize effects on water quality, wildlife and fish habitat, regeneration of desired tree species, forage production, recreation uses, aesthetic values, and other resource yields. Forest Plan objectives and standards, together with resource mitigation measures and project design, provide guidance to achieve desired effects of maintaining or enhancing

resources. This resource protection and environmental analysis is integrated throughout the EA document and would be carried forth into contract provisions and project implementation on the ground.

Executive Order 12898, Environmental Justice. Implementation of the selected alternative would not result in disproportionate impacts to any minority or low-income communities (Executive Order 12898). The effects on social groups such as Indians, women, or the civil liberties of any American citizen would not be significant. Effects on all people, regardless of race, religion, and sex would not be significant.

I have made the finding that this decision is consistent with Forest Plan standards and guidelines.

Discussion and more details on other laws, regulations, policies and plans are located in Section 1.8 of the EA, beginning on Page 12.

VI. HOW ISSUES WERE CONSIDERED

Scoping was conducted to identify the issues and seek input relevant to this proposal. On April 13, 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. The U.S. Fish and Wildlife Service and Wyoming Game and Fish received a copy of the scoping and were asked to provide comments. Comments were carefully considered and the results of scoping are documented in the project file.

Results of the scoping were that 12 letters, inquiries, phone calls, or e-mails were received. Comments were supportive of the proposal. The *Cody Enterprise* wrote an article in response to the scoping statement. The correspondence is retained in the project file, along with a listing of names and addresses. All comments received through scoping and the public involvement processes were used in developing the issues and alternatives, which directed the analysis process. An ID Team of resource specialists provided input and reviewed the project proposal and participated in issue identification and alternative formulation.

Comments from the scoping can be summarized as these preliminary, general issues/concerns:

- ✓ Consider the presence of crucial winter/yearlong range for elk (Clark's Fork herd) and deer (Upper Shoshone herd) and road/access management
- ✓ Consider the presence of prescribed burns and timber harvest in adjacent stands in the drainage (cumulative actions)
- ✓ Consider spring grizzly bear use in the area and workers-in-grizzly-habitat stipulation
- ✓ Rest treated areas from livestock in project treatment areas
- ✓ Manage cultural resources in accordance with Section 106 of the National Historic Preservation Act and Advisory Council Regulations 36 CFR Part 800.

In the scoping notice for this project an effort was made to elicit specific comments, additional information and concerns, in accordance with NEPA regulations (40 CFR 1500.4[l]) to facilitate the determination of significant issues. The entire body of comment was scrutinized to determine the "significant environmental issues deserving of study" relative to the proposed actions, and to "de-emphasize insignificant issues" (40 CFR 1500.4[g]). The purpose of this determination is to sharply define the issues and present a clear basis of choice for the decision maker. Significant issues are those that provide a basis for alternatives to the proposed action.

VII. ISSUES ANALYZED IN DETAIL

There were several issues identified relative to this proposal. All comments, issues and concerns were given in-depth review and consideration, however only significant issues are addressed in detail. As the NEPA analysis was issue driven, the significant issues provide focus for analysis. An interdisciplinary team of resource specialists also provided input and reviewed the project proposals. In addition to resource specialist input, 12 letters or phone calls from individuals or agencies provided comments on the proposal that were used in the analysis.

The significant issues below helped formulate the alternatives and focus on the resources analyzed in Chapter 3 - Affected Environment and Environmental Consequences of the EA. Detailed discussion of the issues and secondary concerns considered but not analyzed in detail can be found in Section 1.6, pages 7 to 11 of the EA.

Based on the evaluation of preliminary issues by the ID Team, the following issue was identified as requiring alternative development in addition to the proposed action. Issues are points of unanswered questions or unresolved conflict(s) with the proposed action identified during scoping efforts.

Issue 1 – Project Timing. Consider timing the project to reduce bear/human conflicts, limit disturbance of habitat during critical wildlife periods, and limit conflicts/coordination concerns with access through private property. The rationale for considering timing as a significant issue is that the project could be implemented during different seasons. This clearly led to the formulation of alternatives and the analysis of trade-offs associated with the contrasting alternatives. Concerns over spring grizzly bear use, elk calving, and wet spring conditions were considered by the ID Team and in the analysis.

The alternatives will include project design criteria to minimize resource concerns and restrictions for access/road management to address concerns regarding crucial winter range for elk and deer and spring grizzly bear use. A workers-in-grizzly-habitat stipulation is incorporated as a project design criteria.

VIII. ALTERNATIVES CONSIDERED

Introduction. The EA described three issue driven alternatives, including the No Action Alternative, which were developed from the project proposal, interdisciplinary team input, and results of scoping.

IX. ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

Helicopter Logging. This alternative was eliminated from analysis because it is not economically feasible because of the low volume proposed for harvest and current timber values.

Treatment by Prescribed Fire. This alternative would not meet the purpose and need. Prescribed fire is not an appropriate method for treating encroaching conifers in this project. Further, it would not provide commercial products, and would result in additional stress to trees, which would make them more susceptible to insect and disease infestations.

Slashing Conifer Encroachment. This alternative would not meet the purpose and need of the project, especially concerning removing the large Douglas-fir susceptible to beetle infestation.

Treatment in Roadless Areas. The project is designed to remain outside the Trout Creek roadless area (RARE II #2044) and the North Absaroka Wilderness; therefore no alternatives that entered the roadless area were analyzed.

Fall Operations. A fall operating season was eliminated so that conflict between hunters and treatment operations was minimized.

X. Alternatives Considered And Analyzed in Detail

A brief discussion of the similarities and minor differences between the no action alternative and the action alternatives follows.

Season of Operation. Because of timing constraints with other resource values, the ID Team attempted, through project planning and design, to develop a schedule that would minimize conflicts with other resources to the extent possible (grizzly bears, hunting season, private land activities, big game winter range). Some level of concern or conflict was identified for any season or period of operation. The seasonal window for operation will be a winter/spring season for Alternative 2 and summer only under Alternative 3.

Alternative 1 – No Action

Alternative 1 is the no action alternative. NEPA procedural regulations require the Forest Service to identify the no action alternative and use it as a baseline for comparing the environmental consequences of the other alternatives (40 CFR 1502.14(d), and Forest Service Handbook 1909.15, 14.1, 23.1). Current, ongoing management such as fire suppression, grazing administration for commercial livestock, and weed control would continue at present levels.

Alternative 2 – Proposed Action: Winter/Spring Harvest Operation

Alternative 2 is the proposed action as developed and refined from the initial proposal in the scoping statement. In response to the purpose and need and Issue 1 (Timing), this alternative is based on a winter/spring harvesting operation, where treatments (timber harvest and removal) would be conducted immediately after the closing of big game season in the area (early to mid-January) until June 1. Minor road reconstruction would occur during the summer when soil conditions are favorable.

Within the 133-acre project area, approximately 90 acres would be harvested¹. This harvest would produce 300-450 thousand board feet (MBF) of timber. The 90 acres would be treated with shelterwood, selection and aspen regeneration clearcuts to increase vegetation diversity and reduce conifer stands susceptibility to insect and disease infestation. In Unit A, approximately 34 acres, would be treated for release/regeneration of lodgepole pine and removal of large diameter Douglas-fir that are most susceptible to insect and disease infestation. Unit B is 89 acres; approximately 46 acres would be treated to re-establish meadows being lost to encroachment, enhance aspen regeneration through conifer removal, and restore a park-like Douglas-fir stand to increase forage available for wildlife. An approximate ten-acre unit (Unit C) would be treated through timber harvest for conifer encroachment/aspen regeneration, when adequate snow depth or frozen ground conditions are present.

Approximately 2000-2500 feet of FSR 402 would be reconstructed to improve favorable grade and drainage.

Alternative 3 – Summer Operation

In response to the purpose and need and Issue 1 (Timing), Alternative 3 is based on a summer operation, where treatments (timber harvest and removal) would be conducted between July 1 and September 30.

Forested cover treatments would be the same as Alternative 2, except an approximate ten-acre unit

¹ Treatment acreage amounts are \pm 10%.

(Unit C) would not be treated through timber harvest for conifer encroachment/aspen regeneration because moist soils in the area dictate entry only when frozen ground exists in the winter.



Project Area Map

- Roads
-  Existing Road
 -  Reconstruction
 -  Project Area
 -  Private Property

0.5 0 0.5 1 Miles




C WD 2/1/02

Figure 2

Unit A is approximately 89 acres, Unit B approximately 34 acres, and Unit C approximately 10 acres.

Project Design (Mitigation) Measures

Project Design (Mitigation) measures that are common to both Alternative 2 and Alternative 3:

Project Design Criteria and Project Implementation. The analysis documented in the EA discloses the possible beneficial or adverse impacts that may occur from implementing the actions proposed under each alternative. Measures to mitigate or reduce these impacts were identified during the project planning (as project design features) or defined during the analysis of effects summarized in this document (as mitigation measures). Project design features and mitigation measures are guided by Forest Plan direction, research and monitoring studies, and state and federal laws and regulations (including those described in Chapter 1 of the EA).

The project design criteria are found in Appendix B. The design criteria/mitigation measures in this appendix are integral to the project.

Monitoring and Evaluation. Monitoring assesses whether the project was implemented as designed and whether it accomplished the project goals and objectives. During implementation, the timber sale administrator would monitor the project. The project area would be monitored to determine the effectiveness of project design features and/or mitigation, the effects of management activities on various resources, and the overall rate of recovery. Resource specialists would conduct monitoring related to their particular resources. Specific monitoring is identified below:

Regeneration Monitoring: Silvicultural prescriptions will be developed on a site-specific stand basis. These site-specific prescriptions will be developed to implement the line officers selected alternative for the project. These prescriptions will contain regeneration monitoring requirements. After the final cut, where even-aged vegetation management is used (i.e. clearcut or shelterwood) to treat vegetation, regeneration surveys would be scheduled for the first, third, and fifth year.

- ✓ **Noxious Weeds Monitoring:** For up to five years after completion of the project, areas would be monitored for the presence of newly invading exotic species and to evaluate the effectiveness of any treatments or protection measures.
- ✓ **Range Monitoring:** The project area would 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 regeneration in aspen treatment units even with electric fences, additional measures to meet aspen regeneration standards and guidelines would be implemented.
- ✓ **Soil Monitoring:** Effects on compaction, displacement, and organic matter would be monitored during project implementation. If effects were occurring that are either unexpected or more severe than anticipated, the moisture criteria would be altered to limit effects to within soil quality standards (FSH 2509.18. FSM 2554). Additionally, harvesting activities would be suspended until appropriate conditions exist.
- ✓ **Wildlife Monitoring:** If aspen regeneration is not sufficient, cutting of mature aspen stems may be required to regenerate aspen clones.

XI. FINDING OF NO SIGNIFICANT IMPACT (FONSI)

I have reviewed the Council on Environmental Quality Regulations for significance (40 CFR 1509.27) and have determined that this decision is not a major federal action that would significantly affect the quality of the human environment, either individually or cumulatively. Preparation of an Environmental Impact Statement pursuant to Section 102 [2][c] of the National Environmental Policy Act of 1969 is not required. This determination is based on considering the context of the action as discussed in the EA and the following ten intensity factors, as outlined in 40 CFR 1508.27.

Evaluation of the 10 intensity factors:

Impacts that may be both beneficial and adverse.

- There are no beneficial or adverse effects that are significant. See the effects analysis for the selected alternative in the EA I Chapter 3, pages 24 to 54.

Degree to which the proposed action affects public health and safety.

- There is no significant effect to public health and safety. See the effects analysis, Chapter 3, for the selected alternative in the EA on pages 24 to 54. Project design addresses safety, primarily in terms of bear/human conflicts and safety procedures.

Unique characteristics of the geographic area.

- This action will not affect any unique characteristics of the geographic area.

Degree to which effects on the quality of the human environment are likely to be highly controversial.

- The effects on the quality of the environment are not highly controversial, as described in the EA, Section 1.6, Issues, on pages 7-11.

Degree of possible effects on the human environment is highly uncertain or involves unique or unknown risks.

- There are no significant effects, which are highly uncertain or involve unique or unknown risks. The results of monitoring activities will be assessed to determine whether the effects are within the range predicted in the EA. Monitoring is found on page 19 of the EA.

Degree to which action may establish precedent for future actions with significant effects or represents decision in principle about future considerations.

- The action does not establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration. My decision implements direction found in the Forest Plan (EA, Chapter 1, page 3 to 5) and does not establish a precedent for future actions. Implementation of my decision will not trigger other actions, nor is it a part of a larger connected action (EA, Chapter 3).

Is action related to other actions with individually insignificant but cumulatively significant impacts?

- There are no significant cumulative effects. The EA (Chapter 3, pages 24-54) found no past, present, or foreseeable activities in or adjacent to the project area that would result in potential significant cumulative effects to the quality of the human environment.

Degree to which action may adversely affect sites or projects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historic resources.

- The action is not predicted to have significant effects on heritage resources (EA, Section 3.4, page 37)

Degree to which action may adversely affect an endangered or threatened species or its habitat

determined to be critical under the Endangered Species Act.

- The actions do not adversely affect any threatened or endangered species or its habitat that have been determined to be critical under the ESA of 1973 (EA, page 38-54). A biological evaluation process was completed for the project area and there was “may effect, but not likely to adversely affect” determination to threatened and endangered species. See Section V, page 7 of the Decision Notice.

Whether the action threatens violation of federal, state, or local laws or requirements imposed for protection of the environment.

- This action complies with all federal, state, and local laws and requirements for the protection of the environment (EA, Section 1.8, pages 12-14). Wilderness, air quality, wild and scenic rivers, farm lands (prime or unique), and Native American religious concerns would not be affected by implementation of the selected alternative.

XII. APPEAL OPPORTUNITIES AND IMPLEMENTATION DATE

The implementation of this decision is dependent on funding and would be implemented over several years. Proposed start dates are the summer of 2002 and implementation could be over the next two to three years.

If no appeal is received, implementation of this decision may occur on, but not before five (5) business days from the close of the appeal filing period. If an appeal is filed, implementation may not occur for 15 days following the date of the appeal disposition.

Pursuant to 36 CFR 215.7 this decision can be appealed. Appeals under 36 CFR 215 represent concerns about the analysis. Any written appeal must be postmarked or received by the Appeal Deciding Officer within 45 days of publication of a legal notice in the *Cody Enterprise*. Appeals must meet the content requirements at 36 CFR 215.9(b)-215.14 (Content of a Notice of Appeal), including the stated reasons for appeal. Notice of appeal must meet these requirements:

- ✓ State that the document is an appeal filed pursuant to 36 CFR 215;
- ✓ List the name and address of the appellant and, if possible, a telephone number;
- ✓ Identify the decision document by title and subject, date of decision, and name and title of the Responsible Official;
- ✓ Identify the specific changes) in the decision that the appellant seeks or portions of the decision to which the appellant objects;
- ✓ State how the Responsible Official’s decision fails to consider comments previously provided, either before or during the comment period specified in 215.6 and, if applicable, how the appellant believes the decision violates law, regulation, or policy.

Pursuant to 36 CFR, Section 215.10(a), if no appeal is filed, implementation of this decision may occur on, but not before, five business days from the close of the appeal filing period. If an appeal is received, implementation may not occur for 15 days following the date of the appeal disposition [36 CFR. Sec.215.10 (b)]. Appeals must be filed within 45 days from the date the legal notice is published in the *Cody Enterprise*.

Send CFR 215 appeals to:

USDA Forest Service, Region 2
Rocky Mountain Region
Attn.: Appeal Deciding Officer
PO Box 25127
Lakewood, Colorado 80225-25127

CONTACT PERSON

For additional information concerning this decision, please contact NEPA Coordinator Marty Sharp or the deciding official at North Zone/Wapiti Ranger District, 203 A Yellowstone Ave., Cody, WY 82414, phone (307) 527-6921.

A copy of the EA is available for public review at the Wapiti Ranger District Office or upon request. It is also on the Shoshone National Forest home page, (www.fs.fed.us/r2/shoshone).

RESPONSIBLE OFFICIAL

/s/ Brent L. Larson

5/30/02

Brent L. Larson
District Ranger

Date

Appendix A Errata

The following Errata for the Rattlesnake II Vegetation Treatment Project lists errors, omissions, typos, and changes discovered after the Rattlesnake II Vegetation Treatment predecisional Environmental Assessment was released for a 30-day public comment period.

Page 1, last paragraph of Section 1.1, Wapiti Range District, “Range” changed to Ranger

Page 14, first paragraph of Section 1.8.4, “If necessary” dropped

Page 16, section 2.4.2, clarified whether 80 or 90 acres would be treated. The correct number should have been 90 acres, so this was corrected on page 3 and on page 16 where it appeared.

Page 53, Figure 9, habitat for Wyoming tansy mustard, “vegetation” changed to vegetated

Page 55, Shoshone National “For”, changed to Forest

Appendix B Project Design Criteria

Integrated Analysis and ID Team. This appendix contains design criteria used by the interdisciplinary team to maximize enhancement of resources while minimizing adverse environmental effects on the quality of the human environment. An interdisciplinary team of professional resource specialists designed and would administer the project. All actions were evaluated for conformance with the Forest Plan standard and guidelines. Forest-wide standards and guidelines from the Forest Plan apply when implementing activities; not all of these standards and guidelines are repeated in this document. These criteria were developed to reduce impacts to an insignificant level when implementing project activities. They have demonstrated effectiveness, lack controversy, and are specific, measurable, and enforceable.

The following project design criteria (mitigation measures) apply to both action alternatives unless otherwise noted. These must be incorporated into the project design as well as integrated into permits, contracts, operating plans, and project preparation/administrative procedures if compliance with the intent is to be assured. Project design would prevent, eliminate, or minimize impacts of the selected action alternative and would be implemented as follows:

Vegetation Cover Types and Treatment. The following brief discussion of cover types for Douglas-fir, lodgepole pine, limber pine, aspen, mountain big sagebrush, and harvest methods/treatments apply to both action alternatives. The special wood product removal discussion also applies to both action alternatives.

For the Douglas-fir cover type (Unit B), merchantable timber would be removed by commercial timber harvest through shelterwood, selection, or individual tree selection prescriptions (Plan page III-132).

Where remnant aspen cover type exists within Units A, B, and C, merchantable timber would be removed by commercial timber harvest to encourage aspen release. This would occur where conifers are encroaching in aspen clones. Per Forest Plan direction, the harvest method would be small clearcuts (one to five acres). Following post-sale monitoring, regeneration of aspen clones by cutting of mature stems would be implemented if the desired release of aspens were not realized from the removal of encroachment. General direction and standards and guidelines for range resource

management in terms of aspen require close management of grazing by domestic stock in treated aspen stands until regeneration is six feet tall. Where there has been manipulation to induce aspen regeneration, do not allow aspen seedlings to be grazed by livestock more than one out of three years (page III-155)

For the sagebrush cover type (Unit B), merchantable and non-merchantable limber pine, and Douglas-fir would be cut in an effort to return the acreage to an earlier seral stage. Merchantable products would be removed in conjunction with the commercial timber sale. Non-merchantable material would be treated on-site.

For the lodgepole pine cover type (Units A, B, and C), merchantable timber would be removed by commercial timber harvest through shelterwood, group selection, or individual tree selection prescriptions.

Non-merchantable timber and special wood products would also be removed from the three units. This material, which includes commercial green/dead firewood, fence material, furniture roundwood, Christmas trees, and other materials, would be treated using small sale permits, K-V (product sale collection) funded service contracts, or force account labor (Forest Service crews). Outputs from harvest could include a variety of wood products, including merchantable saw logs (>7 inches), products other than logs (POL, 5 inches-6.9 inches), commercial fuelwood, and possibly Christmas trees. Removal of encroaching six- to fifteen-foot conifers that are suitable for Christmas trees would be accomplished through Forest Service crews, K-V funding, civic organizations such as the Boy Scouts or conservation groups, or a commercial Christmas tree contractor.

Road Management Common to Both Action Alternatives. Forest Service Road 402 would be used to access the project area. This road would be reconstructed to standard through minor relocation, where necessary and appropriate, to improve the grade and drainage. Following the project the upper portion of FSR 402 will be managed as described below.

Road 402 will be physically closed with a locked gate on Forest Service land at the north end of the private land (T54N, R104W, Sec. 33). The road will be closed to general public use. Motorized administrative use is allowed, as long-term access and the presence of the road is needed for timber and forest health issues such as insect and disease; motorized access for fuels reduction, prescribed burning and fire suppression, range administration and range project maintenance, wildlife and other multiple-uses in the area. Grazing permittees, special-use permit holders and other agency personnel would need to obtain an authorization from the appropriate level line officer for motorized access on FSR 402 where it is located on the forest. Access permission off Forest would be a continuation of the existing situation, that is, permission is needed from the landowner, as no public right-of-way exists.



No roadless areas would be entered under either alternative.

Harvest/Treatment Methods Common to Both Action Alternatives. Harvest would be by ground based logging systems (i.e. skidders, tracked vehicles, or other mechanized harvesting equipment). This action would result in an average output of approximately 2000-3000 board feet per acre or 300 to 450 mbf of various wood products. Both action alternatives prescribe vegetative treatment of commercial timber types within identified suited timber base as well as outside the suited timber base. Both alternatives include harvest of dead and live trees.

Approved skid trails or temporary roads would be utilized during treatment. Use of any temporary roads would be limited to the contractor only, and only during the period of operations. All temporary roads would be obliterated through the timber sale contract immediately after having served their purpose for treatment and enhancements. Logs would be skidded or taken to a central collection point and removed by logging trucks to an off-Forest mill location.

Commercial timber products would be harvested under the terms and conditions of a three-year Forest Service timber sale contract, although it would most likely be completed in two years or less.

Silvicultural treatments would be designed to reduce risks associated with insects and disease and to combat infestations. Timber sale design, including road and skid trail layout, is guided by Forest Direction and Management area prescriptions of the Forest Plan [FP-II-91]. Site-specific determinations of silvicultural options were made by field examination and diagnosis. Detailed site prescriptions will be prepared following a decision to implement any actions that manipulate forest vegetation.

If overuse of deciduous regeneration by livestock becomes a problem, treated areas will be fenced following sale closure.

Either through force account (Forest Service) crews or K-V funding contracts would be utilized to cut and treat non-merchantable conifers where designated to enhance diversity features such as aspen, deciduous/riparian species, and interior meadows.

Activity Fuels Treatment Common to Both Action Alternatives. At all landings, the timber sale purchaser would be required to pile activity slash for future burning. Activity fuels within harvest units will be lopped and scattered to less than 24-inches in height and where concentrations exceed 15-20 tons/acre jackpot burning will be utilized to reduce fuel loading.

Cultural Resources. To ensure cultural resource protection, complete a Class III (100%) survey and follow all laws, regulations, and policies relative to cultural resources and historic surveys of project areas. New sites discovered during the course of project implementation would be protected from ground disturbance while on-site evaluations of their significance and treatment are made in consultation with the SHPO.

Forestry/Timber Best Management Practices. (see Watershed).
Contract Period. (see above Harvest/Treatment Methods.)

Operating Season and Winter Logging. The operating season would vary based on the selected alternative. Winter logging is prescribed in a designated area where frozen or snow covered ground is needed to limit resource damage.

Vegetation Management. No forest openings larger than 40 acres would occur to maintain cover and habitat effectiveness, visual resources, and NFMA compliance.

Skidding. Skid distances would be increased to the degree reasonable to minimize constructing new temporary roads or spurs. Skidding will take place when soil is dry or frozen when possible and skid trails will be returned to as near as natural condition as possible to limit resource damage.

Following harvest operations, skid trails and landings would be reclaimed if necessary by removing berms, covering with slash, installing water bars, and seeding to protect soil and water resources.

Diversity. Forest Plan direction and standards and guidelines for vertical and structural diversity included in the project design are:

- ✓ Maintain or establish a minimum of 20% of the forested area within a unit to provide vertical diversity.
- ✓ Maintain or establish a minimum of 30% of the forested area within a unit to provide horizontal diversity.
- ✓ In forested areas of a unit, maintain at least 5% in grass/forb stages and at least 10% of the conifer potential natural vegetation in old growth that occurs in 30 acre or larger patches.
- ✓ In forested units, create or modify created openings so they have natural appearing shapes.

- ✓ Maximum of individual treated areas is 500 acres.

Snags and Down Woody Material. The effects to snags and down woody material would be mitigated by the Forest Plan direction included in the project design: Within harvest units, leave six to 10 snags per 10 acres, eight inches or more dbh, where available for wildlife trees. Retain in clumps if possible. Within harvest units, retain a minimum 50 linear feet of dead/down logs per acre that is more than 10 inches dbh [FP-III-20].

Old Growth. To comply with the Forest Plan and project design, old growth would be maintained at least 5% in grass/forb stages and at least 10% of the conifer potential natural vegetation type in old growth [FP-III-19]

Douglas-fir. For the Douglas-fir cover type and mixed conifers (Unit A), merchantable timber would be removed by commercial timber harvest through shelterwood or selection to achieve multi-resource benefits (FP-III-132). Emphasize lodgepole pine and the other minor conifer species by applying the appropriate silvicultural methods to favor these species and maintain or enhance diversity.

Lodgepole Pine. For the lodgepole pine in mixed conifers, merchantable timber would be removed by commercial timber harvest through small clearcut, shelterwood, or selection prescriptions (FP-III-132) to maintain lodgepole pine because of its importance to diversity.

Aspen. Where remnant aspen cover type exists within Units A, B and C, merchantable timber would be removed by commercial timber harvest to encourage aspen release. This would occur where conifers are encroaching in aspen clones. Per Forest Plan direction, the harvest method would be small clearcuts (FP III-132). Following post-sale monitoring, regeneration of aspen clones via cutting of mature stems would be implemented if the desired release of aspens were not realized.

Sagebrush. For the sagebrush cover type, merchantable and non-merchantable limber pine and Douglas-fir will be cut in an effort to return the acreage to an earlier seral stage. Merchantable products will be removed in conjunction with the commercial timber sale. Non-merchantable material will be treated on-site.

Grizzly Bear (Management Situation Area 5).

The project area does contain limited habitat for the grizzly bear, and use is incidental during the spring and fall periods. Existing data indicate that this project area contains mostly marginal habitat, although seasonal essential spring food sources in the form of ungulate carrion, birthing big game, and limited amounts of riparian vegetation do occur in the project area.

Even though this area is outside the recovery area, the proposed action while meeting other objectives will likely have beneficial indirect effects in the long-term for the bear. As big game winter/spring range is being improved, habitat for bear during the spring season will be enhanced due to the increased availability of ungulate carrion and elk calves. In addition, the permanent road restriction will provide more secure habitat for the bear thus enhancing habitat effectiveness yearlong.

Forage availability for elk during the wintering and birthing periods would be enhanced if the forage increase would be allocated to wildlife. In addition, the permanent road restriction will provide more secure habitat for the elk thus enhancing habitat effectiveness yearlong.

The following project design criteria were formulated in order to maintain a sufficient amount of habitat to support and maintain grizzly that do use the area, and enhance for the long-term, favorable and “sustainable habitat conditions” for conservation of the grizzly bear relative to this proposal. Design criteria to maximize potential beneficial effects on a “sustainable” basis would be:

Restrict all motorized access except for “essential” administrative use. Total administrative use by motorized vehicles should not exceed 14 days during the critical spring and fall periods. Restricting administrative use reduces the possibility of habituation of bears to roads, and reduces the displacement of bears from habitat because of random or periodic disturbance.

Favor minority deciduous browse and shrub species (aspen, willow, birch, alder, etc.) wherever it exists in the treatment area to provide habitat components for potential prey species, as well as providing food sources directly (e.g. berries associated with some shrubs), and emphasizing areas that provide succulent vegetative species. Apply harvest prescriptions that favor increasing the amount of aspen type, increasing the number of aspen seral stages, and regeneration (dense sprouting) of aspen for prey species such as elk and deer. Treatments that result in dense regeneration would likely to enhance habitat for potential prey of grizzly.

Favor a variety of vegetative types, seral stages, and patch sizes interspersed throughout the treatment area to provide a mosaic pattern of vegetation and habitats over the landscape. This provides a sustainable source of differing habitat niches for a wide variety of potential prey species as well as providing a diversity of habitat for the bear. Such a mosaic pattern appears to be beneficial to most all species including the grizzly, as it provides for biodiversity.

Provide for adequate linkage corridors throughout the treatment area, and to adjacent areas of habitat, to provide security for movement as well as access to many types and seral stages, including riparian corridors, ridge systems, and major saddles.

Provide an adequate amount of potential foraging habitat in the short-term, by maintaining a variety of types and seral stages interspersed through the area. Assure potential foraging habitat is sustainable in the future by providing a variety of forest types and age classes, scattered throughout the landscape.

Design criteria to minimize potential adverse effects that were integrated into design of the project, and would be included as conditions in any associated contracts and operating plans as necessary and appropriate are:

- ✓ **Activity would be limited in time by contract (3 years).**
- ✓ **Activity would be concentrated by area due to scheduling of treatment units.**
- ✓ **No public access would be allowed during treatment.**
- ✓ **No logging camps would be allowed within the treatment area.**
- ✓ **A security area in excess of 5000 acres would be maintained adjacent to the project (upper Rattlesnake and Robbers Roost Creek area).**
- ✓ **The timber sale contract would include a clause providing for temporary cessation of activities, 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.**
- ✓ **During project implementation and the short-term, strips and patches of forested area would be left untreated to assure adequate cover and corridor linkage for security and movement**
- ✓ **Scheduling project activities and work areas to when/where such work activities and human disturbance would have minimal impact to grizzly.**
- ✓ **After completion of the project, restricting all public motorized vehicle access in the area, and limiting and scheduling motorized administrative access during critical periods (spring and fall) to 14 days per year.**

Designing the road entrance for effective closure upon completion of sale activity.

Grizzly/human conflicts. Include appropriate contract provisions to ensure protection of T&E, proposed and FS sensitive species, including a workers-in-grizzly habitat stipulation. Timber sale operators and their employees will be informed of possible risks any time they are working in grizzly country.

The grizzly bear special order [(Authority 36 CFR 261.50(a&b)] relating to handling and storage of food and other attractants will apply to all timber sale contracts and persons acting on their behalf.

Logging camps. No logging camps for timber sale operations will be permitted in the project area.

Cessation of Activities. The timber sale contract will provide for cessation of activities, if needed, to resolve potential grizzly/human conflicts.

Attractants. Food and garbage storage orders would be adhered to. Crews would be required to have available bear resistant containers for storage of attractants such as lunches, garbage and beverages; and would be required to remove garbage and attractants from the work area each day.

Training. 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 by the timber sale administrator or persons acting on their behalf.

Road Management. There will be no net increase in roads (Forest Plan amendment based upon the Oil and Gas Leasing EIS/ROD). Road closure and restrictions will be implemented as described above in road management common to both action alternatives. The project would involve reconstruction of 2000-2500 feet of road to improve grade and drainage. Unarmored fords would be eliminated, as each of the three stream crossing fords would be armored. Consultation with the Forest engineer would be required. A Roads Analysis Process (RAP) was completed to determine the future management needs for the road.

On roads that are closed to public motorized use, it is recommended that administrative use be limited. Total administrative use by motorized vehicles would be restricted to one or two periods that together should not exceed 14 days during critical periods. Restricting administrative use reduces the possibility of displacement of wildlife from habitat because of random or periodic disturbance.

Visuals. Manage visual resources so that management activities are not visually evident or remain visually subordinate. The shape, size, and location of all harvest activities shall be designed to imitate natural patterns in the characteristic landscape.

Slash piles, skid trails, and landings will be minimized where possible to reduce negative visual impacts.

Skid trails and temporary roads will be returned to as near natural condition as possible to remain visually subordinate

Roadless and Wilderness. To maintain wilderness characteristics, the project is designed to remain outside the Trout Creek roadless area (RARE II #2044) and the North Absaroka Wilderness.

Weeds. To minimize soil disturbance and integrate weed prevention and management in all vegetation projects, a noxious weed evaluation was conducted on the project area prior to implementation. Areas with current noxious weeds would be pre-treated or evaluated and treated after project implementation.

Coordination. Notify range allotment permittees of upcoming timber harvest activity. The standards and guidelines for aspen regeneration (FP.111-155) would be implemented. Salting shall occur away from harvest units. Require that the integrity of existing fences and gates be maintained during harvest activities and beyond; any fence in disrepair or damaged by the activities should be repaired or reconstructed with K-V, range, or multi-resource funding in a timely matter. Project design for range resource management in terms of treated aspen require:

- ✓ Closely manage grazing by domestic stock in treated aspen stands until regeneration is six feet tall. Where there has been manipulation to induce aspen regeneration, do not allow aspen seedlings to be grazed by livestock more than one out of three years.

Sensitive Plants. To ensure sensitive plant species, any areas with threatened, endangered, sensitive or rare plants or animals discovered during project layout or implementation would be examined by the appropriate specialist(s) and requisite action taken.

Silviculture Best Management Practices-Wyoming Nonpoint Source Management Plan (Final, March 1997). Applicable practices, as determined by IDT members, shall be implemented as part of this project. These practices will result in maintaining existing beneficial uses of water resources, and reduce adverse effects and water quality degradation to a level of non-significance.

Watershed Conservation Practices Handbook-FSH 2509.25-2001. Applicable practices, as determined by IDT members, shall be implemented as part of this project. These practices are proven ways, using current knowledge and technology, to meet Forest Plan standards and reduce adverse effects and water quality degradation to a level of non-significance.

Marking. The treatment area would be marked to meet objectives, and marking guidelines would be very specific in order to assure attainment of objectives of the selected alternative. Marking of aspen and deciduous tree regeneration areas and interior meadows would be completed by a journey level wildlife biologist.

Snags and Down Woody Material. Within harvest units, leave six to 10 snags per 10 acres, eight inches or more dbh, where available for wildlife trees based on Forest Plan direction. Retain in clumps if possible. Within harvest units, retain a minimum 50 linear feet of dead/down logs per acre that is more than 10 inches dbh [FP-III-20]. Timber sale contract provisions will be used to protect snags.

Nest Trees. Protect nesting raptors by disallowing management activities within 300 feet of a nest tree from May 1 to July 31 [FP-III-53].

Winter Range. All treatments would be completed in a manner that improves or maintains crucial winter range quality and quantity for wildlife forage and improves the diversity of late vegetative types by setting back succession, especially in dense conifer stands.

Forage. In dense conifer stands, treatment would consist of conifer removal to create openings or enhance interior meadows for increased forage production for big game species.

Cover. Ensure that sufficient timber remains in the area to provide big game thermal and security cover by maintaining small, mosaic patterns for all treatments.

Fuels. Reduce or otherwise treat activity fuels so the potential intensity of an area will not exceed 400 BTU's/sec/ft. on 90% of the days during regular fire season or break up continuous fuel concentrations exceeding the above standard into manageable units with fire breaks or fire lanes.