

## Chapter 2.0 Alternatives Including the Proposed Action

### 2.1 Introduction

This chapter describes three issue driven alternatives, including the No Action Alternative, which were developed from the project proposal, interdisciplinary team input, and results of scoping.

The two action alternatives include mitigation measures and are consistent with Forest Plan standards and guidelines. Project design criteria and mitigation measures applicable to all the action alternatives are described in this chapter.

Project design criteria common to the action alternatives, as applicable, are:

- A noxious weed evaluation would be conducted on both projects prior to treatment. Areas with current noxious weeds (Canada thistle is present) would be pre-treated or evaluated and treated after project implementation.
- No thinning or firewood cutting would occur in whitebark pine stands.
- Burning would take place both in the spring and fall and activities would be scheduled to minimally impact other uses of the areas to the extent possible (i.e. hunting, traffic on the highway, etc.).
- Within the visual corridor of the Scenic Byway, stumps would be cut less than six inches from the ground level to minimize visual impacts for sensitivity Level 1 travel routes as required by Forest Plan standards and guidelines [III-28 12 (a,b,c)]. Slash and debris will be burned in compliance with plan standards and guidelines.
- The proposed use of a helicopter for a short duration involves a relatively small area of less than a square mile (439 acres) proposed for burning within the wilderness area.
- The use of riparian buffer strips at least 150 feet wide on each side of streams and watercourses is the recommended guideline. The low intensity burns would be irregular and create a mosaic, so the burn would be less than 150 feet in some instances and more in other areas. The riparian buffers will not be actively ignited. Fire may back into or through these riparian areas; however, they will not be intentionally ignited.
- Notifications: As per public comment, the operator of the North Absaroka Aerosol Monitor and the Wyoming Department of Transportation maintenance foreman would be contacted prior to conducting prescribed burning in the area. Public notification (newspaper, radio) would be initiated before prescribed burning would occur. Areas and trailheads accessing the project areas would be signed two weeks prior with highly visible signs prior to minimize conflicts with hunters and other recreationists.
- A process is in place to notify affected publics as to when an ignition may occur and to provide continued dialog during and after the burn. In addition, contingency plans would be

developed and identified in the burn plan to help assure public safety and protection of private property in the event of an escaped fire situation. 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 specifies 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.

- Recommendations for wildlife mitigation:
  - 1) Maintain 40% of the stands, interspersed throughout the area, in mature timber
  - 2) Maintain patch sizes of more than 30 acres and with more than 70% canopy cover. This enhances early succession habitat, while simultaneously providing hiding cover, thermal cover, and old growth components for all species.
  - 3) Maintain a good interspersed of stands throughout the sagebrush/grassland type by treating only 1/3 to 1/2 of the type per unit area by stripping or burning in patches.

**Monitoring and Evaluation.** 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 (III-96). The monitoring to accomplish this and to evaluate the implementation of either action alternatives is:

- Monitoring and photo monitoring (before and after): Prior to treatment, monitoring plots and photo points would be established to monitor changes in species composition and fuel loading. The plots would be revisited immediately after the project is completed to evaluate if the project objectives were achieved.
- Monitoring of visibility and organic particulates will be conducted at an Interagency Monitoring of Protected Visual Environments (IMPROVE) aerosol monitor near the summit of Dead Indian Hill.

## **2.2 Alternative Considered But Not Analyzed in Detail**

A non-helicopter ignition alternative was considered, but not evaluated in detail because of safety considerations for hand ignition crews. Continuous fuels, the steepness of the slopes and the amount of fire needing to be lit at one time to achieve the project objectives make it unfeasible for hand crews to implement in a safe manner.

## **2.3 Alternatives Considered And Analyzed in Detail**

### **2.3.1 Alternative 1 – Current Management [No Action]**

Alternative 1 is the No Action Alternative, a continuation of current management. It does not address most of the issues documented in Chapter 1, specifically the purpose and need for action regarding fuels loading, public health and safety, and aesthetics.

**Bald Ridge.** Under the No Action Alternative, prescribed fire and firewood cutting would not be used to improve conditions to reduce the potential for large scale, high-intensity fires, reduce fuel accumulations in limber pine stands with blister rust, and improve scenic values in the long term.

**Dead Indian.** Under the No Action Alternative, prescribed fire would not be used to improve conditions so that wildland fires with a natural ignition could be allowed to burn to allow fire to play a more natural role in this portion of the North Absaroka Wilderness. Prescribed fire would also not be used to help make the wilderness boundary more defensible against wildland fire escaping the wilderness.

Future wildland fires with natural ignitions would be analyzed on an individual basis to determine if they should be put under prescription and be allowed to burn in accordance with the Shoshone Forest Plan and North Absaroka Wilderness Fire Management Plan. Without a reduction in fuels, the Forest Service would continue to suppress virtually all new lightning caused fires in the wilderness area to protect property outside the wilderness area.

### 2.3.2 Alternative 2 – Proposed Action

Alternative 2 is the Proposed Action as described in the scoping statement (*see* Figure 2).

**Bald Ridge.** The Proposed Action as described in the scoping statement for the Bald Ridge project proposes to cut and remove the dead and dying limber pine that is located along Highway 296 as a means to reduce future fuel loading as well as enhance visual quality along the highway. Dead and dying trees that are accessible from the highway would be cut and removed with a commercial operator or by a public firewood area. This involves three units (numbers 2, 3 and 4) that total approximately 96 acres. Only about ten acres out of the 39 acres in unit 4 would be included in a firewood area. Trees not removed by firewood cutters would be cut and left in place and the slash broadcast burned with a prescribed fire. The firewood cutting units adjoin Highway 296 and extend about one-quarter of a mile off the side of the highway in open grown dead and dying limber pine stands. The remaining three units (Numbers 1, 5 and 6) total approximately 83 acres that would not have any firewood cutting, the only prescription would be prescribed burning by hand ignition.

Project design specific to this project is: 1) The slash resulting from limber pine tree removal and firewood harvest in the Bald Ridge project would be broadcast (spread) and burned as part of the prescribed fire. Special emphasis would be given to mitigating the visual effects of burning and firewood cutting in areas visible from the scenic byway and from private lands. Live trees would be left wherever possible, 2) Firewood cutting of limber pine in the Bald Ridge units would be open only during the summer and early fall months, when soil moisture is low to limit soil compaction.

Alternative 2 (Proposed Action) for the Bald Ridge project (*see* Appendix E) can be summarized as follows:

- Six units totaling 208 acres, ranging in size from 12 acres to 51 acres
- Slopes range from 0-25%
- Treatments include firewood cutting and prescribed burning by hand ignition in three units and prescribed burning by hand ignition in three units
- Of the total 208 acres of treatment, 33 acres (16%) are estimated to remain unburned, 144 acres (69%) are estimated to burn at a low intensity, and 31 acres (15%) are estimated to burn at a high intensity.
- It is anticipated that 60% of the standing dead and dying trees will be removed along Highway 296 by firewood cutting.

**Dead Indian.** The Proposed Action as described in the scoping statement for the Dead Indian Fuels Reduction Project proposes to prescribe burn areas along the boundary of the North Absaroka Wilderness to create a firebreak between the Dead Indian Creek portion of the wilderness in order to reduce the hazards to other resources, life, and property outside the wilderness. Approximately 675 acres are proposed for burning inside the wilderness and 1,410 acres outside the wilderness. Vegetation targets to burn include grass, sagebrush, down and dead litter accumulation, and live trees. One unit within the wilderness area is proposed for aerial ignition by helicopter for safety reasons. Two units outside the wilderness are proposed for both aerial and hand ignition.

Some fireline construction may be needed but would be limited to hand tools inside wilderness areas. Fire engines would not be used in the wilderness. The Minimum Impact Suppression Tactics (MIST) as specified in the North Absaroka Wilderness Fire Plan would be followed for the Dead Indian fuels reduction project (*see* Appendix F).

For safety reasons, helicopter ignition of Dead Indian unit 4 in the wilderness is the only feasible method, as documented in the minimum tool analysis. Approval from the Regional Forester is required for the use of mechanized equipment in the wilderness. Helicopter use within the wilderness would be limited to ignition only and control of fire with water drops; all landing zones would be located outside the wilderness.

Alternative 2 (Proposed Action) for the Dead Indian project (*see* Appendix G) can be summarized as follows:

- Five units totaling 2085 acres, ranging in size from 86 acres to 1183 acres
- Slopes range from 35-45%
- Prescriptions include prescribed burning by hand ignition in three units (1, 2 and 3) and prescribed burning by aerial and hand ignition in two units (5, 6). Unit 4, inside the wilderness is proposed for aerial ignition because of crew safety concerns as discussed previously.
- Of the total 2085 acres of treatment, 479 acres (23%) are estimated to remain unburned, 1043 acres (50%) are estimated to burn at a low intensity, and 563 acres (27%) are estimated to burn at a high intensity.

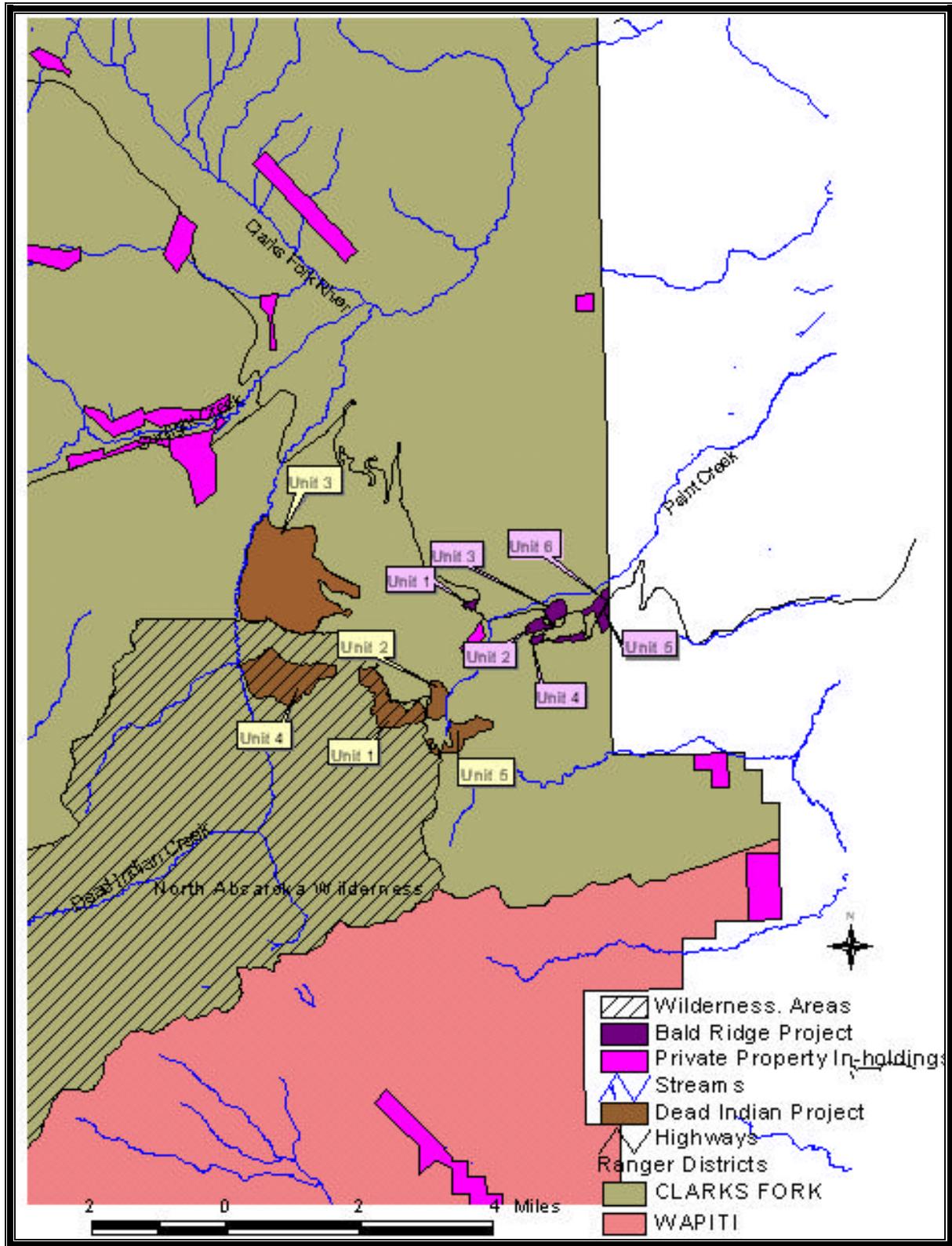


Figure 2-Alternative 2 (Proposed Action)

## 2.4 Alternative 3 – Modified Proposed Action

Alternative 3 is the Modified Proposed Action (*see* Figure 3). The Bald Ridge project remains unchanged from Alternative 2 to Alternative 3. The only modifications are for the Dead Indian project, where the large unit 3 was split into two smaller units to mitigate loss of elk hiding cover. This resulted in a smaller amount of treatment acres for the project.

In summary, for the Dead Indian project Alternative 3 (Modified Proposed Action) involves (*see* Appendix G):

- six units totaling 1619 acres, ranging in size from 86 acres to 462 acres
- Slopes range from 35-45%
- Treatments include prescribed burning by hand ignition in three units (1, 2 and 3) and prescribed burning by aerial and hand ignition in two units (5, 6). Unit 4, inside the wilderness, is proposed for aerial ignition because of crew safety concerns as discussed previously.
- Of the total 1619 acres of treatment, 366 acres (23%) are estimated to remain unburned, 818 acres (50%) are estimated to burn at a low intensity, and 435 acres (27%) are estimated to burn at a high intensity.

In addition to the mitigation/monitoring and design features common to Alternative 2 and 3, the Modified Proposed Action incorporates additional project and design features and mitigations that resulted from issues and concerns raised during the scoping process (*see* following section). It is the alternative most responsive to the input received from public scoping and agency coordination. The recommended guidelines/mitigation measures suggested during scoping were considered in developing Alternative 3.

### Mitigation

Mitigation measure(s) that are common to both Alternative 2 and Alternative 3:

- All prescribed burning and smoke management would be conducted under a prescribed burn plan that specifies conditions under which the burn can occur. An air quality permit would be obtained will be obtained from DEQ that specifies the conditions under which the project can be conducted to minimize air quality impacts. The permit would be incorporated into the burn plan and would guide the development of burn prescriptions to mitigate air quality impacts. Air quality standards would not be exceeded with this project. Prescribed burning would be managed to comply with state and federal air quality regulations and control.

### Additional Mitigation for Alternative 3

Based on scoping, modifications were made to unit 3 of the Dead Indian Fuels Reduction project as a result. The center of unit 3 in the southwest quarter of section 20 was deleted from plans to burn in order to maintain the timber stand and retain adequate hiding cover. This reduction into two smaller units was a result of the on-the-ground visit and mitigates concerns over sufficient cover

for elk security. Consideration would be given to minimizing the burning of sagebrush to prevent unacceptable decreases in mule deer winter habitat.

Also in burn unit 3 of the Dead Indian project, the 25-acre stand of small diameter lodgepole pine identified in Alternative 2 is deleted from prescribed burning or any treatment.

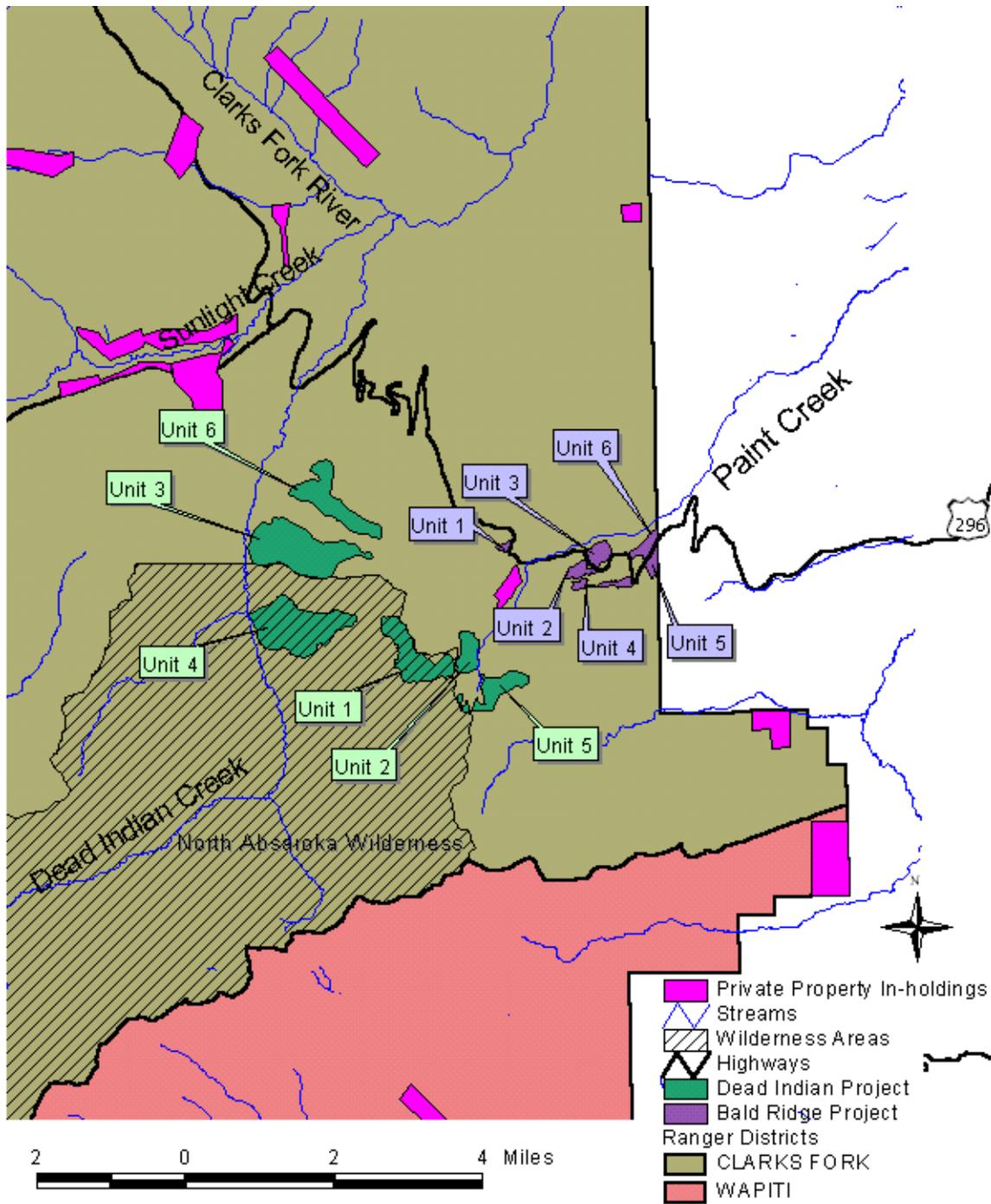


Figure 3-Alternative 3 (Modified Proposed Action)

