Proposed Action
for the
Teton to Snake Fuels Management Project

Bridger-Teton National Forest, Jackson Ranger District
Teton and Lincoln Counties, Wyoming

December 2010; Correction January 2011

Errata corrected 01/18/2011

Corrections are indicated in bold/red font in the table.

Table 2

- Prescribed fire treatment acres located in Roadless Areas were inaccurately displayed as those acres in the Defense Zone only. This has been corrected to reflect all acres of prescribed fire located in Roadless Areas, both inside and outside of the Defense Zone.

- Prescribed fire treatment acres located in the Wilderness Study Areas were inaccurately displayed as those acres in the Defense Zone only. This has been corrected to reflect all acres of prescribed fire located in the Wilderness Study Area, both inside and outside of the Defense Zone.

What is the Forest Service Proposing?

The Jackson Ranger District of the Bridger-Teton National Forest is proposing the following activities within the Teton to Snake Fuels Management project area:

- Conduct prescribed burning, non-commercial thinning, and commercial thinning to modify potential fire behavior and enhance aspen communities.
- Remove hazardous snags in close proximity to private property and the Bonneville Power Administration power line to promote public and firefighter safety.
- Maintain or reconstruct existing roads and construct temporary roads and landings to facilitate implementation of the proposed action.

The proposed actions would be designed and implemented to protect resources and special areas within the project area. The acres, locations, and further detailed information about these proposals are provided in this document for your review and comment. Further details are also available on the Bridger-Teton National Forest website or upon request as described below. The proposed fuels management activities would occur on national forest system lands identified as wildland-urban interface (WUI) in the 2005 Teton County Community Wildfire Protection Plan. The actions would move the landscape toward the desired future condition outlined in the 1990 Bridger-Teton Land and Resource Management Plan.

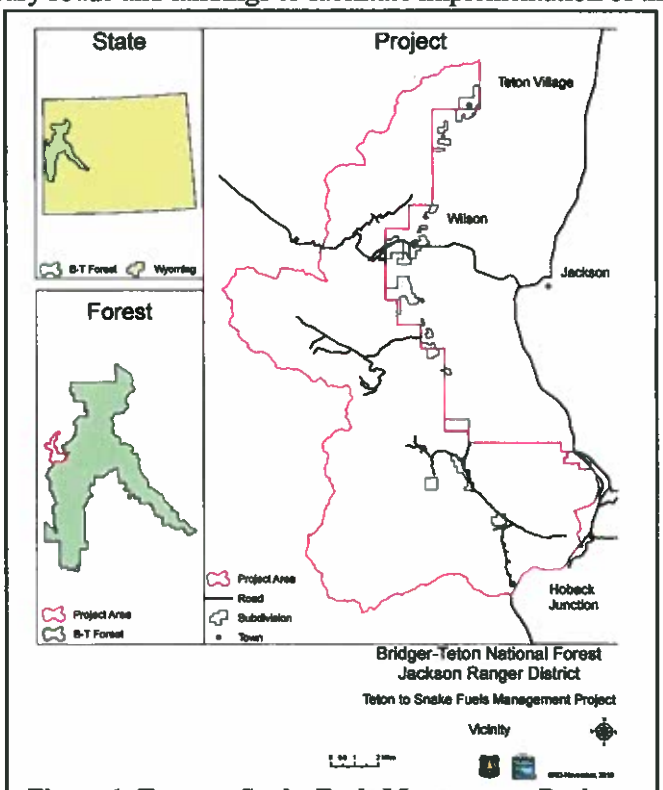

Figure 1. Teton to Snake Fuels Management Project

Project Area

The project area lies west of the Jackson Hole valley and Snake River corridor, and east of the Caribou-Targhee National Forest (**Error! Reference source not found.**). The

majority of the project area is in Teton County, with a small portion in Lincoln County, Wyoming. The following communities are adjacent to or near the project area: Teton Village, Northern and Southern Fish Creek Homes, Heidelberg, Trail Creek, Town of Wilson, Heck of a Hill, Indian Paintbrush, Crescent H, Singing Trees/River Meadows, Taylor Creek, Highland Creek Hills, Red Top Meadows, Trails End, Fall Creek Ranch, and Hog Island. Wildfire occurring in forested land adjacent to these communities may be easily pushed into those communities by prevailing winds. The combination of winds, forest fuels conditions in the project area, and downwind development creates a higher threat to values in this wildland-urban interface area than in other areas on the Bridger-Teton National Forest.

The project area includes a portion of the Palisades Wilderness Study Area as well as the Munger Mountain and Phillips Bench Inventoried Roadless Areas.

For this project, the Forest Service divided the wildland-urban interface (WUI) lands into two sub-classifications: defense zone and threat zone. The defense zone is an area extending one-quarter mile from the ownership boundary between national forest and private land (most occupied by residences or summer homes), and lands around the Teton Pass power line. The threat zone includes the remaining area within the WUI boundary.

Purpose and Need for Action

The purpose of this project is to (1) improve firefighter and public safety, (2) reduce wildland fire threat to residential areas and power line corridors, and (3) allow Forest managers to transition from suppressing all fires to a more natural fire regime.

Background

Private lands adjacent to the national forest boundary from Red Top Meadows to Teton Village have experienced considerable residential development since the 1990s. The need to treat fuels in this area became readily apparent with the 2001 Green Knoll Fire, which burned approximately 4,700 acres over the course of eight days. The fire started well within the Forest boundary, however south to southwest winds quickly drove the fire onto adjacent private lands, with spotting observed one-quarter mile ahead of the fire front. The combination of high density housing adjacent to the Forest boundary, the forest fuels conditions in the area, and the prevailing winds that push wildfire toward residential areas indicated to fire managers that fuel treatments were urgently needed in this area to reduce wildfire threat.

In response, local fire managers in 2003 planned a small-scale mechanical thinning project called the Red Top to Teton Village Fuels Reduction project. This project treated fuels only within several hundred feet from the private land/Forest boundary and was considered effective as long as no fire spotting occurred and sufficient resources (people, equipment, and aircraft) were available in the event of a wildfire. While this treatment offered more ability to successfully fight fires near residential areas by increasing defensible space, the treatments did not reduce the overall probability of wildfire enough to alter fire response in the larger landscape; managers must suppress all fires in the area to minimize the probability of wildfire reaching and threatening the neighboring homes. This is because firefighting resource availability is not predictable from year to year. To avoid a full suppression response, fire managers need to be able to manage fire before it is in people's back yards.

Following the fuels reduction project, Teton County completed their Community Wildfire Protection Plan in August 2005. This was developed by county, state, and federal fire managers in collaboration with other agencies and the interested public. This plan reinforced that many of the residential areas adjacent to the National Forest in this project area were at high to extreme hazard levels from wildfire.

Need for Action to Reduce Wildfire Threat to Private Lands and the BPA Power Line

There are 1,579 private lots within one-half mile of the project area boundary. Forest changes due to years of fire suppression and the ongoing bark beetle epidemic combined with the high density of homes downwind of potential fire starts creates a higher wildfire threat in this area than in any other area on the Bridger-Teton National Forest. In the Teton Pass area, the Bonneville Power Administration maintains a high voltage power line which is the primary source of

electricity for Jackson Hole. If a wildfire were to occur in this area, the power line could be shut down due to heavy smoke, flames, or fire suppression activities. This would pose a major disruption for people living, working, or visiting Jackson Hole and also would pose a significant threat to firefighter safety.

Homeowners are responsible to make their homes "Firewise," a program funded by the 2000 National Fire Plan, not only to protect their own home from a wildfire but also to protect their neighbors' homes. Likewise, BPA has maintenance responsibilities within the power line corridor with a focus on removing trees that could fall on the power line. The Forest Service has a complementary responsibility to reduce the probability of wildfire originating on the National Forest from burning onto private lands or impacting the power line. Policy from the 2000 National Fire Plan emphasizes treating and reducing hazardous fuels in wildland-urban interface areas to reduce the threat to life and property while also maintaining firefighter safety and reducing fire suppression costs.

A fire behavior assessment conducted in 2010 revealed that 42% of the area within one-quarter mile of residential areas and the power line (defense zone) could produce flame lengths over four feet, and 25% of this same area could produce crown fires and potential spotting ahead of the fire. Under these kinds of conditions, fire fighters are ineffective without support from aircraft and heavy equipment and wildfires become very difficult to suppress. Snags are also of concern due to the increasing amount of beetle-killed trees. Falling snags and hazard trees are the second leading cause of fatalities and serious injury during wildland firefighting operation (14 fatalities/debilitating injuries in the last 6 years), thus reducing the number of snags in the defense zone is important to improve firefighter safety.

From this discussion two Needs for Action based on Forest Plan management direction arise:

Need for Action: There is a need to treat areas in the WUI defense and threat zone to reduce wildfire threat to highly valued resources and assets.

Need for Action: Firefighter safety is threatened by falling snags and high intensity fire behavior near developed areas where extensive tree mortality has occurred in recent years. There is a need to remove snags in close proximity to homes and the power line to promote safety during firefighting activities.

Need for Action to Transition from Suppressing All Fires to a More Natural Fire Regime

Land management objectives in the Forest Plan emphasize allowing natural processes such as fire to operate as freely as possible but fire managers and decision makers do not want to assume the risk of fire burning onto private land or near the power line without treating fuels to reduce the threat. Historic fire occurrence data shows that 198 fires burned within the project area between 1953 and 2007, an average of four fires per year, all of which were suppressed. In 2010 there were again four fires in the project area which were all suppressed. By comparison, in the Gros Ventre Wilderness on the Jackson Ranger District, four out of five fires in 2010 were allowed to play a nearly natural role. As a result of years of fire suppression in the project area, the fire regime has been altered, notably moderate size, mixed-severity types of fires no longer occur. Most ignitions today result in small, low-severity fires that burn less than 1 acre and occasional large, stand-replacement fires that burn under extreme dry and windy conditions overpowering suppression efforts. This change in the fire regime is most evident in the Douglas-fir forests where fire-scarred trees show a history of frequent low- and mixed-severity burns but no burning for approximately the last 100 years. Ecological effects from years of fire suppression include conifer expansion into meadows, aspen decline, and fuel build-up with subsequent effects on wildlife and water flow.

In addition to ecological changes due to an altered fire regime, activities associated with fire suppression are generally larger in scale and incorporate additional resources such as bulldozers and other heavy equipment. Such a management response has a greater potential to introduce weeds and directly impact vegetation, soil, water, and wildlife. Fire suppression of high intensity fires in the wildland interface can also be more costly than managing for a more natural fire regime. The Green Knoll fire exemplifies the issue well. Since this fire was burning in conditions that firefighters could not directly suppress (over 4 foot flame lengths), expensive suppression resources including fixed-wing planes, helicopters, bulldozers, and heavy equipment were used to control the fire. The total cost of the Green Knoll fire was $13.3 million which equates to about $2,830 per acre. By comparison, the national average suppression cost for large fires

(over 300 acres) is roughly $500 per acre. By creating forest conditions that would allow the Forest to manage more fires in the project area with less suppression activity, future fire costs associated with large catastrophic fires could be significantly lowered, while also lowering firefighter exposure to hazardous conditions. The most efficient and effective way to manage this area to meet land management objectives would be to allow more fires to play their natural role. The proposed action is intended to give fire managers more options for managing fires in this area to achieve this goal. Proposed treatments are strategically placed within the project area to enhance aspen and to create more diversity which in turn breaks up the continuity of fuels creating areas that fire managers can use to steer wildfires away from residential areas and the power line. If nothing is done to treat fuels in the project area, nearly all wildfires in the project area will be suppressed which will continue toward adverse changes to the fire regime and wilderness character and that will increase long-term fire threat to highly valued resources and assets.

From this discussion two additional Needs for Action based on Forest Plan management direction arise:

Need for Action: In the project area and in particular within the Wilderness Study Area, the natural fire regime cannot be reestablished due to the proximity of developed areas. Natural fire starts are not free to burn with the regularity or intensity of pre-settlement times. This has led to ecological effects such as Douglas-fir encroachment into meadows, aspen decline, and buildup of fuels. The potential for high-intensity fire restricts the opportunity to use fire for resource benefit in the project area and the proximity to private land, homes, and the power line indicates a need to reduce fire behavior to protect those values.

Need for Action: There is a need to perpetuate aspen communities by reducing competing conifers and increasing age-class diversity. Healthy aspen stands with minimal conifer encroachment may not burn or will burn with low intensity and can help meet fire management objectives by providing fuel breaks.

Proposed Action

See **Error! Reference source not found.**, Table 2 displays the acres of each proposed treatment type. The "Total Treatment Acres" column includes general forest lands as well as lands in special land allocations, which are broken out and displayed in the columns 3-5. Also of note is that because the defense zone, roadless areas, and wilderness study area overlap in places, some acres are accounted for in more than one column.

, and Figure 2 for locations and acreage of specific proposed treatments. See Table 3 for road work proposals.

- Conduct prescribed burning, non-commercial thinning, and commercial thinning to modify potential fire behavior and enhance aspen communities and their effectiveness in meeting fire management goals. Treat areas using thinning and/or prescribed fire methods to reduce surface and ladder fuels and modify fire behavior by reducing surface fire intensity and potential for crown fires. Treat aspen community types by thinning and/or prescribed fire methods to reduce conifer encroachment, restore size and age class diversity, and perpetuate the species.
- Remove hazardous snags to promote public and firefighter safety. Reduce snag levels by removing dead and dying trees in close proximately to private property and the BPA power line.
- Maintain or reconstruct existing roads and construct temporary roads and landings to facilitate implementation of the proposed action. See Table 3 for specific roads proposals.
- Implement a variety of design features as necessary to protect resources and special areas within the project area. These will be applied to specific treatment units to further eliminate or reduce adverse environmental effects.

Table 1. Summary of proposed treatment acres by WUI zone

Project Area Acres	Proposed Treatment Acres			
	Prescribed Fire Units (acres)[a]		Thinning Units[b] (acres)	
	Defense Zone	Outside Defense Zone	Defense Zone	Outside Defense Zone
87,027	1,209	18,775	2,049	478

[a] The goal of these burns is to achieve a mosaic of fire across the landscape, leaving observable fire effects on only 40-60 percent of the prescribed fire acres.
[b] Thinning treatments include piling and burning slash to reduce fuels. In addition, approximately 319 acres of thinning units may also have prescribed fire as a final treatment.

Table 2 displays the acres of each proposed treatment type. The "Total Treatment Acres" column includes general forest lands as well as lands in special land allocations, which are broken out and displayed in the columns 3-5. Also of note is that because the defense zone, roadless areas, and wilderness study area overlap in places, some acres are accounted for in more than one column.

Table 2. Specific treatments and acreage, with acres located in special land allocations

Treatment	Total Treatment Acres	Treatment Acres located In Defense Zone	Treatment Acres located In Roadless Areas	Treatment Acres located In Wilderness Study Area
Prescribed Fire	19,984	1,209	6,857	11,113
Non-commercial Thin (NCT) Hand Cut (HC) Hand Pile and Burn (HPB)	1,245	1,222	267	453
Non-commercial Thin (NCT) Hand Cut (HC) Hand Pile and Burn (HPB) Prescribed Fire last (PF)	252	248	0	178
Non-commercial Thin (NCT) Prune (PR) Hand Cut (HC) Hand Pile and Burn (HPB) Lop and Scatter (LS)	301	297	0	125
Non-commercial Thin (NCT) Commercial Thin (CT) Ground-based Yarding (GBY) Machine Cut/Machine Pile and Burn (MC/MPB) –OR– Hand Cut/Hand Pile and Burn (HC/HPB)	729	282	23	0

Connected Actions

Thinning treatment of some units would require road maintenance, reconstruction, or construction in order to allow equipment access and to remove logs from the site. Preliminary estimates are displayed in **Error! Reference source not found.** and summarized as follows:

- Conduct maintenance on four existing roads for a total of approximately 3.6 miles. This would entail a variety of actions such as grading, brushing, and clearing or repairing drainage structures.
- Reconstruct to widen approximately 1.1 miles of one existing road.
- Construct two temporary roads for a total of approximately 0.8 miles. These would be closed and rehabilitated after operations.

Log landings would be required and may be in the form of road widening for roadside landings, or constructed clearings at the end of haul roads. Landings will be designed and located using all Forest Plan standards and guides as well as Wyoming Best Management Practices to protect resources.

Table 3. Preliminary estimates of proposed road work

Location	Existing or New Roads	Type of Road Work	Length of Road Work (feet)
Phillips Bench	2 existing roads	Maintenance	4,800
		Reconstruction	6,000
North Fork Fall Creek	1 new temporary road and 3 existing roads	Construction	2,500
		Maintenance	11,800
		Maintenance	800
		Maintenance	1,600
Red Top Meadows	1 new temporary road	Construction	1,500

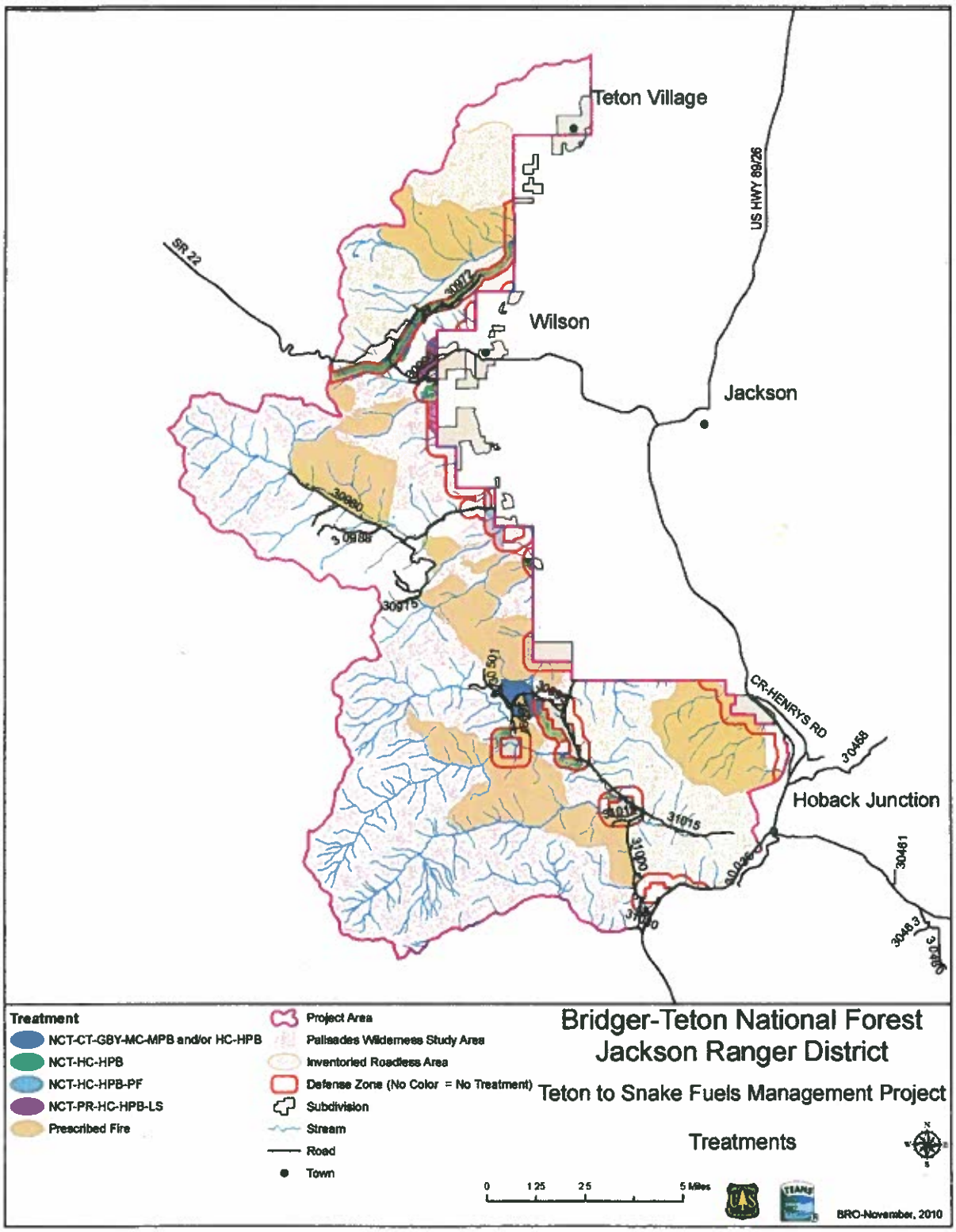

Figure 2. Proposed treatments. See Table 2 displays the acres of each proposed treatment type. The "Total Treatment Acres" column includes general forest lands as well as lands in special land allocations, which are broken out and

displayed in the columns 3-5. Also of note is that because the defense zone, roadless areas, and wilderness study area overlap in places, some acres are accounted for in more than one column.

for key to treatment names.

Implementation

The proposed action would be implemented over a period of approximately 10 years. Conducting prescribed fire and mechanical thinning activities is dependent on site and weather conditions which will vary from year to year and cause varying levels of accomplishment.

Design Features

Standard and project-specific design features would be assigned to various treatments and locations in order to minimize or avoid potential adverse environmental effects while meeting the project's purpose and need. Design features also provide direction for implementing actions in a manner consistent with the environmental analysis. As much as possible, design features are site-specific and consist of Forest Plan standards and guidelines, Wyoming Best Management Practices, US Fish and Wildlife Service conservation measures for threatened and endangered species, and additional law, regulation, and policy. For example, design features may restrict operations to particular seasons, require slash treatments in visually sensitive areas, prescribe conditions for machinery use, and provide for public access and safety during implementation. The Teton to Snake Fuels Management project includes proposed design features to protect:

- Recreation experiences and facilities
- Visual quality
- Air quality
- Soils and water quality
- Cultural resources
- Wildlife, fish, and vegetation, including threatened, endangered, or sensitive species and their habitat
- Special areas such as the Palisades Wilderness Study Area and inventoried roadless areas

Preliminary Issues and Concerns

The proposed action represents the combination of unit treatments and locations designed by a team of resource specialists to minimize or avoid adverse environmental effects while still meeting the purpose and need for the project. In addition, the Forest Service met with the public, community groups, and other-agency staff on several occasions and obtained feedback, ideas, and concerns as noted below:

1. Impacts to wilderness character in the WSA.
2. Climate change impacts to the current vegetative conditions.
3. Impacts to recreationists and permittees.
4. The potential for motor vehicle trespass following project treatment.
5. The feasibility of perpetuating aspen given the extent of ungulate browsing.
6. Impacts to wildlife, including threatened, endangered, and sensitive species.
7. The effectiveness of treatments to modify fire behavior in the project area and if managers have the resolve to let fire play its natural role in the WSA if the proposed treatments are implemented.
8. Homeowners should be informed of their role in protecting values at risk, such as using the Firewise programs.
9. Impact on five-needled pines such as limber and whitebark pines.
10. Existing and desired visual qualities impacted by proposed timber harvest activities and burning activity.
11. Effect on opportunities for firewood collection.

These initial concerns have helped shape the proposed action. Public comments and the environmental analyses will continue to influence and determine the final preferred project design.

Nature of the Decision to be Made

The analysis for this project will be documented in an environmental assessment (EA). The EA will document site-specific issues, consider alternatives that respond to the issues, and analyze effects of the proposed actions. Based on this analysis and review of public comments, the responsible official will make the following decisions:

1. Which alternative or blending of alternatives would best move the Teton to Snake project area toward the Desired Future Conditions outlined in the Forest Plan, and best address the purpose and need identified for this project?
2. Which alternative best addresses relevant issues raised by the public and the interdisciplinary team?
3. Do any of the alternatives require and a Forest Plan amendment?

The responsible official will remove from consideration any actions that would cause significant adverse environmental effects.

Public Involvement

Public participation is an integral part of this environmental analysis. The Forest Service is seeking information and comments from individuals, as well as from Federal, State, and local agencies, Tribes, and organizations that may be interested in or affected by this project. We are soliciting your comments, suggestions, concerns, and new information to help us define key issues associated with the proposed action, to develop alternatives, and to focus the analysis of effects.

There will be another opportunity to comment when the environmental assessment is ready for review. If you provide comments or express interest in this project during that formal 30-day comment period, you will be eligible to file an administrative appeal on the final decision. You are not eligible to appeal the decision if you respond only to this scoping letter.

The results of public comments and the analysis of effects will be documented in the final EA.

How Can You Comment?

Please submit your comments as instructed below to ensure that we receive and have the opportunity to carefully consider your comments as we proceed. Comments are due by January 14, 2011.

By Mail:	District Ranger Dale Deiter Bridger-Teton National Forest 25 Rosencrans Lane P.O. Box 1689 Jackson, WY 83001
By FAX:	(307) 739-5450, ATTN: Dale Deiter, Teton to Snake Project
By email:	<comments-intermtn-bridger-teton-jackson@fs.fed.us>
Verbal Comments:	Verbal comments must be received in person at the Jackson Ranger Station or via telephone at (307) 739-5425 (TTY 307-739-5503), during normal business hours (8:00 am – 4:30 pm).

Include the following information with your comments: Your name, address, and telephone number; the project you are commenting on: Teton to Snake Fuels Management Project; and site-specific comments about the proposed action, along with supporting information you believe will help identify issues, develop alternatives, or predict environmental effects of this proposal.

If you reference scientific literature in your comment letter, please send a copy of the entire reference you have cited, or attach it in an e-mail, and include rationale as to how you feel it is pertinent to the Teton to Snake Fuels Management Project.

Comments received in response to this solicitation, including names and addresses of those who comment, will be part of the public record, and will be available for public inspection. Pursuant to 7 CFR 1.27(d), any person may request the agency to withhold a submission from the public record by showing how the Freedom of Information Act (FOIA) permits such confidentiality. Persons requesting such confidentiality should be aware that, under FOIA, confidentiality may be granted only in very limited circumstances, such as to protect trade secrets. The Forest Service will inform the requester of the agency's decision regarding the request for confidentiality, and where the request is denied, the agency will return the submission and notify the requester that the comments may be resubmitted with or without name and address within the next 10 days.

For More Information and Further Involvement

If you would like more information or further detail on the proposed action, direct questions to Michael Johnston, North Zone Fire Management Officer, at the above address, or call 307-739-5425. A more detailed description of the proposed action with background, treatment unit information, and a map set of the units and project area is available for viewing and downloading on the Bridger-Teton National Forest website at

< http://www.fs.fed.us/r4/btnf/projects/>

Future notification and opportunities for review and comment will be made via mail and email to all who respond with comments or otherwise request to remain on the project mailing list. Documents will be posted on the Bridger-Teton National Forest website and will also be mailed upon request. Unless you tell us otherwise, if you use electronic mail to submit comments, we will notify you via email when documents are available on the website. If you submit comments via US Post, we will mail notifications to the address supplied.

Responsible Official

The Responsible Official for the Teton to Snake Fuels Management Project is Mr. Dale Deiter, District Ranger for the Jackson Ranger District.

Thank you for your interest in the Bridger-Teton National Forest.

Dale A. Deiter

Dale Deiter
District Ranger

18 Jan. 2011

Date

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