

United States Department of Agriculture

Forest Service

May 2008



Environmental Assessment

Bridger-Teton National Forest

Land and Resource Management Plan Amendment:

Pronghorn Migration Corridor

Bridger-Teton National Forest Sublette and Teton Counties, Wyoming

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SUMMARY

The Bridger-Teton National Forest proposes to amend its 1990 Land and Resource Management Plan (Forest Plan) to allow continued successful migration of the pronghorn (*Antilocarpa americana*) that summer in Jackson Hole and winter in the Green River basin in Wyoming. The Forest Plan Amendment would designate a Pronghorn Migration Corridor and create a standard requiring that projects, activities and infrastructure authorized by the Forest Service in the corridor be designed, timed and/or located to allow continued successful migration. The migration corridor to which this amendment would apply extends from the Forest boundary near the Green River Lakes Road north of Pinedale in Sublette County, Wyoming to the Forest boundary with Grand Teton National Park northeast of Kelly in Teton County, Wyoming. It is within the Pinedale and Jackson Ranger Districts of the Bridger-Teton National Forest.

Because the proposal would not result in significant changes to multiple-use goals and objectives for long-term land and resource management, the proposed amendment is considered to be "non-significant" according to the planning regulations at 36 CFR 217. Therefore, the amendment can be authorized in a Decision Notice after completion of this Environmental Assessment (EA). In this EA, the Forest Service evaluates the Proposed Action and the "No Action" alternative of not amending the Forest Plan.

Based on this EA, the responsible official will decide whether or not to amend the Forest Plan as described. The Responsible Official is the Forest Supervisor of the Bridger-Teton National Forest Kniffy Hamilton.

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INTRODUCTION

Document Structure	

The Forest Service has prepared this Environmental Assessment in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This Environmental Assessment discloses the direct, indirect, and cumulative environmental impacts that would result from the proposed action and alternatives. The document is organized into four parts:

- *Introduction:* The section includes information on the history of the project proposal, the purpose of and need for the project, and the agency's proposal for achieving that purpose and need. This section also details how the Forest Service informed the public of the proposal and how the public responded.
- Alternatives, Including the Proposed Action: This section provides a more detailed description of the agency's proposed action as well as any alternatives. These alternatives were developed based on significant issues raised by the public and other agencies. This discussion also includes possible mitigation measures. Finally, this section provides a summary table comparing the contents and the environmental consequences associated with each alternative.
- Existing Conditions: This section describes the existing conditions of the pronghorn migration corridor and livestock grazing operations in the corridor.
- Environmental Consequences: This section describes the environmental effects of implementing the proposed action and alternatives. Within each section, the affected environment is described first, followed by the effects of the No Action Alternative that provides a baseline for evaluation and comparison of the other alternatives that follow.
- Consultation and Coordination: This section provides a list of preparers and agencies consulted during the development of the environmental assessment.

Additional documentation, including more detailed analyses of project-area resources, may be found in the project planning record located at the Forest Supervisors Office in Jackson.

Background _____

The pronghorn that summer in Jackson Hole migrate annually from wintering areas in the Green River basin. Documented round trip migration distances from 175 to 330 miles make this the longest known terrestrial animal migration in the 48 contiguous states. The corridor has been used by pronghorn for at least 6000 years (Berger, et al. 2006). Typically, the pronghorn migrate through the corridor in April or May and again in October or November. These pronghorn are a part of the impressive panorama of free-ranging native Rocky Mountain mammals in northwest Wyoming. This landscape draws tourists from around the world and supports a robust regional economy.

Purpose and Need for Action_____

A significant portion of the full migration route is within the Bridger-Teton National Forest. Managing this migration corridor to facilitate continued successful movement will help

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ensure protection of this herd and its migration. The purpose of this proposal is to ensure that projects, activities, and facilities conducted by or authorized by the Forest Service within the corridor allow for continued successful pronghorn migration.

The Forest Service cannot by itself guarantee continued successful migration of this herd because there are numerous factors beyond Forest Service control such as activities on lands under other jurisdictions within the migration corridor. On January 30, 2007, Forest Supervisor Kniffy Hamilton, signed a "Pledge of Support" to work with others to help ensure protection of the migration route. This proposal supports that larger effort.

Proposed Action _____

The Forest Service proposes to designate a Pronghorn Migration Corridor as shown on the attached map and to facilitate continued successful migration in that corridor. To that management end, projects, activities, and infrastructure in the corridor would be designed, timed and/or located to allow continued successful migration of pronghorn through the corridor. Presently, activities within the Forest corridor are not compromising the annual migrations, so no changes to current activities are anticipated.

It is important to note that while the full length of the migration route includes lands under various jurisdictions including Bureau of Land Management, State, and private lands in Teton and Sublette Counties, this Forest Service proposal applies only to Forest Service System lands within that larger corridor. In addition, the proposal does not constrain activities on private land within the Forest boundary.

Decision Framework

Given the purpose and need and the analysis contained in this EA, the deciding official will review the proposed action and the alternatives and decide to amend the Forest Plan as described, to amend the Forest Plan with some adjustments, or not to amend the Forest Plan.

Public Involvement

The proposal was provided to the public and other agencies for comment in a Scoping Statement dated March 6, 2008. The proposal was listed in the Bridger-Teton Schedule of Proposed Actions on April 1, 2008. Comments were received from government entities such as the Bureau of Land Management, Grand Teton National Park, and the Wyoming Game and Fish Department; from livestock associations and permittees; from conservation organizations; and from many private citizens. Approximately 19,400 emails were received supporting the proposal. Livestock interests were concerned that the proposal could negatively affect their operations. Some conservation organizations wanted specific restrictions added to the amendment such as a decision to make oil and gas leasing unavailable in the corridor. Using the comments received from scoping, the interdisciplinary team developed issues to be addressed in this EA.

Issues

The Forest Service separated the issues into two groups: significant and non-significant issues. Significant issues were defined as those directly or indirectly caused by implementing the proposed action. Non-significant issues are identified as those: 1) outside the scope of the

proposed action; 2) already decided by law, regulation, Forest Plan, or other higher level decision; 3) irrelevant to the decision to be made; or 4) conjectural and not supported by scientific or factual evidence. The Council on Environmental Quality (CEQ) NEPA regulations require this delineation in Sec. 1501.7, "...identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (Sec. 1506.3)..." The full comment letters and a list of non-significant issues and the reasons for categorizing them as such are contained in the project record.

As for significant issues, the Forest Service identified 2 topics raised during scoping:

- 1. The effect of the proposed action on pronghorn migration through the corridor.
- 2. The effect of the proposed action on livestock grazing operations.

ALTERNATIVES, INCLUDING THE PROPOSED ACTION

This chapter describes and compares the alternatives considered. It includes a description of each alternative and a map of the proposed action. Some of the information used to compare the alternatives is based upon the design of the alternative and some of the information is based upon the effects of implementing each alternative.

Alternatives	

Alternative 1 - No Action

Under the No Action alternative, current management plans would continue to guide management of the area. There would be no Forest Plan Amendment.

Alternative 2 - Proposed Plan Amendment

Under this alternative, the Forest Service would manage the pronghorn migration corridor, encompassing approximately 47,000 acres as shown on the map, to facilitate continued successful migration of the pronghorn that summer in Jackson Hole and winter in the green River basin. To that management end, the proposed Forest Plan amendment would add a standard requiring that projects, activities, and infrastructure in the corridor be designed, timed and/or located to allow continued successful migration of pronghorn through the corridor. Therefore, this amendment would require that such a determination be made prior to Forest Service authorization of projects, activities, and infrastructure in the corridor.

Because the proposed amendment would not make site-specific decisions or authorizations, the analysis of effects in this EA cannot be site-specific or project-specific. However, this amendment would require site-specific analysis at the project level of the effects of specific activities and infrastructure on pronghorn migration. Based on that site-specific analysis, a determination that the activity or infrastructure would allow continued successful migration would have to be made for the activity or infrastructure to be authorized.

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Presently, activities within the Forest portion of the migration route are not compromising the annual migrations, so changes to current activities will not be required by this amendment.

It is important to note that, while the full length of the migration route includes lands under various jurisdictions including Bureau of Land Management, State, and private lands in Teton and Sublette Counties, this Forest Service proposal applies only to Forest Service System lands within that larger corridor. Furthermore, the proposal does not constrain activities on private property within the Forest boundary.

Bridger-Teton National Forest Pronghorn Migration Corridor Pronghorn Migration Corridor on BTNF Pronghorn Migration Corridor off Forest 47,000 Ac. on Bridger-Teton NF Big Piney

Figure 2. Pronghorn Migration Corridor

NOTE: The proposed Forest Plan Amendment only applies to Forest Service System lands.

Comparison of Alternatives

This table provides a summary of the differences between the alternatives.

Table 1. Summary Comparison of Alternatives.

	Alternative 1 – No Action	Alternative 2 – Proposed Plan Amendment
Alternative	No Amendment to the Forest Plan	Amendment designating corridor and requiring that activities/infrastructure allow continued successful pronghorn migration
Current Activities	Current activities continue	Current activities continue (because migration is currently successful)
Future Activities	Future activities authorized under current management plans	Future activities (recreation, grazing, vegetation treatment, etc.) authorized only if they allow continued successful migration
Private Land	Activities on private land are not constrained	Activities on private land are not constrained
	Summary of Effects Analyzed Below	
Pronghorn Migration	Possibility that future activities could inhibit migration	Activities authorized only if they allow continued successful migration
Livestock Grazing Current Activities	Current activities not affected	Current activities not affected (because migration is currently successful)
Livestock Grazing Future Activities] _Future activities not affected	Future activities somewhat limited must allow continued successful migration

EXISTING CONDITIONS

Existing conditions are described for the two significant issues identified by the Interdisciplinary Team based on responses to scoping.

1. Pronghorn Migration

Pronghorn antelope utilize sagebrush and grassland habitats in Wyoming. The pronghorn corridor contains spring, summer, and fall range for a limited number of pronghorn from the Sublette herd unit (#401), which is the most migratory pronghorn population in the United States. No winter range is present. The pronghorn corridor also provides a crucial migration route that links the Jackson Hole area summer range with winter range near the Pinedale Mesa, and additional ranges to the southeast. Specifically, these pronghorn utilize a route that runs along the west side of the Green River from the Forest boundary north to Bacon Ridge and Bacon Creek and continues into the Gros Ventre River drainage.

2. Livestock Grazing Operations

Current livestock grazing operations coexist with successful pronghorn migration in the corridor. The corridor crosses two active cattle allotments, the Upper Green River and the Upper Gros Ventre. It also crosses two forage reserves. Three other active allotments are adjacent to the corridor. The permitted period of use on the Upper Green River allotment is from June 18 to October 8, and on the Upper Gros allotment it is from June 16 to October 15. Pronghorn typically move through the corridor in April or May and again in October or November, so there is very little overlap of livestock grazing with pronghorn migration. Research on livestock grazing and pronghorn indicates that they are not incompatible (Yoakum, et al *in* Krausman 1996). While there are numerous range management fences in the corridor, they do not preclude successful pronghorn migration. Successful grazing operations help to maintain open space on private land; subdivision development creates numerous impediments to migrating wildlife (Holz 2008, personal communication).

ENVIRONMENTAL CONSEQUENCES

For the two significant issues, this section summarizes the potential effects of the alternatives. It also presents the basis for the comparison of alternatives summarized in the table above.

1. The effect of the proposed action on pronghorn migration through the corridor.

Direct and Indirect Effects Alternative 1 – No Action

Under Alternative 1, pronghorn will continue to successfully use the corridor in its present condition. The future beneficial impacts that would result from implementation of the Forest Plan Amendment would not be realized. Future projects within the corridor would not be required to facilitate continued successful migration. This could have long-term negative impacts on pronghorn if projects were to block, alter, or highly delay pronghorn migration through the corridor on Forest.

Alternative 2 - Proposed Plan Amendment

Under Alternative 2, pronghorn will continue to successfully use the corridor in its present condition. The future beneficial impacts that would result from implementation of the Forest Plan Amendment would be realized. Future projects within the corridor would be required to facilitate continued successful migration. This would have long-term positive impacts on pronghorn by assuring successful future pronghorn migration on Forest.

Cumulative Effects

Projects that could cumulatively impact pronghorn within the migration corridor include range improvements and vegetation treatments; in particular, existing and future range improvement projects and vegetation treatments in pronghorn habitat within the migration corridor. Potential future and existing projects on Forest include:

- Existing range improvement structures (i.e. fences)
- Proposed Gros Ventre allotment range improvements
- Proposed Bacon Ridge vegetation treatments
- Lower Gros Ventre habitat enhancement project
- Proposed Gros Ventre mineral exploration (precious metals)

Keep in mind that existing range improvement structures and management practices within the corridor currently do not inhibit successful pronghorn migration on Forest.

Alternative 1 - No Action

Current and future range improvement structures, vegetation treatment and other projects within the corridor would not be required to facilitate continued successful migration. This could have short-term and long-term negative cumulative impacts to pronghorn. Short-term cumulative impacts could include temporary displacement or delaying migration while vegetation treatments are taking place. Long-term cumulative impacts could include migration being blocked, altered, or highly delayed by range improvement structures, vegetation treatment and other projects. Also, vegetation treatments could improve pronghorn habitat within the corridor, by improving habitat condition and increasing "open space" that pronghorn prefer.

Alternative 2 - Proposed Plan Amendment

Current and future range improvement structures, vegetation treatment and other projects within the corridor would be required to facilitate continued successful migration. As a result, any potential negative cumulative impacts from future projects in the corridor would be reduced or removed with implementation of the Forest Plan Amendment. Also, vegetation treatments could improve pronghorn habitat within the corridor, by improving habitat condition and increasing "open space" that pronghorn prefer.

This analysis of effects on pronghorn migration is based on Cory Mlodik's specialist report that is contained in the project record.

2. The effect of the proposed action on livestock grazing operations.

Direct and Indirect Effects Alternative 1 – No Action

Under Alternative 1, grazing operations would continue to be managed under law, regulation and policy and guided by specific Allotment Management Plans and Annual Operating Instructions. Proposed changes to grazing operations would be evaluated in terms of law, regulation, and policy. There would be no Forest Plan Amendment requiring that activities and infrastructure allow continued successful pronghorn migration.

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Alternative 2 – Proposed Plan Amendment

Under Alternative 2, grazing operations would continue to be managed under law, regulation and policy and guided by specific Allotment Management Plans and Annual Operating Instructions. Because current grazing operations, including structures, on/off dates and rotations, coexist with successful pronghorn migration, this proposed amendment will not require changes to current grazing operations.

With the creation of this Forest Plan Amendment, future activities and infrastructure, including those associated with livestock grazing, would only be authorized if they were determined to allow continued successful pronghorn migration. Compared to Alternative 1, this may limit the range of future activities and infrastructure that could be authorized. However, if future activities and infrastructure are designed, timed or located in a way that allows continued successful migration, they would be acceptable. The most typical range structural improvements are fences, and these can be designed to allow the movement of pronghorn.

Cumulative Effects

Existing and reasonably foreseeable activities that could cumulatively impact grazing operations within the migration corridor include current and future range improvement structures, establishment of the forage reserves in 2007, and vegetation treatments. Specific potential future and existing projects on Forest include:

- Existing Range Improvements (i.e. fences)
- Gros Ventre Allotment Range Improvements

Alternative 1 - No Action

Considering existing conditions and reasonably foreseeable future activities, it is expected that, without the proposed amendment, grazing operations in the corridor will remain stable. Grazing operations will continue to be managed under federal law, regulation, and Forest Service policy and be guided by specific Allotment Management Plans and Annual Operating Instructions.

Alternative 2 – Proposed Plan Amendment

Considering existing conditions and reasonably foreseeable future activities, it is expected that, with the proposed amendment, grazing operations in the corridor will remain stable. Because current grazing operations coexist with successful pronghorn migration, the amendment will not affect current operations. Therefore the proposed amendment contributes very little to any cumulative effect on current operations. Grazing operations will continue to be managed under federal law, regulation, and Forest Service policy and be guided by specific Allotment Management Plans and Annual Operating Instructions.

As described, the amendment has the potential to limit the range of possible future operations, but that effect is also expected to be small given the lack of overlap between migration and livestock grazing and the opportunity to design, locate or time activities and

infrastructure to allow continued pronghorn migration. The proposed amendment therefore also contributes very little to any cumulative effect on future operations.

CONSULTATION AND COORDINATION

The Forest Service consulted the following during the development of this environmental assessment:

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