



# Bison and Elk Management Plan and EIS



PLANNING UPDATE NUMBER SEVEN  
Summer 2005



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# Public Meetings

## Draft Management Plan and EIS is Ready for Review

After four years of work, the U.S. Fish and Wildlife Service and National Park Service are excited to announce that the Draft Management Plan and Environmental Impact Statement (Plan/EIS) for the Jackson bison and elk herds is complete and ready for review.

The draft Plan/EIS outlines the management goals and strategies for managing the elk and bison herds while preserving and restoring habitat for the benefit of many other wildlife species. The document evaluates and compares

six alternatives that address elk and bison numbers, habitat restoration, forage production, supplemental feeding and disease issues. This planning update provides an overview of the contents of the draft Plan/EIS.

### Schedule of public meetings

#### ***Bozeman, Montana***

**August 29, 2005**

**Open House 2:00-5:00 pm**

**Public Hearing 6:30-9:00 pm**

**Lindley Center**

**1102 E Curtiss**

#### ***Jackson, Wyoming***

**August 30, 2005**

**Open House 2:00-5:00 pm**

**Public Hearing 6:30-9:00 pm**

**Virginian Lodge**

**750 W Broadway**

#### ***Riverton, Wyoming***

**August 31, 2005**

**Open House 2:00-5:00 pm**

**Public Hearing 6:30-9:00 pm**

**Holiday Inn/Convention Center**

**900 E Sunset**

## Public Involvement and Meeting Format

Public involvement has been an integral part of the planning process with 21 prescoping, scoping and alternative development meetings to identify key issues of concern.

Once again, the agencies invite the public to engage in the planning process and comment on the draft Plan/EIS. The agencies will mail copies of the document to agencies, organizations and individuals who have been actively involved in the planning process. Others can request a copy from the agencies or view the document online. Public meetings in August will provide

an additional opportunity for the public to review the draft and share their comments with the agencies.

An afternoon open house and an evening hearing will be held in Jackson, Wyoming, Riverton, Wyoming, and Bozeman, Montana. The open houses, held from 2:00 pm to 5:00 pm, will give the public an opportunity to informally learn and ask questions about the plan. No presentations will be given.

Public hearings, held from 6:30 to 9:00 pm, will allow individuals to present oral or written comments. Individuals interested in expressing their views must sign up to speak for not more than 3 minutes. Speaking time may not be donated to other individuals. If 3 minutes are not adequate for a member of the public to express his/her views, he/she may submit additional written comments. Due to the large number of people who may wish to give oral comments a strict schedule must be maintained.

Conserving native grazing habitat is important for maintaining healthy elk populations. *Photograph by J. Hogan. Cover Photograph by NPS.*



# Management Alternatives

## Goals, Objectives and Strategies

The draft Plan/EIS outlines the goals, objectives and strategies for management of the Jackson elk and bison herds. A goal is a broad statement of desired future conditions, while an objective describes what the agencies want to achieve on the refuge and the park. Strategies are specific actions, tools or techniques used to meet an objective.

### Goals

#### Habitat Conservation

- Native grazing habitat conservation
- Conservation of woody vegetation
- Restoration of native habitats

#### Sustainable Populations

- Healthy, resilient populations
- Natural population levels

#### Numbers of Elk and Bison

- Contribute to herd objectives
- Natural population densities
- Natural levels of variation
- Natural population fluctuations

#### Disease Management

- Address risk of brucellosis transmission
- Address risk of non-endemic diseases

## A Range of Alternatives

Six alternatives are outlined and analyzed within the draft Plan/EIS. The alternatives represent a wide range of management strategies. The draft Plan/EIS details how the elk and bison herds will be managed and how their habitat will be conserved and restored. All alternatives are based on the assumption that the Jackson elk herd objective, as determined by the Wyoming Game and Fish Department (WGFD), remains 11,029.

### Alternative 1 - No Action

Retains current management regime. Farming and flood irrigation would continue on the refuge. Supplemental feeding for elk and bison would occur in most winters. Woody vegetation would continue to decline. Bison hunting would not occur on the refuge or the park, but elk hunting/reduction would continue.

### Alternative 2 - Minimal Management of Habitat & Populations with Support for Migrations

Emphasizes natural population regulation, natural ecosystem restoration, and reduced disease risks. Elk and bison would rely on native winter range and would not be hunted on the refuge or the park.

### Alternative 3 - Restore Habitat, Support Migration & Phase Back Supplemental Feeding

Emphasizes more use of native winter range and lower elk numbers on the refuge and the park, allowing habitat to improve and disease risks to be reduced as a result of less concentration of animals. Hunting on the refuge would maintain bison numbers at the herd number when the Record of Decision is signed. Elk hunting/reduction would occur on the refuge and the park, when needed.

### Alternative 4 - Restore Habitat, Improve Forage & Phase Back Supplemental Feeding

Emphasizes fewer elk and bison on the refuge and park combined with increased use of native winter range in average and below average winters. Increased sprinkler irrigation would improve forage quality, and fencing would protect woody vegetation on the refuge. Bison hunting would be allowed on the refuge. Elk hunting/reduction would occur on the refuge and park, when needed.

### Alternative 5 - Restore Habitat, Improve Forage & Continue Supplemental Feeding

Emphasizes fewer bison and current numbers of elk on the refuge and park. Increased sprinkler irrigation and almost yearly supplemental feeding on the refuge would occur. Bison numbers would be reduced through hunting. Elk hunting/reduction would occur on the refuge and the park.

### Alternative 6 - Restore Habitat, Adaptively Manage Populations & Phase Out Supplemental Feeding

Emphasizes lower elk and bison numbers and transition to native winter range. Sprinkler and flood irrigation would improve forage production on cultivated fields. Lower concentrations of animals would reduce disease risks. Fencing would allow woody habitat to recover. Bison and elk hunting would occur on the refuge and elk reduction would occur on the park, when needed.

## Proposed Action

After careful consideration of scientific opinions and stakeholder views, Alternative 4 was identified as the proposed action because it would restore habitat, improve forage, and transition elk and bison to increased use of native winter range. This alternative strives to balance the significant issues, as well as other agency and stakeholder perspectives with the purposes, missions, and management policies of the U.S. Fish and Wildlife Service and the National Park Service.

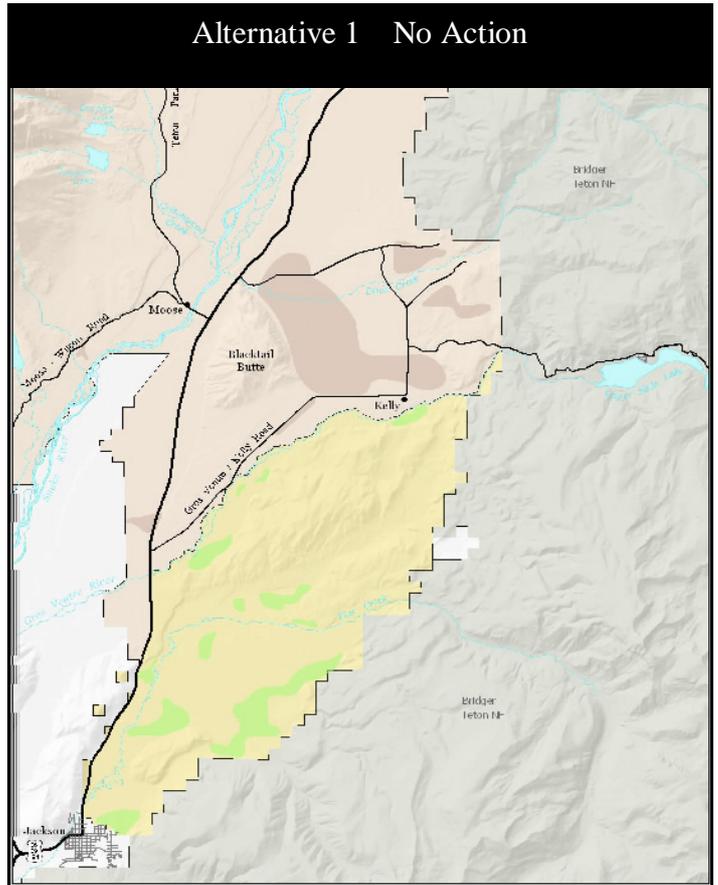
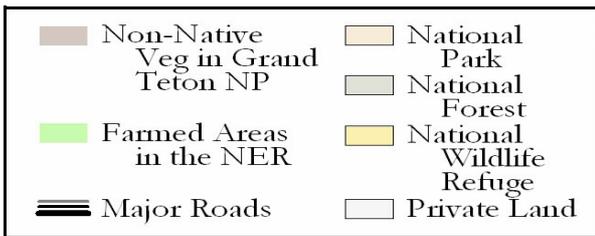


Autumn colors in Grand Teton National Park contribute to the spectacular vistas that visitors come from all over the world to see. *Photograph by K. Painter.*

# Alternatives 1 and 2

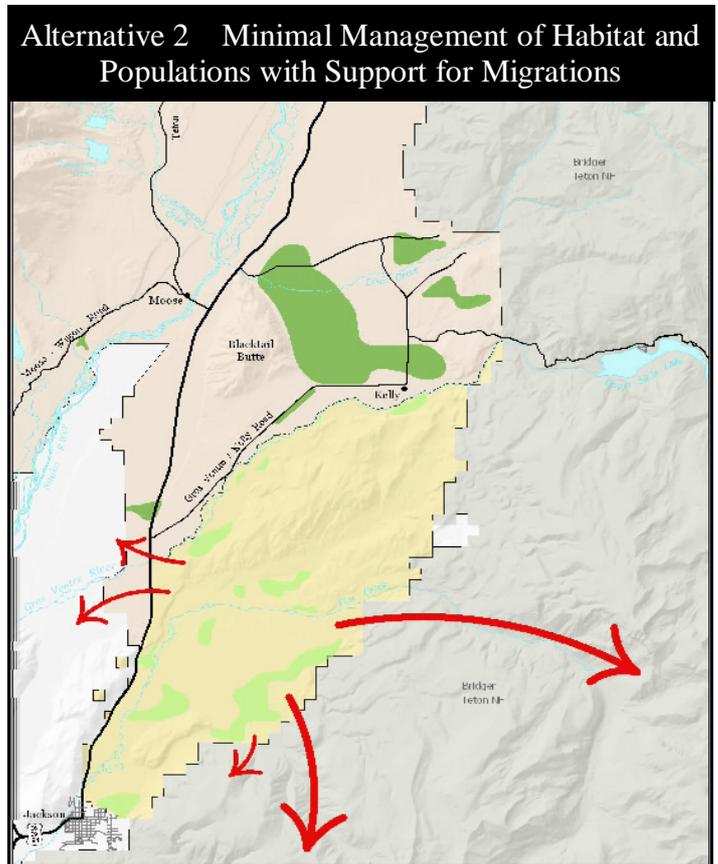
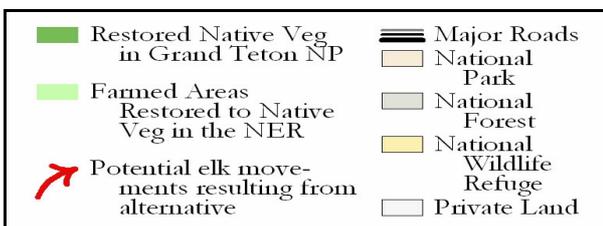
## Impacts of Alternative 1

The No Action Alternative would continue to maintain large numbers of elk and bison on the refuge and the park by providing supplemental feed (alfalfa pellets) nearly every winter. Bison numbers would grow to some undetermined number above 1,000 animals. Willow, aspen, and cottonwood communities on the refuge would continue to deteriorate and nonnative plant communities in agricultural lands on the park would not be restored to native vegetation. The risk of a non-endemic disease negatively impacting the elk and bison herds would remain high.



## Impacts of Alternative 2

Elk and bison numbers would fluctuate from year to year depending on predation, disease, weather factors, and numbers of animals harvested on surrounding lands. After severe winters, numbers of elk and bison would be lower. Some woody plant communities may improve on the refuge, but aspen stands would continue to deteriorate. Areas with non-native plant communities in the park and the refuge would be restored to native vegetation. Compared to Alternative 1, bison and elk would distribute themselves more widely. Less concentration of animals would greatly reduce non-endemic disease risks. Some elk could learn to migrate to the Green River Basin.



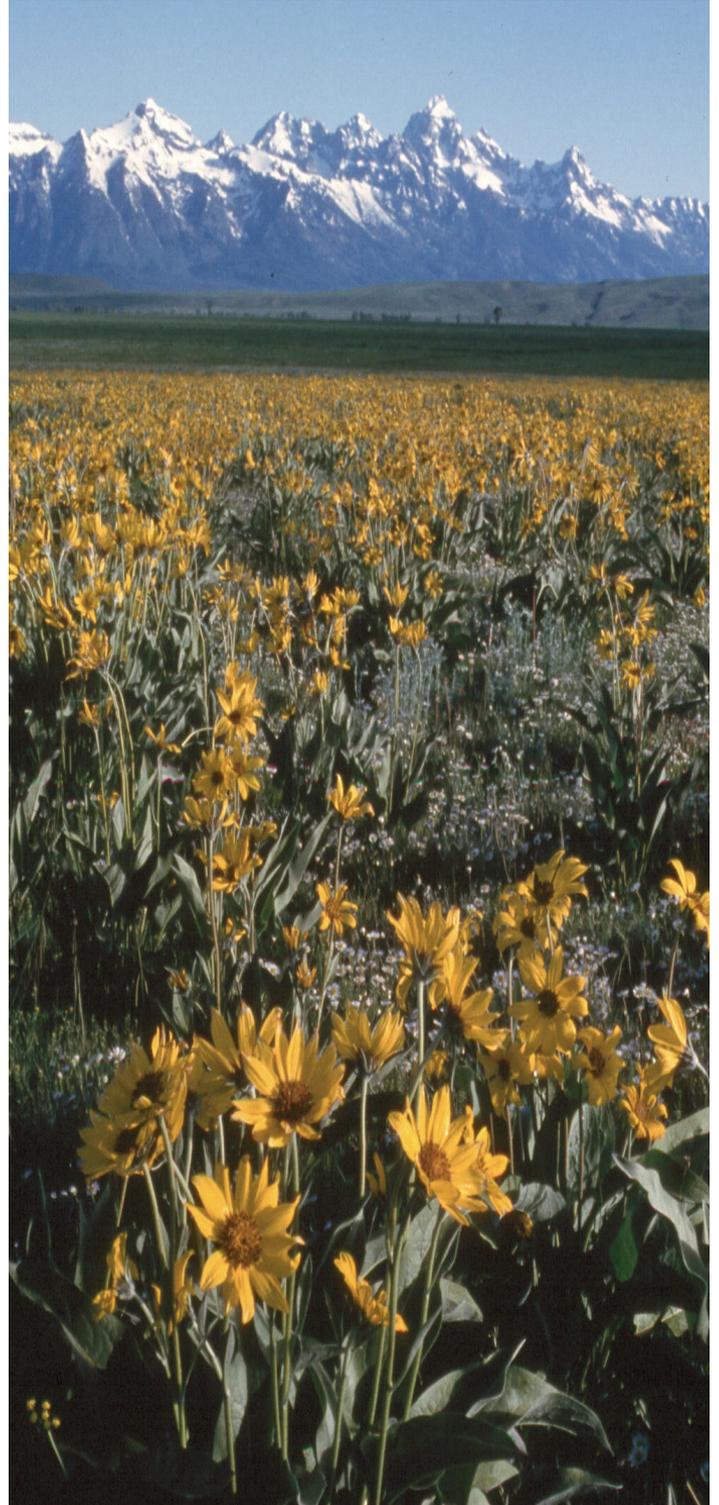
# Alternatives 1 and 2

## Elements of Alternative 1

- A maximum of 7,500 elk wintering on the refuge
- Approximately 2,500 elk summering in the park
- Supplemental feeding with alfalfa pellets in nearly all winters (9 of 10 years)
- An elk hunt on the refuge and an elk herd reduction program on the park
- No bison hunting on the refuge or the park. Bison herd continues to grow above 1,000 animals.
- Flood irrigation and cultivation of approximately 2,400 acres on the refuge
- No brucellosis vaccination on the refuge or the park

## Elements of Alternative 2

- No population targets for elk and bison on the refuge and the park
- No hunt/reduction for elk or bison on the refuge and the park
- Transition elk and bison to native winter range within 10-15 years.
- Refuge and park support for efforts of others to promote elk migration to the Green River Basin
- Irrigation on the refuge phased out and 2,400 acres of cultivated fields restored to native vegetation
- Approximately 4,500 acres of agricultural lands on the park restored to native vegetation
- No brucellosis vaccination on the refuge or the park

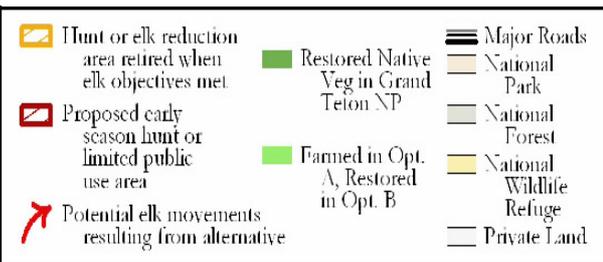


Acres of balsam root, a native wildflower, grow on the refuge every spring. *Photograph by K. Painter.*

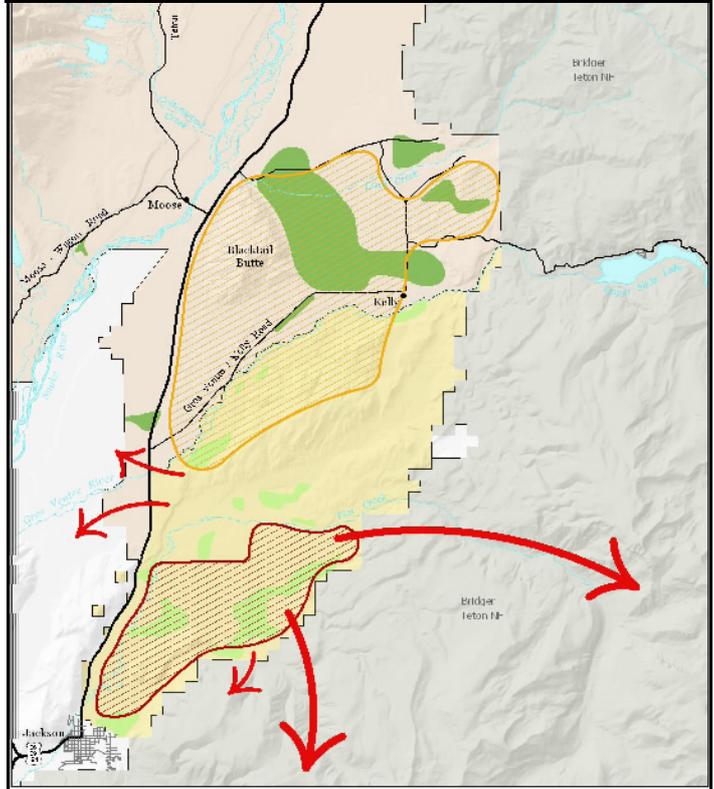
# Alternatives 3 and 4

## Impacts of Alternative 3

Elk and bison would rely on native range in all but severe winters which would result in greater distribution of elk and bison and decreased non-endemic disease risks. Some elk may migrate to the Green River Basin. Hunting of bison on the refuge and elk hunting/reduction on the refuge and the park would increase recreational opportunities while preventing bison and elk numbers from growing. Willow communities on the refuge may recover, but aspen habitat would likely continue to deteriorate. Non-native plant communities in agricultural lands on the park would be restored to native vegetation.

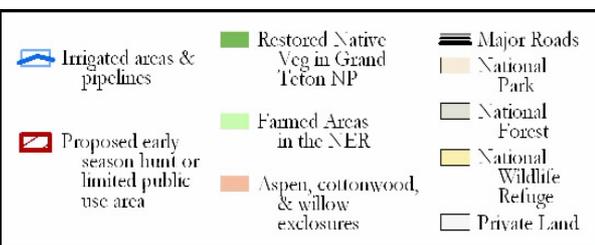


## Alternative 3 Restore Habitat, Support Migration, and Phase Back Supplemental Feeding

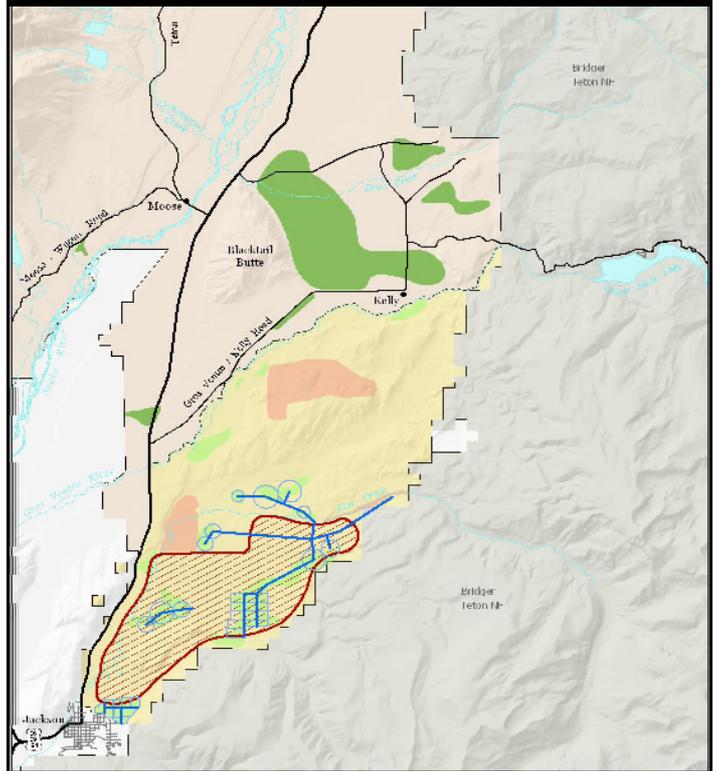


## Impacts of Alternative 4 (Proposed Action)

Elk and bison would rely on native range in average and below average winters which would increase elk and bison distribution in approximately half of all winters. Supplemental feeding would occur in above average winters (estimated 4-5 of 10 winters). Sprinkler irrigation on the refuge would improve the quality of forage on cultivated fields, while willow, aspen and cottonwood communities on the refuge would recover due to fencing. Bison hunting on the refuge and elk hunting/reduction on the refuge and the park would increase recreational opportunities while controlling bison and elk numbers. Non-native plant communities on the park would be restored to native vegetation.



## Alternative 4 Restore Habitat, Improve Forage, and Phase Back Supplemental Feeding



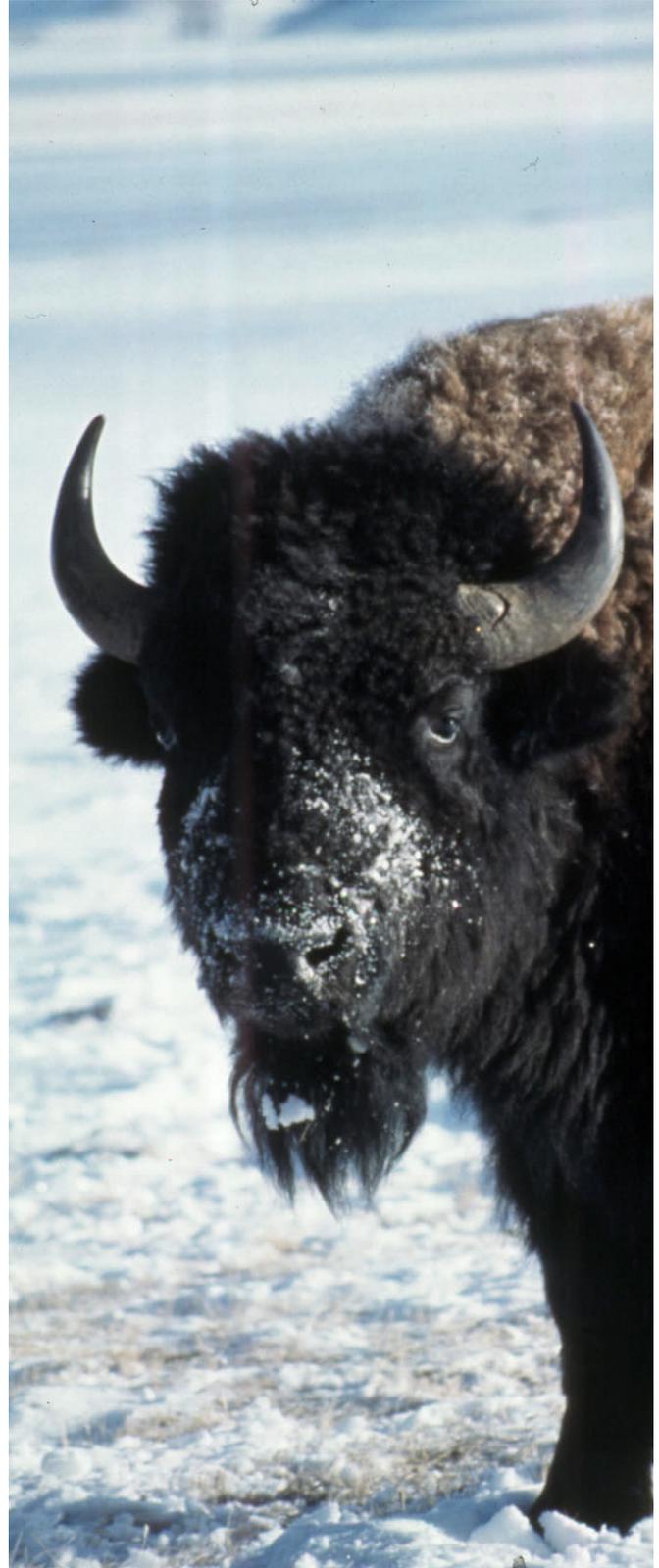
## Alternatives 3 and 4

### Elements of Alternative 3

- Approximately 1,000-2,000 elk wintering on the refuge and 500-1,000 elk summering on the park.
- The bison herd numbers 800-1,000.
- A bison hunt for the public and a limited bison herd reduction for tribal members on the refuge. Elk hunting/reduction on the refuge and the park, when needed.
- Within 15 years transition to native winter range in all but severe winters (estimated 2 of 10 years), when supplemental feeding would occur.
- In Option A, irrigation and farming on the refuge similar to Alternative 1. In Option B, irrigation and farming phased out and 2,400 acres of cultivated fields restored to native vegetation.
- Approximately 4,500 acres of agricultural lands on the park restored to native vegetation.
- Refuge and park support for efforts of others to promote elk migration to the Green River Basin.

### Elements of Alternative 4

- About 4,000-5,000 elk wintering on the refuge and 1,300-1,600 elk summering on the park.
- The bison herd numbers 450-500.
- Elk and bison hunt/reduction same as Alternative 3.
- Within 15 years transition to native winter range in average and below average winters. Supplemental feeding would occur in above average winters only (estimated 5 of 10 years).
- Sprinkler irrigate 1,100 acres and flood irrigate 500 acres on the refuge, while continuing to farm 2,400 acres.
- Approximately 4,500 acres of agricultural lands on the park restored to native vegetation.
- WGFD vaccinates elk for brucellosis with Strain 19 and bison would be vaccinated when a vaccine is found with 50% or greater efficacy.



Most of the Jackson bison herd spend winters on the National Elk Refuge. *Photograph by K. Painter.*

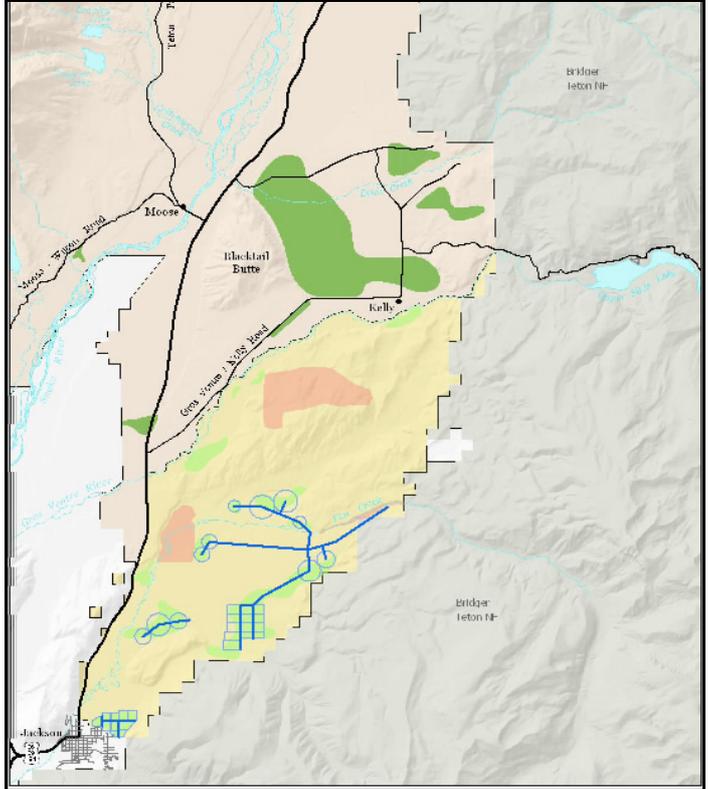
# Alternatives 5 and 6

## Impacts of Alternative 5

Providing supplemental feed in most winters would maintain high numbers of elk on the refuge and the park. High concentrations of animals would maintain high risks of non-endemic disease, which could negatively impact the elk and bison herds. Sprinkler irrigation on the refuge would improve the quality of forage on cultivated fields, while willow, aspen and cottonwood communities on the refuge would recover due to fencing. Bison hunting on the refuge and elk hunting/reduction on the refuge and the park would increase recreational opportunities while controlling bison and elk numbers. Non-native plant communities in agricultural lands on the park would be restored to native vegetation.

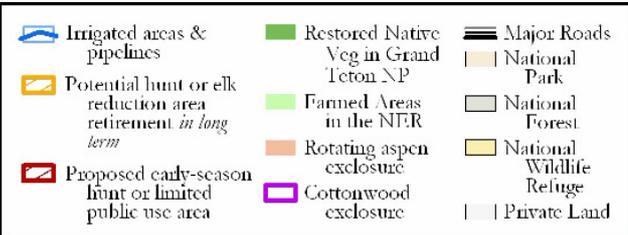


## Alternative 5 Restore Habitat, Improve Forage, and Continue Supplemental Feeding

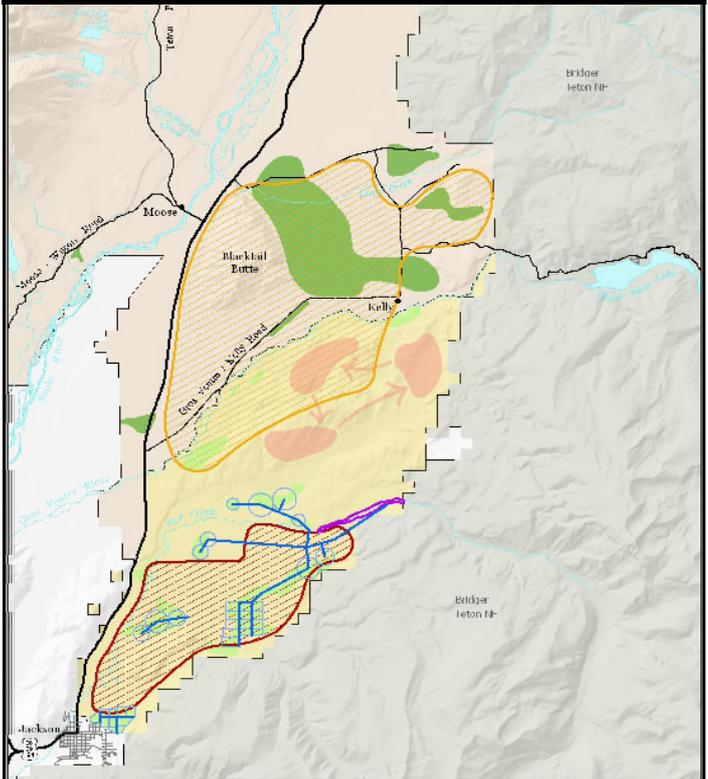


## Impacts of Alternative 6

Within 5 years, transition elk and bison to native range in all winters increasing distribution of elk and bison, which would reduce the risks of non-endemic disease negatively impacting the elk and bison herds. Sprinkler irrigation on the refuge would improve the quality of forage on cultivated fields, while willow, aspen and cottonwood communities on the refuge would recover due to lower numbers of animals and fencing. Bison hunting on the refuge and elk hunting/reduction on the refuge and the park would increase recreational opportunities while controlling bison and elk numbers. Non-native plant communities in agricultural lands on the park would be restored to native vegetation.



## Alternative 6 Restore Habitat, Adaptively Manage Populations, and Phase out Supplemental Feeding



## Alternatives 5 and 6

### Elements of Alternative 5

- A maximum of 7,500 elk wintering on the refuge and less than 2,500 elk summering on the park.
- Bison herd averages 400 post hunt.
- A bison hunt for the general public and elk hunting/reduction on the refuge and the park.
- Provide supplemental feed in most winters.
- Sprinkler irrigate 1,100 acres and flood irrigate 500 acres on the refuge, while continuing to farm 2,400 acres.
- Approximately 4,500 acres of agricultural lands on the park restored to native vegetation.
- WGFD would vaccinate elk for brucellosis with Strain 19 and bison would be vaccinated with RB 51.

### Elements of Alternative 6

- About 2,400-3,200 elk wintering on the refuge and an estimated 1,200-1,600 elk summering on the park.
- Bison herd averages 400 animals post hunt.
- A bison hunt for the public and a limited bison herd reduction for tribal members on the refuge. Elk hunting/reduction on the refuge and the park, when needed.
- Within 5 years, transition elk and bison to native winter range.
- Sprinkler irrigate 1,100 acres and flood irrigate 500 acres on the refuge, while continuing to farm 2,400 acres.
- Approximately 4,500 acres of agricultural lands on the park restored to native vegetation.



The park and the refuge provide habitat for many species of animals.  
*Photographs by J. Foott, D. Stratton, F. Camenzind, and J. Hogan.*

# Summary of Alternatives

| <b>GOAL #1 HABITAT CONSERVATION</b>  |  |   |  |  |  |  |
|--|--|---|--|--|--|--|
|  | <b>Alternative 1<br/>No Action</b>                             | <b>Alternative 2</b>  | <b>Alternative 3</b>   | <b>Alternative 4<br/>Proposed Action</b>                               | <b>Alternative 5</b>                                   | <b>Alternative 6</b>                                   |
| <b>Grazing Habitat on NER (farming)</b>  | 800-2,000 ac./yr flood irrigated; 60 acres sprinkler irrigated | no irrigation or farming after fields are restored to native vegetation | a. same as Alt. 1<br>b. irrigation and farming phased out after 15 years | up to 1,600 acres irrigated, including 1,100 acres sprinkler irrigated | same as Alt. 4   | same as Alt. 4   |
| <b>Restore Woody Vegetation (NER)</b>  | experimental work: 2 small exclosures                          | no fencing  | no fencing   | 100-1,000 acre exclosures (1,600 acre total)                           | same as Alt. 4   | 600 acres rotating + 100 acres stationary              |
| <b>GTNP</b>  | minimal restoration of native vegetation                       | native vegetation restored on 4,500 acres of ag. lands                  | native vegetation restored on 4,500 acres of ag. lands                   | native vegetation restored on 4,500 acres of ag. lands                 | native vegetation restored on 4,500 acres of ag. lands | native vegetation restored on 4,500 acres of ag. lands |
| <b>GOAL #2 SUSTAINABLE POPULATIONS</b>   |  |   |  |  |  |  |
| <b>GOAL #3-JACKSON ELK NUMBERS TO MEET STATE HERD OBJECTIVE -11,029 ELK</b>                  |  |   |  |  |  |  |
| <b>Elk on NER</b>  | maximum of 7,500   | no population target  | 1,000-2,000 (phased in)  | 4,000-5,000 (phased in)  | maximum of 7,500                                       | maximum of 2,400-3,200                                 |
| <b>Elk on GTNP</b>   | one third of the NER numbers                                   | no population target  | 500-1,000  | 1,300-1,600  | less than 2,500  | no target-estimated 1,200-1,600                        |
| <b>Bison on NER &amp; GTNP</b>   | 800-1,000+; uncontrolled growth                                | no population target  | 800-1,000  | 450-500  | 400  | average of 400   |
| <b>Elk Hunt (NER; GTNP)</b>  | yes  | no  | yes  | yes  | yes  | yes  |
| <b>Bison Hunt (NER)</b>  | no   | no  | yes  | yes  | yes  | yes  |
| <b>Winter Feeding (NER)</b>  | feed 9 of 10 years average 70 days/year                        | transition to native winter range within 10-15 years                    | emergency only (e.g., 2 of 10 years); phased back in 15 years            | contingency (e.g., 4-5 of 10 years); 15-year phase back                | same as Alt. 1 (9 of 10 yrs)                           | transition to native winter range within 5 years       |
| <b>Migration</b>   | none   | support efforts of others   | support efforts of others  | limited increased distribution; none in feeding years                  | none   | natural migration could occur                          |
| <b>GOAL #4 DISEASE MANAGEMENT</b>  |  |   |  |  |  |  |
| <b>Use of Brucellosis Vaccines (NER)</b>   | temporary vaccination with Strain 19 would end                 | no vaccination  | vaccinate when effective vaccine found                                   | WGFD-use Strain 19 on elk; bison-when effective vaccine found          | allow WGFD to use RB51 on bison & Strain 19 on elk     | vaccines not used until found effective (oral for elk) |
| <b>Transition to Winter Range Use to Reduce Brucellosis Prevalence/Potential CWD Impacts</b> | no action  | transition to winter range use over 15 years                            | transition to winter range use in most years                             | transition to winter range use in some years                           | no action  | transition to winter range use within 5 years          |

# General Information

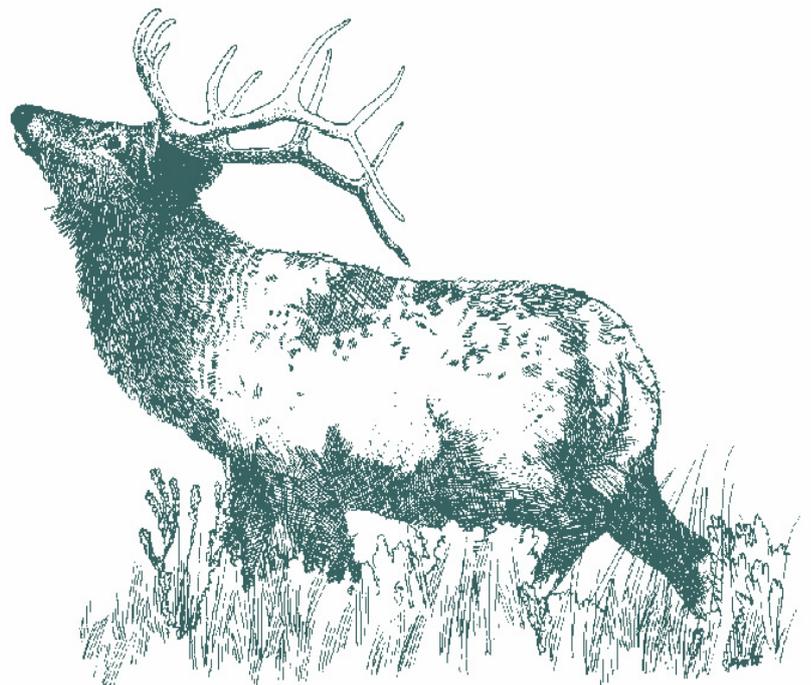
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| <u>Lead Agencies:</u>            | U.S. Fish and Wildlife Service (National Elk Refuge)<br>National Park Service (Grand Teton National Park)   |
| <u>Cooperators and Partners:</u> | U.S. Forest Service (Bridger-Teton National Forest)<br>Animal and Plant Health Inspection Service<br>Bureau of Land Management<br>Wyoming Game and Fish Department  |
| <u>Final Product:</u>            | A Bison and Elk Management Plan for the National Elk Refuge (NER) and Grand Teton National Park (GTNP)  |
| <u>NEPA Compliance</u>           | Environmental Impact Statement (EIS)  |
| <u>Decision Area:</u>            | Decisions resulting from the planning process will be limited to management activities on the NER and GTNP.   |
| <u>Analysis Area:</u>            | Potential effects of management alternatives on biological resources are being analyzed primarily within the ranges of the Jackson elk and bison herds (which include the NER, GTNP, southern Yellowstone National Park, and the Buffalo and Jackson Ranger districts of Bridger-Teton National Forest), but the analysis also covers potential effects on other parts of western Wyoming. Potential effects of management alternatives on socio-economic factors are being analyzed at city, county, and state levels. |

## History of Planning Effort

The *Jackson Bison Herd Long-Term Management Plan and Environmental Assessment* was developed during the mid 1990s. This document was the result of a series of planning efforts begun in the 1980s to assess and establish actions for 1) herd size, 2) herd reduction, 3) winter distribution, and 4) disease management. The plan was approved in 1997 but a lawsuit prevented implementation of most of the federal management actions outlined in the plan. The court ruled that destruction of bison on NER and GTNP for population control purposes could not be carried out until the effects of the NER's winter feeding on bison are analyzed in additional National Environmental Policy Act (NEPA) compliance requirements.

Since no plan for managing elk on the NER and GTNP has ever been prepared, it was determined that a combined bison and elk plan for the federal areas should be undertaken.

This process was recommended by NER and GTNP and directed by the Department of Interior (DOI) Assistant Secretary for Fish and Wildlife and Parks in 1999. The DOI committed to this process in the settlement deliberations for the 1998 lawsuit.



# How to Comment

## Comments Welcome

We encourage you to be involved in the planning process and to take the time to review the document and attend one of the public meetings.

The deadline for the comment submission is September 30, 2005. As you are reviewing the document, please keep in mind that comments on the Draft Plan/EIS should be specific and should address the adequacy of the plan, the impact statement, and the merits of the alternatives discussed.

In the Final Plan/EIS, the agencies will respond to all substantive comments. Comments are considered substantive if they:

- Question, with reasonable basis, accuracy of information in the document.

- Question, with reasonable basis, adequacy of the environmental analysis.
- Present reasonable alternatives other than those presented in the Plan/EIS.
- Cause changes/revisions to the Plan/EIS.
- Provide additional information relevant to the analysis.

At the close of the comment period, the agencies will analyze the comments. New information relevant to the analysis and other substantive comments will be used to revise the draft document and begin preparation of the final Plan/EIS. The agencies anticipate publishing the final plan and environmental impact statement in the summer of 2006.



Yellow warblers and other neotropical migratory birds rely on healthy woody vegetation for nesting and foraging. USFWS Photograph.

Please direct comments on the draft Plan/EIS to:

**Bison and Elk MP/EIS**  
**Laurie Shannon, Project Manager**  
**National Elk Refuge**  
**PO Box 510**  
**Jackson, WY 83001**  
**Telephone 303-236-4317 (Denver)**  
**Telephone 307-733-9212 x238 or 251 (NER)**  
**FAX 307-733 9729**  
**Email: [bison/elk\\_planning@fws.gov](mailto:bison/elk_planning@fws.gov)**  
**Website <http://bisonandelkplan.fws.gov>**

## Estimated Timeline for Actions and Products

Public Involvement and Scoping (completed)  
Alternative Development and Analysis (completed)  
**Draft Plan/EIS Available to the Public**  
**Comments Due on Draft Plan/EIS**  
Final Plan/EIS available to the public  
“Record of Decision” published in *Federal Register*

February - August, 2001  
November 2001 - May 2005  
**July 2005**  
**September 30, 2005**  
Summer 2006  
Late Fall 2006

**Bison and Elk Planning Team**  
**P. O. Box 510**  
**Jackson, WY 83001**