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# **Environmental Assessment and Finding of No Significant Impact**

**Bessey Travel Management Review Project**

Bessey Ranger District, Nebraska National Forests & Grasslands

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# CHAPTER 1 - PURPOSE OF AND NEED FOR ACTION

## Introduction

In compliance with the National Environmental Policy Act, the Bessey Ranger District has prepared this document to disclose the absence or presence of any environmental consequences that may result from implementing our proposed action, implementing no action, or from implementing a third alternative action. In addition, this document provides evidence gathered from multiple environmental analyses to determine whether to prepare an environmental impact statement (EIS) or a finding of no significant impact (FONSI).

This Environmental Assessment (EA) references the *Final Environmental Impact Statement for Travel Management on the Nebraska National Forest, Buffalo Gap National Grassland, Oglala National Grassland and Samuel R. McKelvie National Forest (Administered by the Nebraska National Forest)*, hereafter called the NNF&G Travel Management Plan. This EA also references the *Land and Resource Management Plan 2001 Revision Nebraska National Forest and Associated Units (LRMP)*.

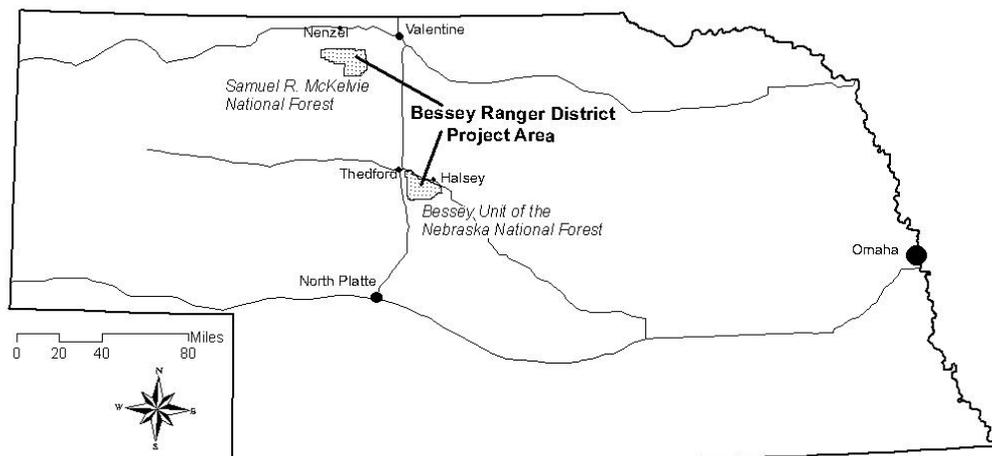
## Location and Existing Condition

The Bessey Travel Management Review Project area is limited to select user-created routes within the Samuel R. McKelvie National Forest and the Bessey Unit of the Nebraska National Forest. Both units are administered by the Bessey Ranger District of the Nebraska National Forests and Grasslands.

The Samuel R. McKelvie National Forest is located approximately 22 miles southwest of Valentine, Nebraska. Within the Samuel R. McKelvie National Forest, motorized travel is currently allowed along 90.32 miles.

The Bessey Unit of the Nebraska National Forest is located approximately 2 miles southwest of Halsey, Nebraska and 18 miles southeast of Thedford, Nebraska. Motorized travel is currently allowed along 121.6 miles.

**Figure 1. Project Area Vicinity Map:** Location of Project Area within the state of Nebraska.



No new road construction is proposed as part of this project. The routes proposed in the Bessey Travel Management Review Project are existing routes, having been created by users prior to implementation of the NNF&G Travel Management Plan in 2010. These routes are primarily maintenance level 2 roads, having high clearance with native sand surfaces. These routes have been created by motor vehicle use as vehicles cut through native grass cover, exposing the sand below along two parallel trails, each a wheel-width across and a wheel-base apart.

## **Purpose and Need**

Since the implementation of the NNF&G Travel Management Plan in 2010, the Bessey Ranger District has received numerous comments from other agencies and the public exhibiting a need for additional motorized access to several areas of the forest for hunting, fishing, general recreation and other uses. In addition, implementation of the NNF&G Travel Management Plan has limited motorized travel to only those routes designated by the current Motor Vehicle Use Map, thereby concentrating effects of motorized travel on those roads.

This project would address access needs and potentially reduce effects of concentrated travel by allowing motorized use on certain existing user-created routes in areas of the Samuel R. McKelvie National Forest and the Bessey Division of the Nebraska National Forest.

## **Decision Framework**

Based on the analyses and environmental impacts disclosed in this Environmental Assessment, the responsible official will decide whether to implement the proposed action, implement no action, or to implement a third alternative action. Any decisions will adhere to the necessary design features and monitoring listed in Tables 3 and 4.

## CHAPTER 2 - RESULTS OF PUBLIC INVOLVEMENT

### Scoping and Notice of Proposed Action

Since the implementation of the Nebraska National Forests and Grasslands' Travel Management Plan in 2010, the Bessey Ranger District has been soliciting comments regarding the currently-available motorized travel system. From these comments, the Bessey Travel Management Review Project was developed to further investigate the effects of increasing motorized access within Samuel R. McKelvie National Forest and the Bessey Unit of the Nebraska National Forest.

The Bessey Travel Management Review Project was first advertised to the public on March 12, 2013 with press releases published at media outlets throughout Nebraska and on the Nebraska National Forests and Grasslands website. These press releases encouraged the public to attend one of four public information meetings held throughout Nebraska in Thedford, Grand Island, Valentine, and Alliance. Over 30 people attended these meetings to become informed about the project and the comment process. Additional press releases followed, detailing the comment process and project information.

An official Notice of Proposed Action was published in the Legal Section of the North Platte Telegraph on March 14, 2013, thereby beginning a 30-day public comment period. Letters containing the Notice of Proposed Action and information about the comment process were mailed directly to state and local governments, Native American tribal agencies, pertinent natural resource agencies, and individuals who expressed interest through our mailing list. This project was first listed in the Nebraska National Forests and Grasslands Schedule of Proposed Actions (SOPA) on January 31, 2013 and published on the second quarterly SOPA in 2013.

Preliminary issues were identified by the internal interdisciplinary team (ID team) prior to scoping. Additional issues were identified after reviewing comments received during the public scoping period. Issues are summarized in the following table:

**Table 1. Issues regarding the Bessey Travel Management Review Project, identified both prior to project development and during the project scoping period.**

Category	Issue Statement	Response
Recreation	<p>A number of users have expressed that their recreational experience would be improved with additional motorized access.</p> <p>Some users have concerns that the Proposed Action will decrease the beauty, peacefulness, and solitude of Natick Campground and Samuel R. McKelvie National Forest.</p>	<p>This issue was addressed during project development as the project aims to increase motorized access.</p> <p>Alternative 3 was developed to maintain areas of non-motorized access.</p>

Category	Issue Statement	Response
Public Safety	<p>There is a concern that mixing motorized and non-motorized uses within close proximity of each other is unsafe.</p> <p>There is concern that the Proposed Action may increase fire danger.</p> <p>Some users have expressed that fire suppression will be improved with increased motorized access.</p>	<p>Current travel management limits motorized use to a designated travel system, reducing interactions between motorized and non-motorized uses. This project similarly aims to designate and limit motorized use to a travel system.</p> <p>This concern has been addressed through analysis; see page 14.</p> <p>This issue was addressed during project development as the project aims to increase motorized access. In addition, this concern has been addressed through analysis; see page 14.</p>
Access	<p>There are concerns that the current travel system restricts travel, thereby hindering public use of NFS lands for recreation.</p>	<p>This issue was addressed during project development as the project aims to increase motorized access.</p>
Scenic value/ Landscape aesthetics	<p>There are concerns that the Proposed Action will decrease scenic value within Samuel R. McKelvie National Forest.</p>	<p>This concern has been addressed through analysis; see page 13.</p>
Maintenance/ Economics	<p>There are concerns about the failure to maintain additional routes with current funding levels.</p> <p>There are concerns about the failure to enforce regulations on additional routes with current funding levels.</p>	<p>This concern has been addressed through analysis; see page 21.</p> <p>This concern has been addressed within the NNF&amp;G Travel Management Implementation Plan, which sets guidelines for enforcement.</p>
Soils	<p>There is a concern that the Proposed Action may increase soil erosion.</p> <p>There is concern that the current travel system is concentrating travel and therefore exacerbating erosion.</p>	<p>This concern has been addressed through analysis; see page 15.</p> <p>This issue was addressed during project development as the project aims to lessen the concentration of traffic on currently available routes.</p>

<b>Category</b>	<b>Issue Statement</b>	<b>Response</b>
Wildlife and plants	<p>There is concern that the Proposed Action may impact or disturb Endangered Species, sensitive species, and other species of concern.</p> <p>Some users have concerns that the noise from increased motorized access will repel wildlife and/or fragment habitat.</p> <p>There is concern that the Proposed Action might increase introduction of non-native plants.</p>	<p>This issue was addressed during project development; known communities were avoided during route selection. In addition, this concern has been addressed through analysis; see page 16.</p> <p>This concern has been addressed through analysis; see page 16.</p> <p>This concern has been addressed through analysis; see page 14.</p>

## CHAPTER 3 - DESCRIPTION OF ALTERNATIVES

### Alternative 1 – Proposed Action

In order to improve recreational access in Samuel R. McKelvie National Forest, the following user-created routes would become open to every kind of motorized access; please refer to Appendix A: Maps.

- 1) McClaran Road would extend existing route 604 to route 605.
- 2) Diamond Bar Road would connect Hwy 16 to route 605.
- 3) Treeline Road would extend from route 603, ending at the edge of the timber line.
- 4) Steer Creek West would connect route 603 to route 602.
- 5) Steer Creek East would connect route 603 to route 602, approximately 3 miles east of Steer Creek West.
- 6) South Falls Road would connect FH-5 to route 601.
- 7) Powderhorn A would connect routes 621 and 626.
- 8) Powderhorn B would connect routes 621 and 626, but approximately 3.5 miles north of Powderhorn A.
- 9) An extension of Cormorant Road would connect FH-5 to route 626.

In addition, the limitation of allowing only highway-legal vehicles on routes 622 and 623 would be removed, thereby opening access of those routes to motorized vehicles of any type.

To improve recreational access in the Bessey Unit of the Nebraska National Forest, the following user-created routes would become open to motorized access by highway-legal vehicles only; please refer to Appendix A: Maps.

- 10) North River Access would extend from Hwy 2 to the Middle Loup River.
- 11) Western Road would extend from route 259 to the west forest boundary.
- 12) Middle West Road would similarly extend from route 259 to the west forest boundary, but approximately 2.5 miles south of Western Road.
- 13) Motorized access would be added from route 203 to Windmill 25, a popular camping spot.

Furthermore, the following user-created routes would increase access for every kind of motorized use:

- 14) Access to Whitetail Campground would be rerouted. Most of route 277 would become temporarily closed to motorized traffic, while access would be added to connect route 224 to the remainder of route 277.
- 15) Near Whitetail Campground, motorized access would be opened to Cell Hill.

Lastly, the seasonal closure of routes 201, 202, 205, and 209 would be removed, opening those routes to year-round motorized access.

## **Alternative 2 – No Action**

No additional routes would become open to motorized access. Motorized travel would be allowed only on routes designated by the current Motor Vehicle Use Map. Please refer to Appendix A: Maps.

## **Alternative 3 – Maintain Select Non-Motorized Areas**

This Alternative was created in response to public comments requesting that we maintain areas of non-motorized access; please refer to Appendix A: Maps.

To preserve areas of non-motorized access in Samuel R. McKelvie National Forest, the following routes would remain closed to motorized access:

- 1) Steer Creek West
- 2) Steer Creek East
- 3) South Falls Road
- 4) Powderhorn B.

However, to improve recreational access in Samuel R. McKelvie National Forest, the following user-created routes would be opened to motorized traffic:

- 5) McClaran Road would extend route 604 to route 605.
- 6) Diamond Bar Road would connect Hwy 16 to route 605.
- 7) Treeline Road would extend from route 603, ending at the edge of the timber line.
- 8) Powderhorn A would connect routes 621 and 626.
- 9) An extension of Cormorant Road would connect FH-5 to route 626.

In addition, the limitation of allowing only highway-legal vehicles on routes 622 and 623 would be removed, thereby opening access of these routes to motorized vehicles of any type.

To preserve areas of non-motorized access in the Bessey Unit of the Nebraska National Forest, current seasonal closures to motorized access would remain on the following routes: 201, 202, 205, 209.

However, to improve recreational access in the Bessey Unit of the Nebraska National Forest, the following user-created routes would become open to motorized access by highway-legal vehicles only:

- 10) North River Access would extend from Hwy 2 to the Middle Loup River.
- 11) Western Road would extend from route 259 to the west forest boundary.
- 12) Middle West Road would similarly extend from route 259 to the west forest boundary, but approximately 2.5 miles south of Western Road.
- 13) Motorized access would be added from route 203 to Windmill 25, a popular camping spot.

Furthermore, the following user-created routes would increase access for every kind of motorized use:

- 14) Access to Whitetail Campground would be rerouted. Most of route 277 would become temporarily closed to motorized traffic, while access would be added to connect route 224 to the remainder of route 277.
- 15) Near Whitetail Campground, motorized access would be opened to Cell Hill.

## Comparison of Alternatives

The table below indicates the total miles of motorized access that would become available with each alternative. These numbers are listed by administrative unit and type of motorized access allowed, and the numbers are further listed by seasonal access for the Bessey Unit of the Nebraska National Forest.

**Table 2. Comparison of Miles Available to Motorized Access, by Alternative.**

	Alt.1	Alt. 2	Alt. 3
<b>TOTALS</b>			
Open to All Motorized Traffic	138.65	94.61	115.99
Highway-Legal Vehicles only	119.81	117.30	119.81
<b>SAMUEL R. MCKELVIE</b>			
Open to All Motorized Traffic	128.44	84.45	105.78
Highway-Legal Vehicles only	1.41	5.87	1.41
<b>BESSEY UNIT</b>			
Open To All Motorized Traffic	10.21	10.17	10.21
Open continually to Highway-Legal Vehicles only	118.40	98.87	105.83
Seasonally Open to Highway-Legal Vehicles only	0	12.57	12.57

## Design Features for Alternative 1 and Alternative 3

If, after analysis of environmental effects, the deciding official selects either Alternative 1 or Alternative 3, implementation may require the following design features, where applicable, to mitigate any negative effects.

**Table 3. Design features for implementation of either the Alternative 1 or Alternative 3.**

1.	Reduce steep grades where possible.
2.	Consider seasonal or annual road/area closures.
3.	Reference FSH 7709.56 for all design standards.
4.	Document and approve Road Management Objectives.
5.	Relocate roads out of bottoms to minimize impact in intermittent draws.
6.	Minimize stream crossings.
7.	If installed, utilize outlets-of-drainage devices to dissipate flow and disperse water.
8.	If installed, ensure catchment basins are of adequate size and location.
9.	Consult with Forest Hydrologist when installing drainage structures.
10.	If needed, install drainage devices in accordance with 33CFR323.4(a)(6), FSH 7709.56, 7709.56b, and all applicable State and Federal laws.
11.	If installed, maintain drainage devices with regular debris removal.
12.	Revegetate fill slopes and other disturbed areas.
13.	Maintain vegetative buffers.
14.	Avoid marshy wet areas where possible.
15.	Use rocky fills and geotextiles in marshy wet areas where avoidance is not possible.
16.	Protect highly erodible soils, steep grades, and flat areas with placement of aggregate.
17.	Where applicable, maintain aggregate surfaces.

## Monitoring

If, after analysis of environmental effects, the deciding official selects either the Proposed Action or Alternative 3, implementation will require the following monitoring to be conducted. These monitoring efforts are in addition to monitoring required by the LRMP and the NNF&G Travel Management Plan. All monitoring is the responsibility of the Forest Service.

**Table 4. Monitoring to be conducted after implementation of the Alternative 1 or Alternative 3.**

<b>Monitoring Objective</b>	<b>Monitoring Item</b>	<b>Monitoring Type</b>	<b>Frequency</b>
Visitor satisfaction	Monitor visitor use	Verbal surveys with visitors, incident reports	Weekly during periods of heavy use.
		Receipt of unsolicited comments	Variable
Resource protection	Monitor visitor impacts to resources	Ocular, incident reports, warnings, and violation notices	Weekly during periods of heavy use.
		Photographic comparisons of known problem areas	Annually
		Noxious weed detection	Annually
		Paleontological survey	As needed
		Archaeological survey	As needed
Traffic Density	Monitor average traffic and types of use	Traffic Counters	Annually

## CHAPTER 4 - ENVIRONMENTAL EFFECTS

The environmental impacts of the Proposed Action, the No Action Alternative, and the Maintain Select Non-Motorized Areas Alternative are described in the following sections. The environmental analysis focuses on those resources identified by issue as most likely to be affected. Past, present, and future actions which may have possible effects within the project area are listed below in Table 5; these actions were considered in the effects analysis.

**Table 5. Past, present, and reasonably foreseeable future actions considered in the cumulative effects analysis for the project.**

Action	Date and Description
Implementation of ATV trail fee system	Projected in 2014. Addition of a fee requirement for ATV use of designated trails on the Bessey Unit to fund the maintenance of current ATV trail system.
McKelvie Administrative Site Rehabilitation and Decommissioning	Projected in 2015. Decommissioning and/or rehabilitation of administrative buildings at Samuel R McKelvie National Forest.
Allotment Management Planning in the McKelvie Geographic Area	Signed in 2012. Establishes guidelines for the management of livestock grazing on the Samuel R. McKelvie National Forest.
Implementation of the NNFG Travel Management Plan	Signed in 2010. Limits the use of motorized vehicles to designated routes and restricted areas within the Nebraska National Forests and Grasslands.
Drought	Cyclical periods of inadequate precipitation.

No new road construction is proposed as part of this project. The routes selected for inclusion in the Bessey Travel Management Review Project are existing routes, having been created prior to implementation of the NNF&G Travel Management Plan in 2010.

### Effects to Recreational Resources

Both Samuel R. McKelvie National Forest and the Bessey Unit of the Nebraska National Forest have a variety of recreational opportunities, including hunting, fishing, camping, horseback riding, and off-highway vehicle use.

Below, Table 6 lists the effects of each alternative on recreational resources, based on analysis of access to recreational resources and Recreational Opportunity Spectrum (ROS). ROS classifies recreational opportunities by the degree to which it satisfies recreational needs, taking into account the extent of modifications to the natural environment, types of facilities provided, outdoor skills needed, and density of use.

The table also lists any cumulative effects of each alternative combined with the past, present, and future actions listed in Table 5 above.

**Table 6. Effects to Recreational Resources by each Alternative.**

	<b>Direct &amp; Indirect Effects</b>	<b>Cumulative Effects</b>
<b>Alternative 1</b>	<p>Results in greater motorized access, both for off-highway vehicles and highway-legal vehicles</p> <p>Maintains an area which is only open to highway-legal vehicles near Natick Campground.</p> <p>Does not affect ROS within the Semi-Primitive Motorized class, as the roads within are primitive.</p> <p>Does not affect ROS within the Roded Natural class, as that class allows for “strong evidence of designed roads” with “moderate to high frequency”.</p> <p>Does not affect ROS within Steer Creek Research Natural Area, where motorized dispersed camping and motorized game retrieval are not allowed.</p> <p>Increases area available to motorized dispersed camping, motorized game retrieval, and parking.</p> <p>Reduces contiguous acres of non-motorized areas.</p> <p>Changes in access may alter presence of game birds and big game, thereby resulting in changes to hunting patterns and perceptions of success. This may result in a decrease in recreationists.</p>	No cumulative effects.
<b>Alternative 2</b>	<p>Results in no change to ROS.</p> <p>No change to motorized or non-motorized access.</p>	No cumulative effects.
<b>Alternative 3</b>	<p>Results in greater motorized access, both for off-highway vehicles and highway-legal vehicles</p> <p>Does not affect types of access or seasons of access near Natick campground.</p> <p>Does not affect ROS within the Semi-Primitive Motorized class, as the roads within are primitive.</p> <p>Does not affect ROS within the Roded Natural class, as that class allows for “strong evidence of designed roads” with “moderate to high frequency”.</p>	No cumulative effects.

	<b>Direct &amp; Indirect Effects</b>	<b>Cumulative Effects</b>
	<p>Does not affect ROS within Steer Creek Research Natural Area, where motorized dispersed camping and motorized game retrieval are not allowed.</p> <p>Increases area available to motorized dispersed camping, motorized game retrieval, and parking.</p> <p>Reduces contiguous acres of non-motorized areas.</p> <p>Changes in access may alter presence of game birds and big game, thereby resulting in changes to hunting patterns and perceptions of success. This may result in a decrease in recreationists.</p>	

## Effects to Social and Economic Resources

Social and Economic effects of the Proposed Action were compared to Alternatives 2 and 3, taking into account previous findings from the NNF&G Travel Management Plan. In addition, Table 7 below summarizes the potential effects of each alternative on social resources, based on analysis of local demographic data, local values, social attitudes, and public comments during the scoping period. The table also summarizes potential economic effects based on previous analysis, and lists any cumulative effects of each alternative combined with the past, present, and future actions listed in Table 5 above.

**Table 7. Effects to Social and Economic Resources by each Alternative.**

	<b>Direct &amp; Indirect Effects</b>	<b>Cumulative Effects</b>
<b>Alternative 1</b>	<p>Increases perception that wildlife habitat may become disconnected, and therefore may not be preferred by conservationists.</p> <p>Increases motorized access; motorized recreationists may socially benefit, particularly at Samuel R. McKelvie National Forest.</p> <p>Increases motorized public access to locations of solitude, particularly in Samuel R. McKelvie National Forest; non-motorized recreationists may not prefer this alternative.</p> <p>May increase conflicts between user groups, particularly at Samuel R. McKelvie National Forest.</p>	<p>Some users with conflicting interests may work to find other avenues, such as private lands, where their interests might be better served.</p>

	<b>Direct &amp; Indirect Effects</b>	<b>Cumulative Effects</b>
	<p>Improves opportunities for youth (under 16 years of age) at Samuel R. McKelvie National Forest by providing more mixed-use access (roads open to every type of motorized use.)</p> <p>Increases motorized access; fishing and game enthusiasts will display mixed approval as some prefer large areas free of motorized travel, and others prefer more motorized access as their physical needs dictate.</p> <p>Does not change economic effects from the findings under the Nebraska National Forests and Grasslands' Final Travel Management EIS.</p>	
<b>Alternative 2</b>	<p>Does not affect current perceptions of wildlife connectivity, and therefore may be preferred by recreationists.</p> <p>Does not increase motorized access; motorized recreationists may not prefer this alternative.</p> <p>Concentrated motorized access may limit opportunities for motorized recreationists.</p> <p>Does not increase or decrease non-motorized opportunities.</p> <p>Does not change user conflicts among interest groups.</p> <p>Does not improve opportunities for youth (under 16 years of age).</p> <p>Does not increase motorized access; fishing and game enthusiasts will display mixed approval, as some prefer large areas free of motorized travel, and others prefer more motorized access as their physical needs dictate.</p> <p>Does not change economic effects from the findings under the Nebraska National Forests and Grasslands' Final Travel Management EIS.</p>	<p>Some users with conflicting interests may work to find other avenues, such as private lands, where their interests might be better served.</p>
<b>Alternative 3</b>	<p>Limits perception that wildlife habitat may become disconnected; may be preferred by conservationists over Alternative 1, but not over Alternative 2.</p>	<p>Some users with conflicting interests may work to find other avenues, such as private lands, where their interests might be better served.</p>

	<b>Direct &amp; Indirect Effects</b>	<b>Cumulative Effects</b>
	<p>Retains seasonal closures within the Bessey Unit of the Nebraska National Forest; conservationists may prefer this alternative.</p> <p>Increases motorized public access; motorized recreationists may socially benefit, particularly at Samuel R. McKelvie National Forest.</p> <p>Increases access to locations of solitude, particularly in Samuel R. McKelvie National Forest; non-motorized recreationists may not prefer this alternative.</p> <p>May increase conflicts between user groups, particularly at Samuel R. McKelvie National Forest.</p> <p>Improves opportunities for youth (under 16 years of age) at Samuel R. McKelvie National Forest by providing more mixed-use access (roads open to every type of motorized use.)</p> <p>Increases motorized access; fishing and game enthusiasts may display mixed approval as some prefer large areas free of motorized travel, and others prefer more motorized access as their physical needs dictate</p> <p>Does not change economic effects from the findings under the Nebraska National Forests and Grasslands' Final Travel Management EIS.</p>	

## Effects to Visual Resources

The Nebraska National Forests and Grasslands' LRMP establishes Scenic Integrity Objectives to maintain visual resources. Furthermore, the LRMP establishes guidelines and standards to achieve Scenic Integrity Objectives. Among these guidelines and standards are quantifiable measures such as scenic attractiveness, landscape visibility, and scenic integrity. When combined and compared to an action, those three measures can create a picture of the action's effects on visual resources.

Within Samuel R. McKelvie National Forest and the Bessey Unit of the Nebraska National Forest, much of the landscape's visibility is middle-ground, with limited areas of high visibility.

Scenic integrity is a measure of how resilient a vista is to human-caused changes, and the scenic integrity is low throughout both units, with localized areas of moderate and high integrity. (Low integrity infers that human-caused changes to the landscape have the ability to visually dominate the view.)

Scenic attractiveness measures how visually appealing a view is based on common human perceptions. Much of both units is moderately appealing, with areas of high scenic attractiveness along timbered areas.

Table 8 below lists the effects of each alternative on visual resources, based on analysis of landscape visibility, scenic integrity, and scenic attractiveness within the project area. The table also lists any cumulative effects of each alternative combined with the past, present, and future actions listed in Table 5 above.

**Table 8. Effects to Visual Resources by each Alternative.**

	<b>Direct &amp; Indirect Effects</b>	<b>Cumulative Effects</b>
<b>Alternative 1</b>	<p>Increases access to areas of high recreational value, special interest, and scenic value without bisecting those areas.</p> <p>Routes proposed are mostly within middle-ground visibility, moderate scenic attractiveness, and moderate to low scenic integrity, having minimal impact on scenic views from these routes.</p> <p>Signing of routes proposed would similarly have minimal impact on scenic views.</p>	No cumulative impacts.
<b>Alternative 2</b>	<p>Does not increase access to valued scenic resources.</p>	No cumulative effects.
<b>Alternative 3</b>	<p>Increases access to areas of high recreational value, special interest, and scenic value without bisecting those areas.</p> <p>Routes proposed are mostly within middle-ground visibility, moderate scenic attractiveness, and moderate to low scenic integrity, having minimal impact on scenic views from these routes.</p> <p>Signing of routes proposed would similarly have minimal impact on scenic views.</p>	No cumulative effects.

## Effects to Rangeland Resources

Table 9 below lists the effects of each alternative on rangeland resources, based on analysis of key indicators such as available habitat for invasive plant species and potential for conflict between livestock and recreationists. The table also lists any cumulative effects of each alternative combined with the past, present, and future actions listed in Table 5 above.

**Table 9. Effects to Rangeland Resources by each Alternative.**

	<b>Direct &amp; Indirect Effects</b>	<b>Cumulative Effects</b>
<b>Alternative 1</b>	<p>Increases potential for spread of invasive plant species, especially along riparian areas and wooded draws.</p> <p>Makes detection of new invasive plant infestations difficult.</p> <p>May increase potential for conflicts between livestock and recreationists, such as disrupted grazing patterns, unintentional herding, open gates, and damage to water tanks.</p>	<p>Further soil disturbances increase potential for spread of invasive plant species, especially along riparian areas and wooded draws.</p>
<b>Alternative 2</b>	<p>Does not have any effects on plant communities.</p> <p>Does not affect conflicts between livestock and recreationists.</p>	<p>No cumulative effects.</p>
<b>Alternative 3</b>	<p>Increases potential for spread of invasive plant species, especially along riparian areas and wooded draws.</p> <p>Makes identification of new invasive plant communities difficult.</p> <p>May increase potential for conflicts between livestock and recreationists, such as disrupted grazing patterns, unintentional herding, open gates, and damage to water tanks.</p>	<p>Further soil disturbances increase potential for spread of invasive plant species, especially along riparian areas and wooded draws.</p>

## Effects to Fire Resources and Fuels

Table 10 below lists the effects of each alternative on fire resources and fuels, based on analysis of historical data and current conditions. The table also lists any cumulative effects of each alternative combined with the past, present, and future actions listed in Table 5 above.

**Table 10. Effects to Fire Resources and Fuels by each Alternative.**

	<b>Direct &amp; Indirect Effects</b>	<b>Cumulative Effects</b>
<b>Alternative 1</b>	<p>Improves access to remote areas and thereby improves time needed for fire response.</p> <p>Increases establishment of existing fire breaks, control lines.</p> <p>Increases chance of human-caused ignitions.</p>	<p>No cumulative effects.</p>

	<b>Direct &amp; Indirect Effects</b>	<b>Cumulative Effects</b>
<b>Alternative 2</b>	<p>Response times will not change.</p> <p>The number of existing fire breaks and control lines will not increase.</p> <p>A possible increase in the number of large-scale fires, as access will not improve.</p>	No cumulative effects.
<b>Alternative 3</b>	<p>Improves access to remote areas and thereby improves time needed for fire response.</p> <p>Increases establishment of existing fire breaks, control lines.</p> <p>Increases chance of human-caused ignitions.</p>	No cumulative effects.

## Effects to Water, Soil, and Air Quality

Table 11 below lists the effects of each alternative on soil and water quality based on analysis of soil qualities such as erosion hazard, rutting hazard, soil suitability for roads, and stream channel stability. In addition, effects to air quality are addressed based on comparisons with each alternative to the current LRMP and other regulations. The table also lists any cumulative effects of each alternative combined with the past, present and future actions listed in Table 5 above.

**Table 11. Effects to Water, Soil, and Air Quality by each Alternative.**

	<b>Direct &amp; Indirect Effects</b>	<b>Cumulative Effects</b>
<b>Alternative 1</b>	<p>Increases potential for soil erosion and soil relocation.</p> <p>Has minimal effects to area watersheds.</p> <p>May induce short-term impacts to streams and floodplains at riparian corridors. See Design Criteria.</p> <p>Likely will not degrade water quality.</p> <p>Is not expected to negatively affect wetlands or riparian areas. See Design Criteria.</p> <p>Will remain in compliance with current LRMP, and regulations put forth by the Department of Environment and Natural Resources and the US Environmental Protection Agency.</p> <p>Greenhouse emissions would not be significant enough to measure.</p>	May increase frequency of erosion control measures when combined with current motorized use.

	Direct & Indirect Effects	Cumulative Effects
<b>Alternative 2</b>	<p>Does not increase potential for soil erosion and soil relocation.</p> <p>Does not increase effects to streams and floodplains.</p> <p>Does not change water quality.</p>	No cumulative effects.
<b>Alternative 3</b>	<p>Increases potential for soil erosion and soil relocation.</p> <p>Has minimal effects to area watersheds.</p> <p>May induce short-term impacts to streams and floodplains at riparian corridors. See Design Criteria.</p> <p>Likely will not degrade water quality.</p> <p>Is not expected to negatively affect wetlands or riparian areas. See Design Criteria.</p> <p>Will remain in compliance with current LRMP, and regulations put forth by the Department of Environment and Natural Resources and the US Environmental Protection Agency.</p> <p>Greenhouse emissions would not be significant enough to measure.</p>	May increase frequency of erosion control measures when combined with current motorized use.

## Effects to Wildlife and Sensitive Plant Species

**Endangered, threatened, proposed, and candidate species:** Two federally-listed endangered species are known to be located within these two units: blowout penstemon (*Penstemon haydenii*) and American burying beetle (*Nicrophorus americanus*).

Development of the Bessey Travel Management Review Project gave thorough consideration to the presence of known stands of blowout penstemon and communities of the American burying beetle, avoiding those populations during route selection.

Both endangered species are present on the Bessey Unit of the Nebraska National Forest, and blowout penstemon is present at Samuel R. McKelvie National Forest. Favorable habitat for American burying beetle is located within the project area, namely near the proposed route identified as Cormorant.

Because of the potential habitat located along Cormorant, a biological assessment found that the Bessey Travel Management Review Project may affect the American burying beetle population, but those effects are not likely to be adverse. Any effects would be incidental or discountable, resulting from encounters with motorized traffic along Cormorant during the beetles' active periods. Such encounters would be localized to individuals and would not likely affect the larger population of American burying beetle.

A biological assessment was conducted for all other federally-listed species near Samuel R. McKelvie National Forest and the Bessey Unit of the Nebraska National Forest. This assessment found that the Bessey Travel Management Review Project will have no effect on those species. For a complete list of all other federally-listed species assessed and the resulting determinations, please see Table 14 in Appendix B and the Biological Assessment found in the Administrative Record.

**Sensitive species and management indicator species (MIS):** As part of the Bessey Travel Management Review Project, the Forest Service’s list of sensitive species in Region 2 was compared to local field observations and habitat requirements to determine potential occurrence of sensitive species and MIS. That comparison determined that nineteen sensitive species and 2 MIS are located within Samuel R. McKelvie National Forest and the Bessey Unit of the Nebraska National Forest.

Habitat requirements of the identified sensitive species and MIS were analyzed against each of the project alternatives to determine possible effects of project actions. Listed below are those species which may be impacted by the Bessey Travel Management Review Project, and the results of their analysis. Other species were also analyzed for possible effects, but were determined to receive no impact from the project. For a complete list, please see Table 15 in Appendix B and the Biological Evaluation found in the Administrative Record.

**Table 12. Sensitive species and Management Indicator Species which may or may not be impacted by the Bessey Travel Management Review Project.**

NI = No Impact is expected .

MAII = May Adversely Impact Individuals, but not likely to result in loss of viability, nor a trend toward federal listing.

Species	Alternative 1	Alternative 2	Alternative 3
Black-tailed prairie dog ( <i>Cynomys ludovicianus</i> )	<p><b>MAII</b></p> <p>Species occurs on Bessey District but does not occur on Samuel R. McKelvie. Sandy soils are not conducive to habitat needs of the species thus distribution is very limited. Trails will have no effect. Reroute of Whitetail Campground trail will skirt edge of existing prairie dog town and may have incidental impact on individual near trail, but not effect population.</p>	<p><b>NI</b></p> <p>Species occurs on Bessey District but does not occur on Samuel R. McKelvie. Sandy soils are not conducive to habitat needs of the species thus distribution is very limited. Trails will have no effect.</p>	<p><b>MAII</b></p> <p>Species occurs on Bessey District but does not occur on Samuel R. McKelvie. Sandy soils are not conducive to habitat needs of the species thus distribution is very limited. Trails will have no effect. Reroute of Whitetail Campground trail will skirt edge of existing prairie dog town and may have incidental impact on individual near trail, but not effect population.</p>
American bittern ( <i>Botaurus lentiginosus</i> )	<p><b>MAII</b></p> <p>Samuel R. McKelvie NF has wetlands along Cormorant trail, but should not impact bitterns. Nesting near trails may have incidental impact on individual, but not effect population.</p>	<p><b>NI</b></p> <p>Current trails do not encounter significant number of wetlands and don’t provide suitable habitat</p>	<p><b>MAII</b></p> <p>Samuel R. McKelvie NF has wetlands along Cormorant trail, but should not impact bitterns. Nestin near trails may have incidental impact on individual, but not effect population.</p>

Species	Alternative 1	Alternative 2	Alternative 3
Long-billed curlew ( <i>Numenius americanus</i> )	<b>MAII</b> Species common in Sandhills during summer and nesting near existing trails may have incidental impact on individual, but not effect population.	<b>MAII</b> Species common in Sandhills during summer and nesting near existing trails may have incidental impact on individual, but not effect population.	<b>MAII</b> Species common in Sandhills during summer and nesting near existing trails may have incidental impact on individual, but not effect population.
Burrowing owl ( <i>Athene cunicularia</i> )	<b>MAII</b> Primarily found on prairie dog towns at Bessey and there are no prairie dog towns at Samuel R. McKelvie. Trail reroute near Bessey District Whitetail campground will skirt edge of prairie dog town, thus may have incidental impact on nesting of an individual, but not effect population.	<b>MAII</b> Primarily found on prairie dog towns at Bessey and there are no prairie dog towns at Samuel R. McKelvie. Trail reroute near Bessey District Whitetail campground will skirt edge of prairie dog town, thus may have incidental impact on nesting of an individual, but not effect population.	<b>MAII</b> Primarily found on prairie dog towns at Bessey and there are no prairie dog towns at Samuel R. McKelvie. Trail reroute near Bessey District Whitetail campground will skirt edge of prairie dog town, thus may have incidental impact on nesting of an individual, but not effect population.
Short-eared owl ( <i>Asio flammeus</i> )	<b>MAII</b> Common species in Sandhills and ground nesting near existing trails could impact an individual, but not effect population.	<b>MAII</b> Common species in Sandhills and ground nesting near existing trails could impact an individual, but not effect population.	<b>MAII</b> Common species in Sandhills and ground nesting near existing trails could impact an individual, but not effect population.
Loggerhead shrike ( <i>Lanius ludovicianus</i> )	<b>MAII</b> Project area does contain scattered woodland/shrubland habitat amongst prairie, thus nesting in shrubland habitat near existing trail may impact individual, but not effect population.	<b>MAII</b> Project area does contain scattered woodland/shrubland habitat amongst prairie, thus nesting in shrubland habitat near existing trail may impact individual, but not effect population..	<b>MAII</b> Project area does contain scattered woodland/shrubland habitat amongst prairie, thus nesting in shrubland habitat near existing trail may impact individual, but not effect population..
Grasshopper sparrow ( <i>Ammodramus savannarum</i> )	<b>MAII</b> Common in Sandhills during summer breeding season and ground nesting near existing trails may have incidental impact on an individual, but not affect the population.	<b>MAII</b> Common in Sandhills during summer breeding season and ground nesting near existing trails may have incidental impact on an individual, but not affect the population.	<b>MAII</b> Common in Sandhills during summer breeding season and ground nesting near existing trails may have incidental impact on an individual, but not affect the population.
McCown's longspur ( <i>Calcarius mccownii</i> )	<b>MAII</b> Species of open, short to mixed grass prairies and ground nesting near existing trails may have incidental impact on individual, but will not have an effect on population.	<b>MAII</b> Species of open, short to mixed grass prairies and ground nesting near existing trails may have incidental impact on individual, but will not have an effect on population.	<b>MAII</b> . Species of open, short to mixed grass prairies and ground nesting near existing trails may have incidental impact on individual, but will not have an effect on population.
Chestnut-collard longspur ( <i>Calcarius ornatus</i> )	<b>MAII</b> Species of open, short to mixed grass prairies and ground nesting near existing trails may have incidental impact on individual, but will not have an effect on population.	<b>MAII</b> . Species of open, short to mixed grass prairies and ground nesting near existing trails may have incidental impact on individual, but will not have an effect on population.	<b>MAII</b> . Species of open, short to mixed grass prairies and ground nesting near existing trails may have incidental impact on individual, but will not have an effect on population.

Species	Alternative 1	Alternative 2	Alternative 3
Plains leopard frog <i>(Lithobates blairi)</i>	<b>MAII</b> Limited suitable habitat on Bessey or Samuel R. McKelvie except as associated with proposed existing Cormorant trail through wetland. Travel along trails may have incidental impact on an individual, but will not have an impact on population.	<b>MAII</b> Limited suitable habitat on Bessey or Samuel R. McKelvie except as associated with proposed existing Cormorant trail through wetland. Travel along trails may have incidental impact on an individual, but will not have an impact on population.	<b>MAII</b> Limited suitable habitat on Bessey or Samuel R. McKelvie except as associated with proposed existing Cormorant trail through wetland. Travel along trails may have incidental impact on an individual, but will not have an impact on population.
Northern leopard frog <i>(Rana pipiens)</i>	<b>MAII</b> Limited suitable habitat on Bessey or Samuel R. McKelvie except as associated with proposed existing Cormorant trail through wetland. Travel along trails may have incidental impact on an individual, but will not have an impact on population.	<b>MAII</b> Limited suitable habitat on Bessey and Steer Creek wetland on Samuel R. McKelvie is only wetland that encounters travel management. Travel along trails may have incidental impact on an individual, but will not have an impact on population.	<b>MAII</b> Limited suitable habitat on Bessey or Samuel R. McKelvie except as associated with proposed existing Cormorant trail through wetland. Travel along trails may have incidental impact on an individual, but will not have an impact on population.
Ottoe Skipper <i>(Hesperia ottoe)</i>	<b>MAII</b> Project area has considerable suitable habitat grassland nesting near existing trails may have incidental impact on an individual, but not have an effect on the population.	<b>MAII</b> Project area has considerable suitable habitat grassland nesting near existing trails may have incidental impact on an individual, but not have an effect on the population.	<b>MAII</b> Project area has considerable suitable habitat grassland nesting near existing trails may have incidental impact on an individual, but not have an effect on the population.
Regal fritillary butterfly <i>(Speyeria idalia)</i>	<b>MAII</b> Project area has considerable suitable habitat grassland nesting near existing trails may have incidental impact on an individual, but not have an effect on the population.	<b>MAII</b> Project area has considerable suitable habitat grassland nesting near existing trails may have incidental impact on an individual, but not have an effect on the population.	<b>MAII</b> Project area has considerable suitable habitat grassland nesting near existing trails may have incidental impact on an individual, but not have an effect on the population.
Lesser panicked sedge <i>(Carex diandra)</i>	<b>MAII</b> Samuel R. McKelvie NF has wetlands along Cormorant trail, but this alternative should not impact this species.	<b>NI</b> Current trails do not encounter significant number of wetlands and don't provide suitable habitat.	<b>MAII</b> Samuel R. McKelvie NF has wetlands along Cormorant trail, but this alternative should not impact this species.
Yellow widelip orchid <i>(Liparis loeselli)</i>	<b>MAII</b> Samuel R. McKelvie NF has wetlands along Cormorant trail, but this alternative should not impact this species.	<b>NI</b> Current trails do not encounter significant number of wetlands and don't provide suitable habitat.	<b>MAII</b> Samuel R. McKelvie NF has wetlands along Cormorant trail, but this alternative should not impact this species.
Hall's bulrush <i>(Schoenoplectus hallii)</i>	<b>MAII</b> Samuel R. McKelvie NF has wetlands along Cormorant trail, but this alternative should not impact this species.	<b>NI</b> Current trails do not encounter significant number of wetlands and don't provide suitable habitat.	<b>MAII</b> Samuel R. McKelvie NF has wetlands along Cormorant trail, but this alternative should not impact this species.

Species	Alternative 1	Alternative 2	Alternative 3
Lesser bladderwort ( <i>Utricularia minor</i> )	<b>MAII</b> Samuel R. McKelvie NF has wetlands along Cormorant trail, but this alternative should not impact this species.	<b>NI</b> Current trails do not encounter significant number of wetlands and don't provide suitable habitat.	<b>MAII</b> Samuel R. McKelvie NF has wetlands along Cormorant trail, but this alternative should not impact this species.
Sharp-tailed grouse ( <i>Tympanuchus phasianellus</i> ) <b>MIS</b>	<b>No Measurable Effect</b> Suitable habitat throughout Sandhills and use of existing trails will have relatively no effect on population trend.	<b>No Measurable Effect</b> Suitable habitat throughout Sandhills and use of existing trails will have relatively no effect on population trend.	<b>No Measurable Effect</b> Suitable habitat throughout Sandhills and use of existing trails will have relatively no effect on population trend.
Greater prairie-chicken ( <i>Tympanuchus cupido pinnatus</i> ) <b>MIS</b>	<b>MAII</b> <b>No Measurable Effect</b> Suitable habitat throughout Sandhills and nesting near existing trail may have an impact on an individual, but will have no measurable impact on the population trend.	<b>MAII</b> <b>No Measurable Effect</b> Suitable habitat throughout Sandhills and nesting near existing trail may have an impact on an individual, but will have no measurable impact on the population trend.	<b>MAII</b> <b>No Measurable Effect</b> Suitable habitat throughout Sandhills and nesting near existing trail may have an impact on an individual, but will have no measurable impact on the population trend.

Of the two management indicator species within Samuel R. McKelvie National Forest and the Bessey Unit of the Nebraska National Forest, neither was indicated to have measureable effects resulting from this project. Since the project is incorporating only existing roads for public use, no manipulation of existing habitat conditions will occur; thus no adverse effect on MIS or other wildlife is expected.

## Effects to Cultural Resources

Archaeological surveys have been conducted for analysis of the Bessey Travel Management Review Project. These surveys identified no archaeological sites within the project area. Prior to completion of these surveys, however, seven archaeological sites had been identified within 1 mile of the project area. Of these seven sites, six have been evaluated as ineligible for the National Register of Historic Places (NHRP); the remaining site has not been evaluated against NRHP significance criteria.

Because no archaeological sites have been identified within the project area, each of the Alternatives has no potential to directly affect cultural resources, and each of the Alternatives has no effect on the desired condition of cultural resources as described in the LRMP.

However, with such close proximity to archaeological sites outside the project area, Alternatives 1 and 3 each have the potential to indirectly affect cultural resources by increasing perceived access to such sites, rendering them vulnerable to intentional and unintentional damage.

Site avoidance is the preferred mitigation should archaeological resources become exposed; “see Monitoring” on page 7 above.

## **Paleontological and Geological Considerations**

Both the Samuel R. McKelvie National Forest and the Bessey Unit of the Nebraska National Forest lie within the geographic area called the Sandhills, a sand sea comprised of sand dunes stabilized by vegetation. Bedrock is rarely exposed from under deep layers of sand.

Paleontological surveys have been conducted on both the Samuel R. McKelvie National Forest and the Bessey Unit of the Nebraska National Forest. These surveys found no observations of vertebrate fossils protruding from bedrock within the project area.

Bedrock is the layer of concern for paleontological resources, and because it is rarely exposed within the project area, it is unlikely that any of the project Alternatives will result in detrimental impacts to paleontological resources. Compaction is not likely to occur, given the deep sand layer which covers the bedrock.

It is possible, however, that increased motorized access may accelerate soil erosion. Monitoring may be recommended if the bedrock becomes exposed see “Monitoring”, page 7.

## **Economic and Maintenance Considerations**

Generally, the Forest Service does not use appropriated dollars on Maintenance Level 2 roads. However, if a section of such road becomes unsafe or impassable, the Forest Service aims to repair those sections. Successful repair methods include the placement of tried-and-tested aggregates such as mudrock (a mixture of clay and river-run rock), wood chips, geotextiles, or a combination of any of these.

Because the Forest Service does not typically use appropriated dollars on roads such as those considered by the Bessey Travel Management Review Project, none of the alternatives will have any broad negative financial or maintenance effects within the project area. The public should understand that these roads are for high-clearance four-wheel-drive vehicles, and there is a risk in traveling them.

An additional consideration regards the North River Access in the Bessey Unit of the Nebraska National Forest. This location requires crossing an unregulated double-set of railroad tracks, which may pose a safety issue: when one set of tracks is occupied by a “resting” train, visibility to the other set of tracks is reduced. It may become a financial burden in the future to install and maintain the swinging-arm barricades, should the state government dictate.

## CHAPTER 5 – CONSULTATION AND COORDINATION

### Preparers and Contributors

The following Forest Service Employees contributed to this document:

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### Agencies and Organizations Consulted

Letters containing the Notice of Proposed Action and information about the comment process were mailed directly to those agencies and organizations listed in Table 13 below.

**Table 13. Agencies and Organizations Consulted regarding the Bessey Travel Management Review project.**

U.S. Senator Deb Fischer	U.S. Senator Mike Johanns	U.S. Congressman Adrian Smith
U.S. Senator Tim Johnson	U.S. Senator John Thune	U.S. Congresswoman Kristi Noem
Badlands National Park	Dawes County Agricultural Office	National Park Service
Natural Resources Conservation Service	Nebraska Department of Agriculture	Nebraska Game and Parks Commission
South Dakota Department of Agriculture	South Dakota Fish and Game	South Dakota Game, Fish and Parks
Upper Niobrara White NRD	US Fish and Wildlife Service	US Geological Service, BRD
Off Road Riders Association	FS Employees for Environmental Ethics	Sugarloaf Water Co
Berry's Hillside Farms	Picture Perfect Photography	J&G Enterprises
Prairie Hills Audubon Society	Halsey Trails Club	Centennial Saddle Club
Black Hills Group - Sierra Club	NE Off Highway Vehicle Association	Wisner Pharmacy

Sierra Club	Norbeck Society Inc	Nature Conservancy
Poss Ranch	Rothleutner Family Limited Part.	Biodiversity Conservation Alliance
Chadron Chamber of Commerce	Nebraska Ornithologists Union, Inc	Nebraska Audubon Council
Nebraska Cattlemen	Nebraska Wildlife Federation	Ecology Now
Nebraska Public Power District	South Dakota Public Lands Council	Southside School
Predator Conservation Alliance	The Humane Society of the United States	Center for Biological Diversity
Center for Native Ecosystems	Ridgeview Country Club	Winnebago Tribal Council
Winnebago Tribe	Omaha Tribal Council	Ponca Tribe of Nebraska
Iowa Tribe of Oklahoma	Pawnee Nation of Oklahoma	Otoe-Missouria Tribe
Sac and Fox Nation	Potawatomi Nation	Kickapoo Tribe of Oklahoma
USDA Forest Service	Seeley Ranch	South Dakota Office School & Public Lands
Rosebud Sioux Tribe	Ponderosa Wildlife Management Area	South Dakota State University
Owl Glenn Farm	Oglala Natural Resource Regulatory Agency	Spring Creek Ranch
Nebraska Tourism	Nebraska Game & Parks Commission	Star City Fourwheelers
Nebraska Department of Natural Resources	Guptill Farms Incorporated	Sugarloaf Grazing Association
Ewoldt Ranch Company	Flying A Ranch	The Ecology Center
Chadron Record	Fall River County Commissioners	University of Nebraska
Central South Dakota Grazing Association	Bureau of Indian Affairs	University of Nebraska - Kearney
Biodiversity Conservation Alliance	Black Hills Badland & Lakes Association	Upper Big Blue Natural Resources District
USDA Natural Resources Conservation Service	USDA APHIS	Upper Loup Natural Resources District

## APPENDIX A: MAPS

Figure 2. Map of Routes included in Alternative 1 (Proposed Action) in Samuel R. McKelvie National Forest.

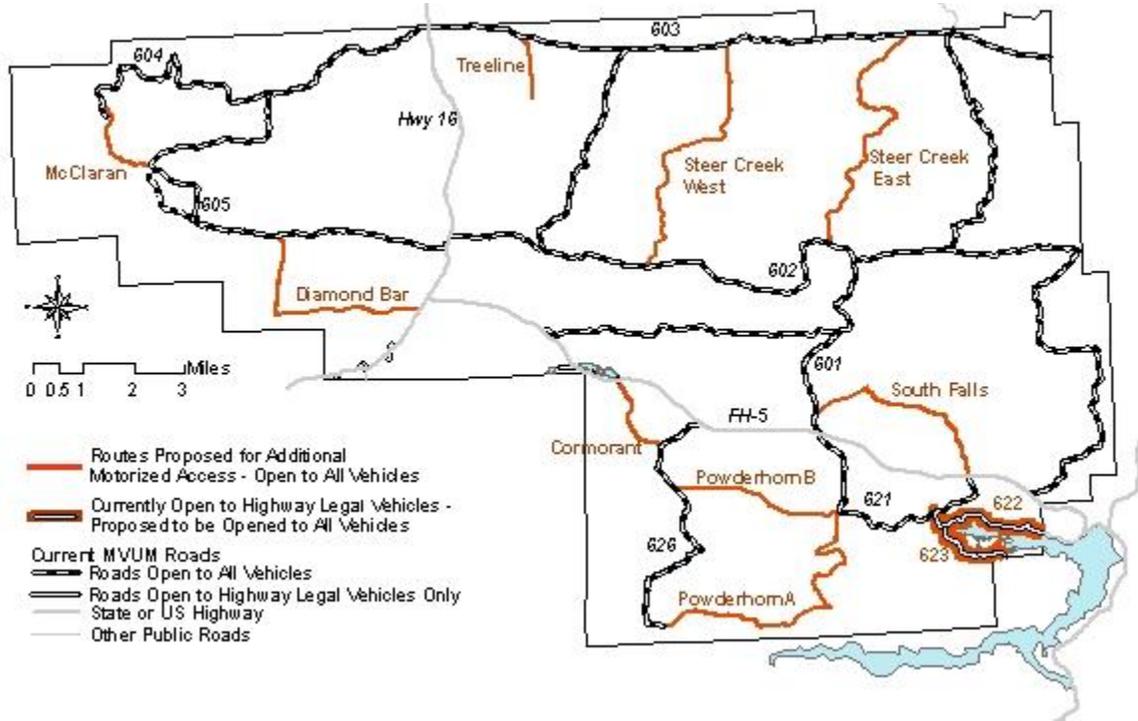


Figure 3. Map of Routes included in Alternative 1 (Proposed Action) in the Bessey Unit of the Nebraska National Forest.

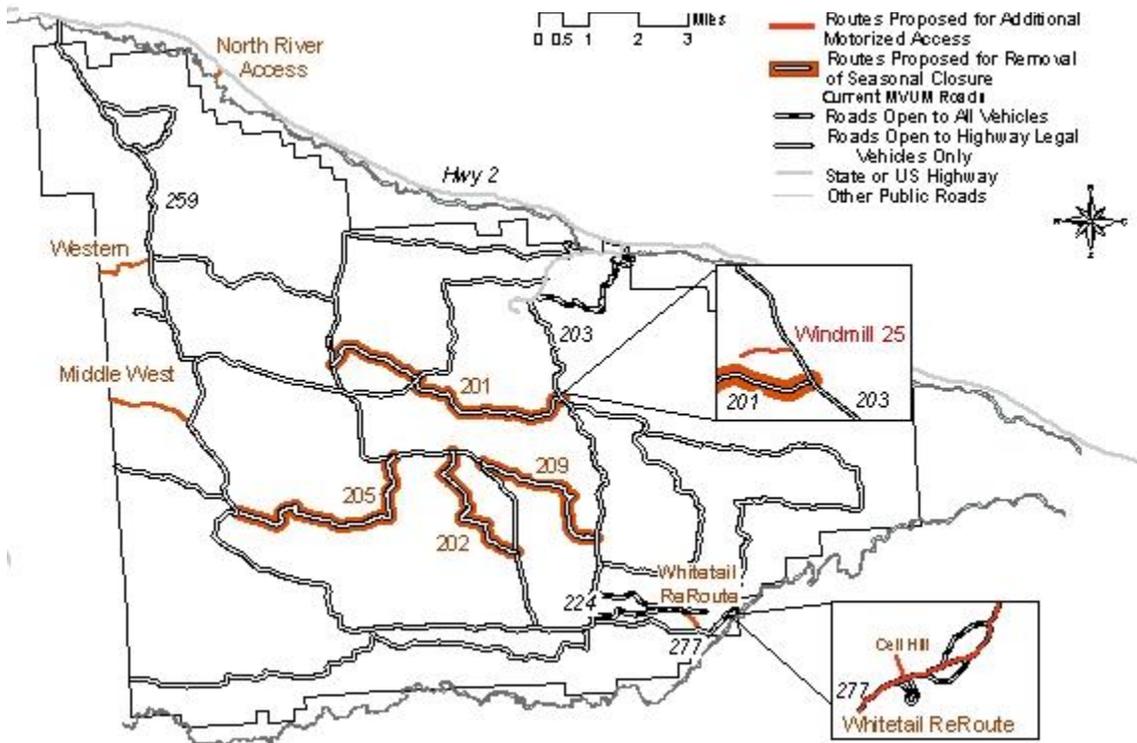


Figure 4. Map of Routes included in Alternative 2 (No Action) in Samuel R. McKelvie National Forest.

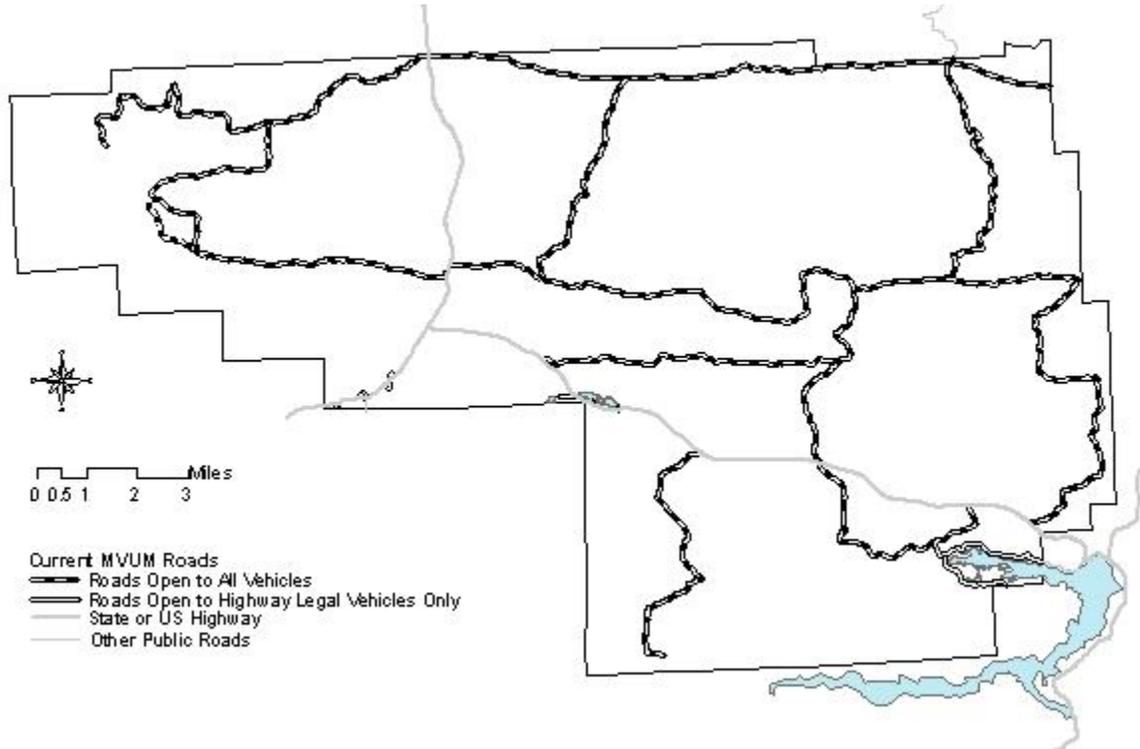


Figure 5. Map of Routes included in Alternative 2 (No Action) in the Bessey Unit of the Nebraska National Forest.

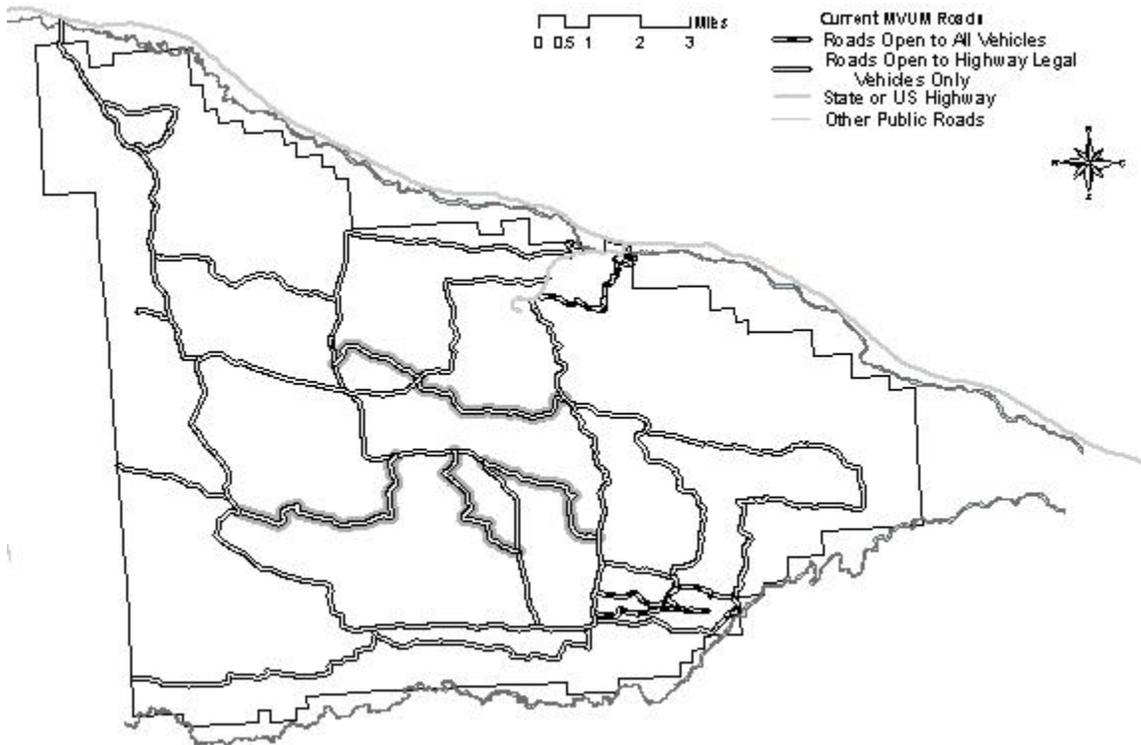


Figure 6. Map of Routes included in Alternative 3 (Maintain Select Non-Motorized Areas) in Samuel R. McKelvie National Forest.

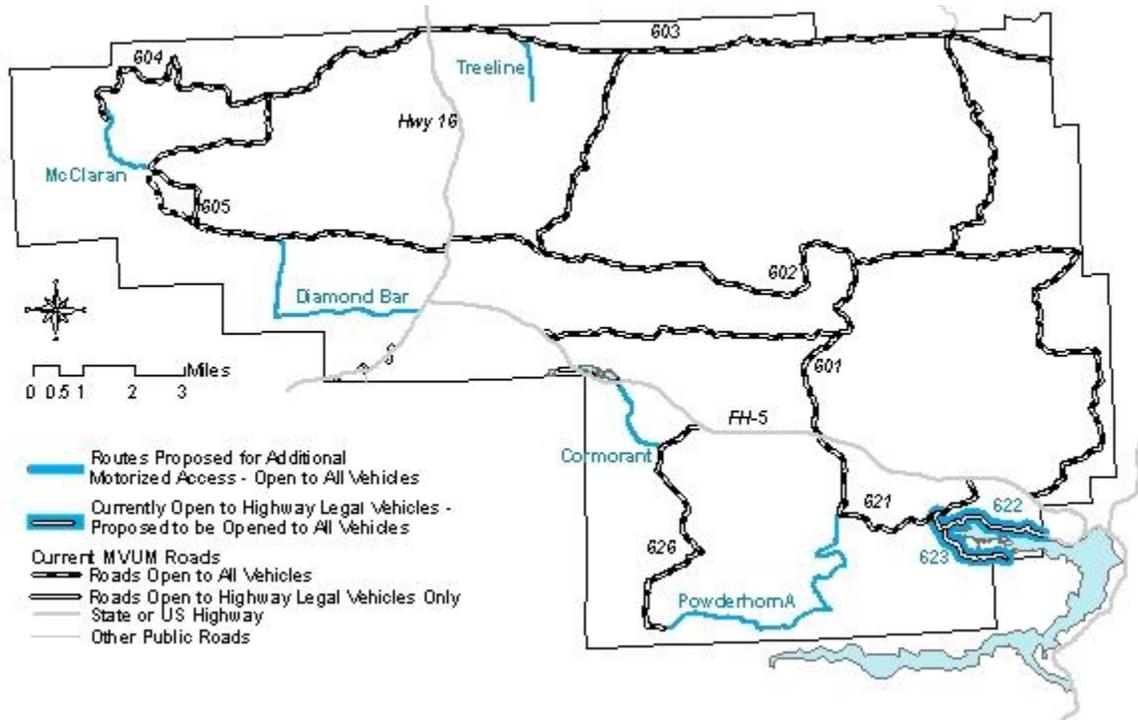
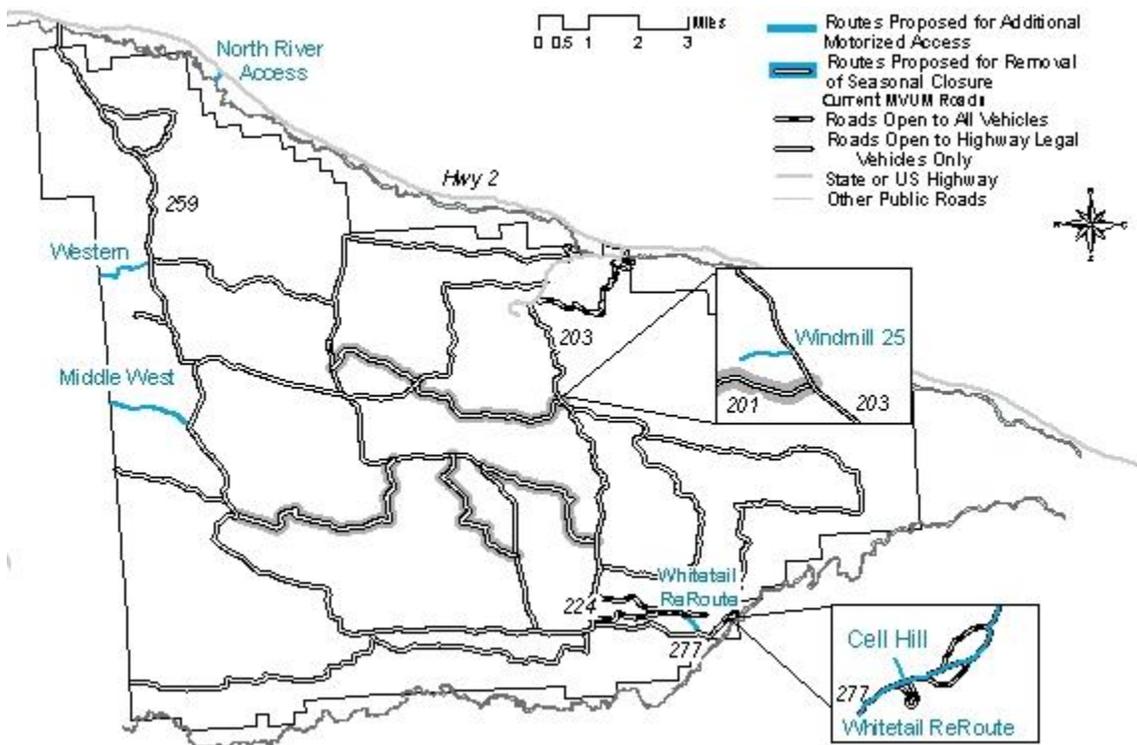


Figure 7. Map of Routes included in Alternative 3 (Maintain Select Non-Motorized Areas) in the Bessey Unit of the Nebraska National Forest.



## APPENDIX B: TABLES

**Table 14. Effects Analysis, Determination, and Rationale for Federally-Listed Species Considered in the Bessey Travel Management Review Project.**

<sup>1</sup> E = Endangered, T = Threatened, P = Proposed

<sup>2</sup> Confirmed records of species in the analysis area

Species	Proposed Action Alternative	No Action Alternative	Maintain Non-Motorized Area Alternative
Whooping crane ( <i>Grus americana</i> )	<b>No effect</b> Incidental sightings of whooping cranes are rare on Samuel R. McKelvie NF and Bessey Division, Nebraska. The project is on the western edge of major migration corridor, has very few wetlands, and is expected to have no effect on this species.	<b>No effect</b> Incidental sightings of whooping cranes are rare on Samuel R. McKelvie NF and Bessey Division, Nebraska. The project is on the western edge of major migration corridor, has very few wetlands, and is expected to have no effect on this species.	<b>No effect</b> Incidental sightings of whooping cranes are rare on Samuel R. McKelvie NF and Bessey Division, Nebraska. The project is on the western edge of major migration corridor, has very few wetlands, and is expected to have no effect on this species.
Least Tern ( <i>Sterna antillarum</i> )	<b>No effect</b> No sightings of least tern have been recorded on Samuel R. McKelvie NF and Bessey Division of Nebraska. The project is located on primarily Sandhills upland ecological sites, has no riverine sandbar habitat, and is expected to have no effect on this species.	<b>No effect</b> No sightings of least tern have been recorded on Samuel R. McKelvie NF and Bessey Division of Nebraska. The project is located on primarily Sandhills upland ecological sites, has no riverine sandbar habitat, and is expected to have no effect on this species.	<b>No effect</b> No sightings of least tern have been recorded on Samuel R. McKelvie NF and Bessey Division of Nebraska. The project is located on primarily Sandhills upland ecological sites, has no riverine sandbar habitat, and is expected to have no effect on this species.
Piping Plover ( <i>Charadrius melodus</i> )	<b>No effect</b> No sightings of piping plover have been recorded on Samuel R. McKelvie NF and Bessey Division of Nebraska. The project is located on primarily Sandhills upland ecological sites, has no riverine sandbar habitat, and is expected to have no effect on this species.	<b>No effect</b> No sightings of piping plover have been recorded on Samuel R. McKelvie NF and Bessey Division of Nebraska. The project is located on primarily Sandhills upland ecological sites, has no riverine sandbar habitat, and is expected to have no effect on this species.	<b>No effect</b> No sightings of piping plover have been recorded on Samuel R. McKelvie NF and Bessey Division of Nebraska. The project is located on primarily Sandhills upland ecological sites, has no riverine sandbar habitat, and is expected to have no effect on this species.

Species	Proposed Action Alternative	No Action Alternative	Maintain Non-Motorized Area Alternative
Topeka shiner ( <i>Notropis topeka</i> )	<p align="center"><b>No effect</b></p> <p>No suitable habitat exists within the project area. The project is located on primarily upland Sandhills ecological sites, has no pristine riparian habitat, and is expected to have no effect on this species.</p>	<p align="center"><b>No effect</b></p> <p>No suitable habitat exists within the project area. The project is located on primarily upland Sandhills ecological sites, has no pristine riparian habitat, and is expected to have no effect on this species.</p>	<p align="center"><b>No effect</b></p> <p>No suitable habitat exists within the project area. The project is located on primarily upland Sandhills ecological sites, has no pristine riparian habitat, and is expected to have no effect on this species.</p>
Pallid sturgeon ( <i>Scaphirhynchus albus</i> )	<p align="center"><b>No effect</b></p> <p>No suitable habitat exists within the project area or Cherry and Thomas counties</p>	<p align="center"><b>No effect</b></p> <p>No suitable habitat exists within the project area or Cherry and Thomas counties.</p>	<p align="center"><b>No effect</b></p> <p>No suitable habitat exists within the project area or Cherry and Thomas counties</p>
Black-footed ferret ( <i>Mustela nigripes</i> )	<p align="center"><b>No effect</b></p> <p>Samuel R. McKelvie has no prairie dog towns and Bessey Division has a one or two prairie dog towns in the project area. No ferrets are known to occur on USFS lands in Sandhills. Proposed action related to Whitetail ReRoute would traverse the west edge of the prairie dog town north of the campground.</p>	<p align="center"><b>No effect</b></p> <p>Samuel R. McKelvie has no prairie dog towns and Bessey Division has a one or two prairie dog towns in the project area. No ferrets are known to occur on USFS lands in Sandhills.</p>	<p align="center"><b>No effect</b></p> <p>Samuel R. McKelvie has no prairie dog towns and Bessey Division has a one or two prairie dog towns in the project area. No ferrets are known to occur on USFS lands in Sandhills. Proposed action related to Whitetail ReRoute would traverse the west edge of the prairie dog town north of the campground.</p>
Blowout penstemon ( <i>Penstemon haydenii</i> )	<p align="center"><b>No effect</b></p> <p>Existing trails recommended for inclusion in travel management on Bessey Ranger District do not pass near known blowout penstemon sites.</p>	<p align="center"><b>No effect</b></p> <p>Existing trails do not pose any threat to blowout penstemon transplant sites due to travel management and penstemon sites are not readily known by the public.</p>	<p align="center"><b>No effect</b></p> <p>Existing trails recommended for inclusion in travel management on Bessey Ranger District do not pass near known blowout penstemon sites.</p>
Western prairie-fringed orchid ( <i>Platanthera praecleara</i> )	<p align="center"><b>No effect</b></p> <p>Existing trails recommended for inclusion in travel management do traverse sub-irrigated meadows. One trail that may potentially have orchids is Cormorant on Samuel R. McKelvie and the area will be surveyed in mid-June. An occurrence is highly unlikely due to annual grazing of the site.</p>	<p align="center"><b>No effect</b></p> <p>No western prairie-fringed orchids are known to occur on Bessey Ranger District. The only existing potential habitat for the orchid would be along Steer Creek on Samuel R. McKelvie NF.</p>	<p align="center"><b>No effect</b></p> <p>Existing trails recommended for inclusion in travel management do traverse sub-irrigated meadows. One trail that may potentially have orchids is Cormorant on Samuel R. McKelvie and the area will be surveyed in mid-June. An occurrence is highly unlikely due to annual grazing of the site.</p>

**Table 15. Effects Analysis of the Bessey Travel Management Review Project on Forest Service Sensitive species and Management Indicator Species.**

**NI** – No impact – where no effect is expected.

**MAII** – May adversely impact individuals, but not likely to result in a loss of viability in the planning area, nor cause a trend toward federal listing – where effects in the project area are not expected to be significant and the species and its habitat will remain well distributed.

Species	Proposed Action Alternative	No Action Alternative	Maintain Non-Motorized Area Alternative
Fringed myotis ( <i>Myotis thysanodes</i> )	<b>NI</b>  Bat not known to occur on Bessey District or Samuel R. McKelvie NF and has no essential roosting habitat.	<b>NI</b>  Bat not known to occur on Bessey District or Samuel R. McKelvie NF and has no essential roosting habitat.	<b>NI</b>  Bat not known to occur on Bessey District or Samuel R. McKelvie NF and has no essential roosting habitat.
Townsend's big-eared bat ( <i>Corynorhinus townsendii</i> )	<b>NI</b>  Bat not known to occur on Bessey District or Samuel R. McKelvie NF and has no essential underground roosting habitat due to sandhills.	<b>NI</b>  Bat not known to occur on Bessey District or Samuel R. McKelvie NF and has no essential underground roosting habitat due to sandhills.	<b>NI</b>  Bat not known to occur on Bessey District or Samuel R. McKelvie NF and has no essential underground roosting habitat due to sandhills.
Hoary bat ( <i>Lasiurus cinereus</i> )	<b>NI</b>  Bat is known to occur on Bessey District (forested habitat). Occurrence of this bat on similar forested areas of the Samuel R. McKelvie NF may occur. However, project area does not contain suitable habitat as it is primarily all upland Sandhills.	<b>NI</b>  Bat is known to occur on Bessey District (forested habitat). Occurrence of this bat on similar forested areas of the Samuel R. McKelvie NF may occur. However, project area does not contain suitable habitat as it is primarily all upland Sandhills.	<b>NI</b>  Bat is known to occur on Bessey District (forested habitat). Occurrence of this bat on similar forested areas of the Samuel R. McKelvie NF may occur. However, project area does not contain suitable habitat as it is primarily all upland Sandhills.

Species	Proposed Action Alternative	No Action Alternative	Maintain Non-Motorized Area Alternative
<p>Black-tailed prairie dog (<i>Cynomys ludovicianus</i>)</p>	<p><b>MAII</b></p> <p>Species occurs on Bessey District but does not occur on Samuel R. McKelvie. Sandy soils are not conducive to habitat needs of the species thus distribution is very limited. Trails will have no effect. Reroute of Whitetail Campground trail will skirt edge of existing prairie dog town and may have incidental impact on individual near trail, but not effect population.</p>	<p><b>NI</b></p> <p>Species occurs on Bessey District but does not occur on Samuel R. McKelvie. Sandy soils are not conducive to habitat needs of the species thus distribution is very limited. Trails will have no effect.</p>	<p><b>MAII</b></p> <p>Species occurs on Bessey District but does not occur on Samuel R. McKelvie. Sandy soils are not conducive to habitat needs of the species thus distribution is very limited. Trails will have no effect. Reroute of Whitetail Campground trail will skirt edge of existing prairie dog town and may have incidental impact on individual near trail, but not effect population.</p>
<p>Swift fox (<i>Vulpes velox</i>)</p>	<p><b>NI</b></p> <p>The project area does not contain suitable habitat for this species.</p>	<p><b>NI</b></p> <p>The project area does not contain suitable habitat for this species.</p>	<p><b>NI</b></p> <p>The project area does not contain suitable habitat for this species.</p>
<p>Rocky mountain bighorn sheep (<i>Ovis canadensis</i>)</p>	<p><b>NI</b></p> <p>The project area does not contain suitable habitat for this species.</p>	<p><b>NI</b></p> <p>The project area does not contain suitable habitat for this species.</p>	<p><b>NI</b></p> <p>The project area does not contain suitable habitat for this species.</p>
<p>River otter (<i>Lontra Canadensis</i>)</p>	<p><b>NI</b></p> <p>Otters occupy riparian areas such as Loup, Dismal, and Niobrara rivers, project area does not contain suitable habitat as it is primarily all upland Sandhills.</p>	<p><b>NI</b></p> <p>Otters occupy riparian areas such as Loup, Dismal, and Niobrara rivers, project area does not contain suitable habitat as it is primarily all upland Sandhills.</p>	<p><b>NI</b></p> <p>Otters occupy riparian areas such as Loup, Dismal, and Niobrara rivers, project area does not contain suitable habitat as it is primarily all upland Sandhills.</p>

Species	Proposed Action Alternative	No Action Alternative	Maintain Non-Motorized Area Alternative
American bittern ( <i>Botaurus lentiginosus</i> )	<b>MAII</b>  Samuel R. McKelvie NF has wetlands along Cormorant trail, but should not impact bitterns. Nesting near trails may have incidental impact on individual, but not effect population.	<b>NI</b>  Current trails do not encounter significant number of wetlands and don't provide suitable habitat	<b>MAII</b>  Samuel R. McKelvie NF has wetlands along Cormorant trail, but should not impact bitterns. Nestin near trails may have incidental impact on individual, but not effect population.
Black tern ( <i>Chlidonias niger</i> )	<b>NI</b>  Limited ponding habitat occurs to attract species.	<b>NI</b>  Limited ponding habitat occurs to attract species	<b>NI</b>  Limited ponding habitat occurs to attract species
Bald eagle ( <i>Haliaeetus leucocephalus</i> )	<b>NI</b>  No bald eagles are known to be nesting or present in the project area, and given the timing and extent of the project activities this species should not be affected by the proposed action.	<b>NI</b>  No bald eagles are known to be nesting or present in the project area, and given the timing and extent of the project activities this species should not be affected by the proposed action.	<b>NI</b>  No bald eagles are known to be nesting or present in the project area, and given the timing and extent of the project activities this species should not be affected by the proposed action.
Ferruginous hawk ( <i>Buteo regalis</i> )	<b>NI</b>  Species of grasslands and observations very infrequent. No nesting habitat near trails.	<b>NI</b>  Species of grasslands and observations very infrequent. No nesting habitat near trails.	<b>NI</b>  Species of grasslands and observations very infrequent. No nesting habitat near trails.
American peregrine falcon ( <i>Falco peregrinus anatum</i> )	<b>NI</b>  The project area does not contain suitable habitat such as perch and nesting habitat for this species.	<b>NI</b>  The project area does not contain suitable habitat such as perch and nesting habitat for this species.	<b>NI</b>  The project area does not contain suitable habitat such as perch and nesting habitat for this species.

Species	Proposed Action Alternative	No Action Alternative	Maintain Non-Motorized Area Alternative
Northern harrier ( <i>Circus cyaneus</i> )	<b>NI</b>  Suitable habitat occurs throughout project area and no nesting habitat near trails.	<b>NI</b>  Suitable habitat occurs throughout project area and no nesting habitat near trails.	<b>NI</b>  Suitable habitat occurs throughout project area and no nesting habitat near trails.
Mountain plover ( <i>Charadrius montanus</i> )	<b>NI</b>  The project area does not contain suitable habitat and is outside the geographic range for this species.	<b>NI</b>  The project area does not contain suitable habitat and is outside the geographic range for this species.	<b>NI</b>  The project area does not contain suitable habitat and is outside the geographic range for this species.
Long-billed curlew ( <i>Numenius americanus</i> )	<b>MAII</b>  Species common in Sandhills during summer and nesting near existing trails may have incidental impact on individual, but not effect population.	<b>MAII</b>  Species common in Sandhills during summer and nesting near existing trails may have incidental impact on individual, but not effect population.	<b>MAII</b>  Species common in Sandhills during summer and nesting near existing trails may have incidental impact on individual, but not effect population.
Yellow-billed cuckoo ( <i>Coccyzus americanus</i> )	<b>NI</b>  The project area does not contain optimal riparian and forested habitat for this species relatively no tree nesting habitat.	<b>NI</b>  The project area does not contain optimal riparian and forested habitat for this species relatively no tree nesting habitat.	<b>NI</b>  The project area does not contain optimal riparian and forested habitat for this species relatively no tree nesting habitat.
Burrowing owl ( <i>Athene cunicularia</i> )	<b>MAII</b>  Primarily found on prairie dog towns at Bessey and there are no prairie dog towns at Samuel R. McKelvie. Trail reroute near Bessey District Whitetail campground will skirt edge of prairie dog town, thus may have incidental impact on nesting of an individual, but not effect population.	<b>MAII</b>  Primarily found on prairie dog towns at Bessey and there are no prairie dog towns at Samuel R. McKelvie. Trail reroute near Bessey District Whitetail campground will skirt edge of prairie dog town, thus may have incidental impact on nesting of an individual, but not effect population.	<b>MAII</b>  Primarily found on prairie dog towns at Bessey and there are no prairie dog towns at Samuel R. McKelvie. Trail reroute near Bessey District Whitetail campground will skirt edge of prairie dog town, thus may have incidental impact on nesting of an individual, but not effect population.

Species	Proposed Action Alternative	No Action Alternative	Maintain Non-Motorized Area Alternative
Short-eared owl ( <i>Asio flammeus</i> )	<b>MAII</b>  Common species in Sandhills and ground nesting near existing trails could impact an individual, but not effect population.	<b>MAII</b>  Common species in Sandhills and ground nesting near existing trails could impact an individual, but not effect population.	<b>MAII</b>  Common species in Sandhills and ground nesting near existing trails could impact an individual, but not effect population.
Lewis's woodpecker ( <i>Melanerpes lewis</i> )	<b>NI</b>  The project area does not contain suitable habitat for this species.	<b>NI</b>  The project area does not contain suitable habitat for this species.	<b>NI</b>  The project area does not contain suitable habitat for this species.
Loggerhead shrike ( <i>Lanius ludovicianus</i> )	<b>MAII</b>  Project area does contain scattered woodland/shrubland habitat amongst prairie, thus nesting in shrubland habitat near existing trail may impact individual, but not effect population.	<b>MAII</b>  Project area does contain scattered woodland/shrubland habitat amongst prairie, thus nesting in shrubland habitat near existing trail may impact individual, but not effect population..	<b>MAII</b>  Project area does contain scattered woodland/shrubland habitat amongst prairie, thus nesting in shrubland habitat near existing trail may impact individual, but not effect population.
Brewer's sparrow ( <i>Spizella breweri</i> )	<b>NI</b>  The project area does not contain suitable habitat for this species.	<b>NI</b>  The project area does not contain suitable habitat for this species.	<b>NI</b>  The project area does not contain suitable habitat for this species.
Grasshopper sparrow ( <i>Ammodramus savannarum</i> )	<b>MAII</b>  Common in Sandhills during summer breeding season and ground nesting near existing trails may have incidental impact on an individual, but not affect the population.	<b>MAII</b>  Common in Sandhills during summer breeding season and ground nesting near existing trails may have incidental impact on an individual, but not affect the population.	<b>MAII</b>  Common in Sandhills during summer breeding season and ground nesting near existing trails may have incidental impact on an individual, but not affect the population.

Species	Proposed Action Alternative	No Action Alternative	Maintain Non-Motorized Area Alternative
<p>McCown's longspur (<i>Calcarius mccownii</i>)</p>	<p><b>MAII</b></p> <p>Species of open, short to mixed grass prairies and ground nesting near existing trails may have incidental impact on individual, but will not have an effect on population.</p>	<p><b>MAII</b></p> <p>Species of open, short to mixed grass prairies and ground nesting near existing trails may have incidental impact on individual, but will not have an effect on population.</p>	<p><b>MAII</b></p> <p>. Species of open, short to mixed grass prairies and ground nesting near existing trails may have incidental impact on individual, but will not have an effect on population.</p>
<p>Chestnut-collard longspur (<i>Calcarius ornatus</i>)</p>	<p><b>MAII</b></p> <p>Species of open, short to mixed grass prairies and ground nesting near existing trails may have incidental impact on individual, but will not have an effect on population.</p>	<p><b>MAII</b></p> <p>. Species of open, short to mixed grass prairies and ground nesting near existing trails may have incidental impact on individual, but will not have an effect on population.</p>	<p><b>MAII</b></p> <p>. Species of open, short to mixed grass prairies and ground nesting near existing trails may have incidental impact on individual, but will not have an effect on population.</p>
<p>Plains leopard frog (<i>Lithobates blairi</i>)</p>	<p><b>MAII</b></p> <p>Limited suitable habitat on Bessey or Samuel R. McKelvie except as associated with proposed existing Cormorant trail through wetland. Travel along trails may have incidental impact on an individual, but will not have an impact on population.</p>	<p><b>MAII</b></p> <p>Limited suitable habitat on Bessey or Samuel R. McKelvie except as associated with proposed existing Cormorant trail through wetland. Travel along trails may have incidental impact on an individual, but will not have an impact on population.</p>	<p><b>MAII</b></p> <p>Limited suitable habitat on Bessey or Samuel R. McKelvie except as associated with proposed existing Cormorant trail through wetland. Travel along trails may have incidental impact on an individual, but will not have an impact on population.</p>

Species	Proposed Action Alternative	No Action Alternative	Maintain Non-Motorized Area Alternative
<p>Northern leopard frog (<i>Rana pipiens</i>)</p>	<p><b>MAII</b></p> <p>Limited suitable habitat on Bessey or Samuel R. McKelvie except as associated with proposed existing Cormorant trail through wetland. Travel along trails may have incidental impact on an individual, but will not have an impact on population.</p>	<p><b>MAII</b></p> <p>Limited suitable habitat on Bessey and Steer Creek wetland on Samuel R. McKelvie is only wetland that encounters travel management. Travel along trails may have incidental impact on an individual, but will not have an impact on population.</p>	<p><b>MAII</b></p> <p>Limited suitable habitat on Bessey or Samuel R. McKelvie except as associated with proposed existing Cormorant trail through wetland. Travel along trails may have incidental impact on an individual, but will not have an impact on population.</p>
<p>Flathead chub (<i>Platygobio gracilis</i>)</p>	<p><b>NI</b></p> <p>The project area does not contain suitable habitat for this species.</p>	<p><b>NI</b></p> <p>The project area does not contain suitable habitat for this species.</p>	<p><b>NI</b></p> <p>The project area does not contain suitable habitat for this species.</p>
<p>Plains minnow (<i>Hybognathus placitus</i>)</p>	<p><b>NI</b></p> <p>The proposed existing trails do not traverse any riparian areas effecting habitat for the species.</p>	<p><b>NI</b></p> <p>The existing trails do not traverse any riparian areas except Steer Creek on Samuel R. McKelvie. Species not discovered during sampling in 2003, thus should have no effect on species.</p>	<p><b>NI</b></p> <p>The proposed existing trails do not traverse any riparian areas effecting habitat for the species.</p>
<p>Sturgeon chub (<i>Macrhybopsis gelida</i>)</p>	<p><b>NI</b></p> <p>The project area does not contain suitable habitat for this species.</p>	<p><b>NI</b></p> <p>The project area does not contain suitable habitat for this species.</p>	<p><b>NI</b></p> <p>The project area does not contain suitable habitat for this species.</p>

Species	Proposed Action Alternative	No Action Alternative	Maintain Non-Motorized Area Alternative
Pearl dace ( <i>Margariscus margarita</i> )	<b>NI</b>  The proposed existing trails do not traverse any riparian areas effecting habitat for the species.	<b>NI</b>  The existing trails do not traverse any riparian areas except Steer Creek on Samuel R. McKelvie. Species not discovered during sampling in 2003, thus should have no effect on species.	<b>NI</b>  The proposed existing trails do not traverse any riparian areas effecting habitat for the species.
Northern redbelly dace ( <i>Phoxinus eos</i> )	<b>NI</b>  The proposed existing trails do not traverse any riparian areas effecting habitat for the species.	<b>NI</b>  The existing trails do not traverse any riparian areas except Steer Creek on Samuel R. McKelvie. Species not discovered during sampling in 2003, thus should have no effect on species.	<b>NI</b>  The proposed existing trails do not traverse any riparian areas effecting habitat for the species.
Finescale dace ( <i>Pho.inus neogaeus</i> )	<b>NI</b>  The proposed existing trails do not traverse any riparian areas effecting habitat for the species.	<b>NI</b>  The existing trails do not traverse any riparian areas except Steer Creek on Samuel R. McKelvie. Species not discovered during sampling in 2003, thus should have no effect on species.	<b>NI</b>  The proposed existing trails do not traverse any riparian areas effecting habitat for the species.
Cooper's Rocky Mountain snail ( <i>Oreohelix strigosa cooperi</i> )	<b>NI</b>  The project area does not contain suitable habitat for this species.	<b>NI</b>  The project area does not contain suitable habitat for this species.	<b>NI</b>  The project area does not contain suitable habitat for this species.

Species	Proposed Action Alternative	No Action Alternative	Maintain Non-Motorized Area Alternative
Ottoe Skipper ( <i>Hesperia ottoe</i> )	<b>MAII</b>  Project area has considerable suitable habitat grassland nesting near existing trails may have incidental impact on an individual, but not have an effect on the population.	<b>MAII</b>  Project area has considerable suitable habitat grassland nesting near existing trails may have incidental impact on an individual, but not have an effect on the population.	<b>MAII</b>  Project area has considerable suitable habitat grassland nesting near existing trails may have incidental impact on an individual, but not have an effect on the population.
Regal fritillary butterfly ( <i>Speyeria idalia</i> )	<b>MAII</b>  Project area has considerable suitable habitat grassland nesting near existing trails may have incidental impact on an individual, but not have an effect on the population.	<b>MAII</b>  Project area has considerable suitable habitat grassland nesting near existing trails may have incidental impact on an individual, but not have an effect on the population.	<b>MAII</b>  Project area has considerable suitable habitat grassland nesting near existing trails may have incidental impact on an individual, but not have an effect on the population.
Lesser panicled sedge ( <i>Carex diandra</i> )	<b>MAII</b>  Samuel R. McKelvie NF has wetlands along Cormorant trail, but this alternative should not impact this species.	<b>NI</b>  Current trails do not encounter significant number of wetlands and don't provide suitable habitat.	<b>MAII</b>  Samuel R. McKelvie NF has wetlands along Cormorant trail, but this alternative should not impact this species.
Yellow widelip orchid <i>Liparis loeselli</i>	<b>MAII</b>  Samuel R. McKelvie NF has wetlands along Cormorant trail, but this alternative should not impact this species.	<b>NI</b>  Current trails do not encounter significant number of wetlands and don't provide suitable habitat.	<b>MAII</b>  Samuel R. McKelvie NF has wetlands along Cormorant trail, but this alternative should not impact this species.
Hall's bulrush <i>Schoenoplectus hallii</i>	<b>MAII</b>  Samuel R. McKelvie NF has wetlands along Cormorant trail, but this alternative should not impact this species.	<b>NI</b>  Current trails do not encounter significant number of wetlands and don't provide suitable habitat.	<b>MAII</b>  Samuel R. McKelvie NF has wetlands along Cormorant trail, but this alternative should not impact this species.

Species	Proposed Action Alternative	No Action Alternative	Maintain Non-Motorized Area Alternative
Barr's milkvetch ( <i>Astragalus barrii</i> )	<b>NI</b>  The project area does not contain suitable habitat for this species.	<b>NI</b>  The project area does not contain suitable habitat for this species.	<b>NI</b>  The project area does not contain suitable habitat for this species.
Dropleaf buckwheat ( <i>Eriogonum visheri</i> )	<b>NI</b>  The project area does not contain suitable habitat for this species.	<b>NI</b>  The project area does not contain suitable habitat for this species.	<b>NI</b>  The project area does not contain suitable habitat for this species.
Lesser bladderwort ( <i>Utricularia minor</i> )	<b>MAII</b>  Samuel R. McKelvie NF has wetlands along Cormorant trail, but this alternative should not impact this species.	<b>NI</b>  Current trails do not encounter significant number of wetlands and don't provide suitable habitat.	<b>MAII</b>  Samuel R. McKelvie NF has wetlands along Cormorant trail, but this alternative should not impact this species.
Sharp-tailed grouse ( <i>Tympanuchus phasianellus</i> )	<b>No Measurable Effect</b>  Suitable habitat throughout Sandhills and use of existing trails will have relatively no effect on population trend.	<b>No Measurable Effect</b>  Suitable habitat throughout Sandhills and use of existing trails will have relatively no effect on population trend.	<b>No Measurable Effect</b>  Suitable habitat throughout Sandhills and use of existing trails will have relatively no effect on population trend.
Greater prairie-chicken ( <i>Tympanuchus cupido pinnatus</i> )	<b>MAII</b> <b>No Measurable Effect (MIS)</b>  Suitable habitat throughout Sandhills and nesting near existing trail may have an impact on an individual, but will have no measurable impact on the population trend.	<b>MAII</b> <b>No Measurable Effect (MIS)</b>  Suitable habitat throughout Sandhills and nesting near existing trail may have an impact on an individual, but will have no measurable impact on the population trend.	<b>MAII</b> <b>No Measurable Effect (MIS)</b>  Suitable habitat throughout Sandhills and nesting near existing trail may have an impact on an individual, but will have no measurable impact on the population trend.

## FINDING OF NO SIGNIFICANT IMPACT

As the responsible official, I am responsible for evaluating the effects of the project relative to the definition of significance established by the CEQ Regulations (40 CFR 1508.13 and CFR 1508.27). I have reviewed and considered the EA and documentation included in the project record, and I have determined that the Bessey Travel Management Review Project will not have a significant effect on the quality of the human environment as defined by 40 CFR 1508.14. As a result, no environmental impact statement will be prepared. My rationale for this finding is as follows, with consideration of both context and intensity organized by sub-section of the CEQ definition of significance cited above.



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District Ranger  
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Date

## Context

The significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale, rather than the world as a whole. Both short- and long-term effects are relevant (40 CFR 1508.27 (a) ).

The effects of the proposed actions are limited in context. Project activities are limited in size at 34 linear miles throughout approximately 210,000 acres on Samuel R. McKelvie National Forest and the Bessey Unit of the Nebraska National Forest. Effects are local in nature and are not likely to significantly affect regional or national resources. Design features are incorporated into the Proposed Action and Alternative 3 to minimize and avoid adverse impacts. Within the context of the landscape as a whole, the ecological consequences are not found to be significant in either the short- or long-term.

## Intensity

Intensity is a measure of the severity, extent, or quantity of effects, and is based on information from the effects analysis of this EA and the references in the project record. The effects of this project have been appropriately and thoroughly considered with an analysis that is responsive to concerns and issues raised by the public. The agency has taken a hard look at the environmental effects using relevant scientific information and knowledge of site-specific conditions gained from field visits. My finding of no significant impact is based on the context of the project and intensity of effects using the ten factors identified in 40 CFR 1508.27(b).

1. *Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.*

Review of the EA and the project record clearly illustrate consideration of potential effects to the human environment, both beneficial and adverse. Based on the detailed specialist reports contained within the project file and summarized in the EA, I conclude that the specific direct, indirect, and cumulative effects of the proposed action are not significant, and this action does not rely on potentially beneficial effects to balance potentially adverse environmental effects.

Implementation of this project would increase motorized access, largely producing effects which are beneficial to recreationists, conservation partners, and the Forest Service. Beneficial effects include, but aren't limited to: increased public access for fishing and hunting, horseback riding, dispersed camping and game retrieval, wildlife and scenery observation, recreational opportunities for youth, fire response in remote areas, and an increased number of existing fire breaks and control lines (EA, pages 10-17.)

Adverse effects resulting from implementation of this project include, but are not limited to: increased potential for soil erosion and soil relocation (EA, pages 17-18), increased potential for spread of invasive plant species (EA, pages 15-16), increased potential for user conflicts (such as between motorized and non-motorized users) (EA, pages 12-14), increased perception of disconnected wildlife habitat (EA, pages 12-14), and increased potential for human-caused fires (EA, pages 16-17).

Implementation of this project may affect the American burying beetle (*Nicrophorus americanus*), which is an endangered species. Any effects are not likely to be adverse. (EA, pages 18-19.)

In consideration of any potential adverse effects, mitigations and preventative measures were included in project design (EA, page 8). Monitoring practices have been similarly considered in project design to evaluate potential effects, both adverse and beneficial (EA, page 9).

2. *The degree to which the proposed action affects public health or safety.*

Consideration to public health and safety was addressed in multiple sections of the EA. From those findings, it is apparent that the proposed increase in motorized use may increase conflicts between user groups, such as between non-motorized users and motorized users (EA, pages 12-14). In addition, increased motorized use may increase chances of human-caused fire ignitions, but will also provide improved access for emergency vehicles (EA, pages 16-17). Within the proposed action, the route identified as North River Access will cross a double set of railroad tracks. That crossing currently has no barricades, and visibility may be reduced if both tracks are occupied (EA, page 23).

Regarding public health, this project will not likely degrade water quality, nor will it increase greenhouse emissions in any measureable volume (EA, pages 17-18).

3. *Unique characteristics of the geographic area such as the proximity to historical or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*

While not immediately adjacent to any notable parklands, prime farmlands, wild and scenic rivers, or other ecologically-critical locations, the project area is within 40 miles of such locations within the larger geographic area of the Nebraska Sandhills. Among others, these locations include the Fort Niobrara National Wildlife Refuge, the Valentine National Wildlife Refuge, the Niobrara National Scenic River, Merritt Reservoir State Recreation Area, and Smith Falls State Park. Because these locations are not immediately adjacent to the project area, no direct effects to those locations will result from this project. Indirect effects may include increased visitor traffic at such locations.

Known wetlands are adjacent to the project area, within 1 mile at Samuel R. McKelvie National Forest. These wetlands are located near Steer Creek Campground and at the Cormorant grazing allotment. This project is not expected to negatively affect such wetlands. (EA, page 17-18)

Also adjacent to the project area are historical and cultural resources, including those within the Bessey administrative site at the Bessey Unit of the Nebraska National Forest, among others. This project will not have any directly negative effects to historical and cultural resources, but may have limited indirect effects with the perception of increased access to such sites. (EA, page 22.)

4. *The degree to which the effects on the quality of the human environment are likely to be highly controversial.*

Based on the limited context of the project, our review of the public comments received, and the analysis documented in the EA and the project record, we do not find any controversial effects to the human environment. In the NEPA context, “highly controversial” does not encompass all public opposition to a proposed action, but instead only applies to a substantial dispute as to the size, nature, or effect of an action.<sup>1</sup> We conclude that the effects of the proposed action are not considered highly controversial by professionals, specialists, and scientists from associated fields of forestry, wildlife biology, soils, botany, fisheries, and hydrology.

5. *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.*

Based on our review of public comments regarding this project and the analysis documented in the EA and Project File, we conclude that there are no uncertain or unique characteristics in the project area which have not been previously encountered or that would constitute an unknown risk to the human environment.

6. *The degree to which the action may establish precedent for future actions with significant effects or represents a decision about a future consideration.*

The Bessey Travel Management Review Project is a site-specific project that does not set precedence for future actions or represent a decision about future considerations. Any proposed future project must be evaluated on its own merits and effects.

7. *Whether the action is related to other actions with cumulatively significant impacts.*

Connected, cumulative, and similar actions have been considered and included in the scope of the analysis. The analysis accounts for past, present, and reasonably foreseeable future actions. Based on our review of the analysis and disclosure of effects in the EA, specialists’ reports, Biological Assessments and Evaluations, and other analyses in the Project Record, we conclude that the Bessey Travel Management Project would not contribute potential cumulative adverse impacts (EA, page 10-23).

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<sup>1</sup> Indiana Forest Alliance, Inc. v. United States Forest Service 325 F.3d 851 (10th Cir.2003) citing Wetlands Action Network v. United States Army Corps of Engineers, 222 F.3d 1105 (9th Cir.2000); Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1212 (9th Cir.1998) citing Greenpeace Action v. Franklin, 14 F.3d 1324, 1335 (9th Cir.1993); Sierra Club v. United States Forest Service, 843 F.2d 1190, 1193 (9th Cir.1988) (accord); LaFlamme v. Federal Energy Regulatory Commission, 852 F.2d 389, 400-01 (9th Cir.1988)

8. *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.* No archaeological sites are located within the project area. However, seven archaeological sites are located within 1 mile of the project area, six of which are ineligible for the National Register of Historic Places (NHRP); the remaining site has not been evaluated against NRHP significance criteria (EA, page 22).

The Bessey Travel Management Review Project will not directly affect any cultural resources, but may indirectly affect such resources by increasing perceived access to such sites, rendering them vulnerable to intentional and unintentional damage (EA, page 22).

9. *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.*

Two federally-listed endangered species are located within the Samuel R. McKelvie National Forest and the Bessey Unit of the Nebraska National Forest: blowout penstemon (*Penstemon haydenii*) and American burying beetle (*Nicrophorus americanus*).

Project design and route selection intentionally avoid communities of blowout penstemon. Blowout penstemon therefore will not be affected by the Bessey Travel Management Review Project (EA, pages 18-19).

Potential habitat for American burying beetle is located along the project route identified as Cormorant. A biological assessment found that the Bessey Travel Management Review Project may affect the American burying beetle population, but those effects are not likely to be adverse within the larger population of American burying beetle (EA, pages 18-19).

10. *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

The proposed action meets all federal, state, and local laws, including those for climate change (EA, pages 17-18), air quality (EA, pages 17-18), heritage resources (EA, page 22), water quality (EA, pages 17-18), soil productivity (EA, pages 17-18) and threatened and endangered species (EA, pages 18-22). It also meets the National Environmental Policy Act disclosure requirements (Bessey Travel Management Review Project EA). The proposed action is consistent with the National Forest Management Act (NFMA) and the Nebraska Land and Resource Management Plan (NLRMP) 2001 Revision. Proposed activities are consistent with the standards, goals, and objectives of Management Areas 4.32 (Dispersed Recreation-High Use), 8.5 (Charles E. Bessey Nursery) and 8.6 (Administrative Sites) as determined in the NLRMP. This proposal does not require any Forest Plan amendments.