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Theodore Roosevelt National Park
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Public Draft



Facility Revitalization Plan

*A Long-Range Plan for Improving Facilities, Housing, and
Visitor Experience at Theodore Roosevelt National Park*

Environmental Assessment

PUBLIC COMMENT

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ACRONYMS AND ABBREVIATIONS

ABA	Architectural Barriers Act
BMP	best management practice
CFR	Code of Federal Regulations
DO	National Park Service Director's Order
EA	Environment Assessment
GSA	General Services Administration
I-94	Interstate 94
MDHT	Maah Daah Hey Trail
NEPA	National Environmental Policy Act
NPS	National Park Service
NRHP	National Register of Historic Places
OSHA	Occupational Safety and Health Administration
park	Theodore Roosevelt National Park
plan	Facility Revitalization Plan
RV	Recreational vehicle
Section 106	National Historic Preservation Act, section 106
SHPO	North Dakota State Historic Preservation Office
THPO	Tribal Historical Preservation Officer

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1 CHAPTER 1: INTRODUCTION, PURPOSE, AND NEED

1.1 INTRODUCTION AND CONTEXT

The National Park Service (NPS) at Theodore Roosevelt National Park is preparing a Facility Revitalization Plan and subsequent environmental assessment (EA) that re-envision several developed areas of the park. These concepts for improving visitor experience and revitalizing park facilities are intended to:

- Define appropriate visitor uses and park functions
- Prepare for future increases in visitation
- Provide an extraordinary visitor experience
- Coordinate the interrelationships among uses, site resources, and facilities
- Establish a consistent, unified character for development
- Establish a decision-making framework for capital improvements, preservation, and development that would address existing deferred maintenance and future facility needs in five areas of the park

The park is composed of three separate areas of land. The North and South Units feature scenic drives, wildlife viewing, hiking, visitor centers, ranger-led programs, and much more. The undeveloped Elkhorn Ranch Unit preserves the site of Roosevelt's "home ranch" in a remote area along the Little Missouri River. This EA looks at five study areas contained within these units.

There are three study areas in the South Unit: Medora Headquarters Area, Painted Canyon, and Peaceful Valley Ranch. There is also a study area at the entry area of the North Unit and a study area at Elkhorn Ranch Unit (Figure 1).

The study area at the Medora Headquarters Area is about 100 acres within the South Unit directly adjacent to the Medora city boundary. Facilities of note in the planning area include the South Unit visitor center, Maltese Cross Cabin, entrance station, headquarters/administration area, park staff housing, maintenance buildings, walking paths, parking areas, and associated roads.

The Painted Canyon area is located in the South Unit of the park off Interstate 94 (I-94) and is a state-designated rest area in addition to being part of the national park. It includes a visitor center with restroom facilities, two sewage lagoons, a picnic area, hiking and horse-riding trails, and parking, all of which are closed in the winter.

The third South Unit area is located at Peaceful Valley Ranch, which is a designated cultural landscape whose contributing structures have recently undergone rehabilitation for current use. These structures include a historic ranch house, bunkhouse, barn, and corrals organized around a dirt parking lot and circulation space. Recent additions include a vault toilet, trails, and a trailhead.

The North Unit is located closer to Watford City, North Dakota, off US Highway 85 along the Little Missouri River. Facilities there include a historic park monument sign, entrance station, temporary visitor center, temporary staff office, temporary restroom trailers, maintenance facilities, park housing, and two sewage lagoons.

Introduction, Purpose, and Need

The Elkhorn Ranch Unit has minimal development and is an important site to Theodore Roosevelt's history in the park. The study area currently includes a trail, benches, interpretive waysides, and connections to the Maah Daah Hey Trail (MDHT) system but no other development or facilities.

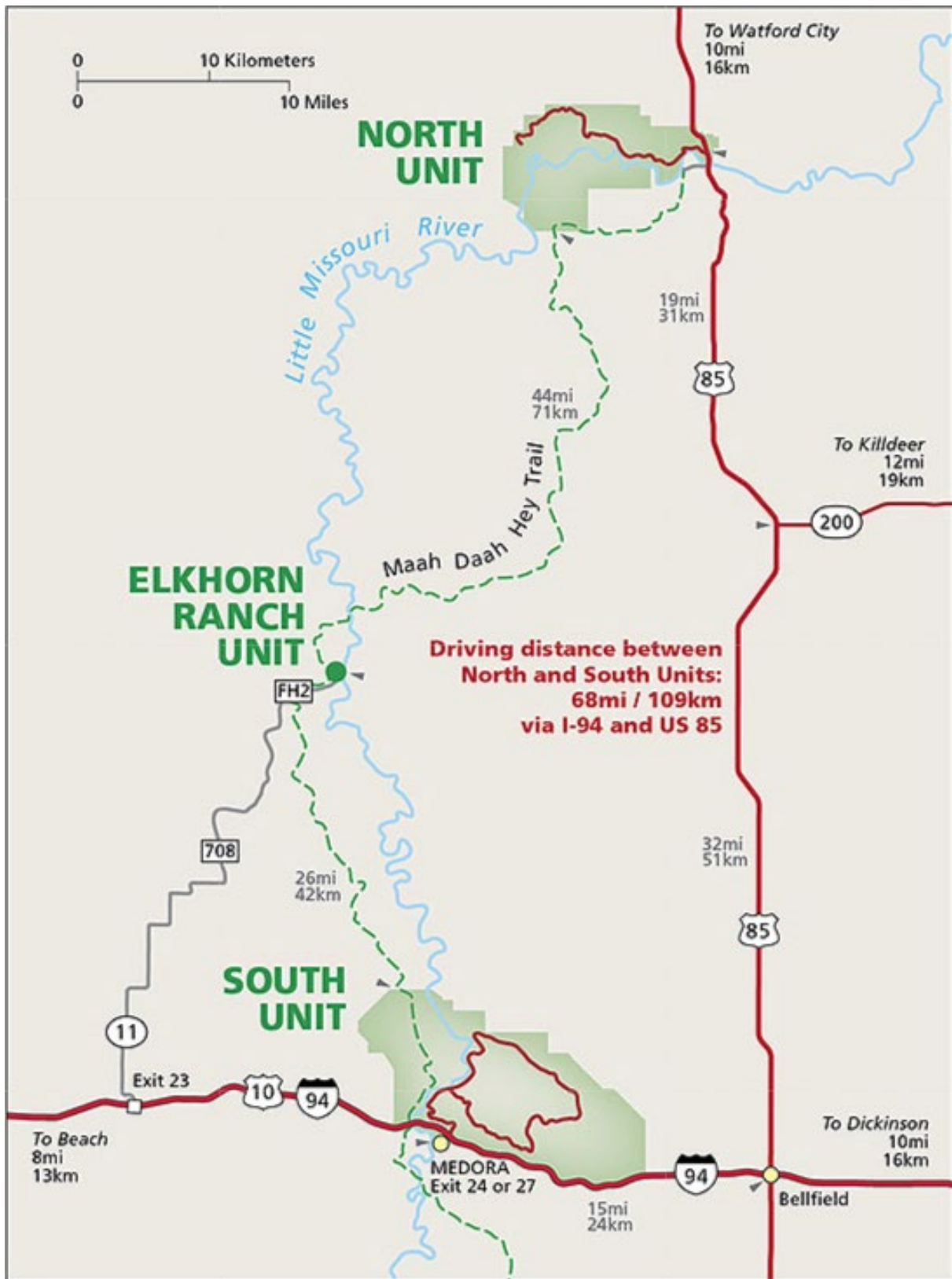


FIGURE 1.1-1. SOUTH UNIT (MEDORA HEADQUARTERS AREA, PAINTED CANYON, AND PEACEFUL VALLEY RANCH), NORTH UNIT, AND ELKHORN RANCH UNIT

1.2 PURPOSE AND SIGNIFICANCE OF THE PARK

1.2.1 Park Purpose

Theodore Roosevelt National Memorial Park was established on April 25, 1947. It was re-designated on November 10, 1978, as Theodore Roosevelt National Park. The purpose statement lays the foundation for understanding what is most important and unique about this park.

Purpose statement for Theodore Roosevelt National Park:

Theodore Roosevelt National Park memorializes Theodore Roosevelt and pays tribute to his enduring contribution to the conservation of our nation's resources by preserving and protecting the scenery, wildlife, and wilderness qualities of the North Dakota Badlands – the landscape that inspired Roosevelt and still inspires visitors today.

1.2.2 Park Significance

Significance statements express why a park's resources and values are important enough to merit designation as a unit of the national park system. Statements of significance describe the distinctive nature of the park and why an area is important within a global, national, regional, and systemwide context. They focus on the most important resources and values that will assist in park planning and management.

The following significance statements have been identified in the Theodore Roosevelt National Park Foundation Document (2014). (Please note that the sequence of the statements does not reflect the level of significance.)

- Theodore Roosevelt National Park's North Dakota Badlands (also called Little Missouri River Badlands), a rugged landscape of colorful geological formation, varied habitats, and abundant wildlife, provide a strikingly dramatic contrast with the rolling mixed-grass prairies in the surrounding region.
- Within the park, continuous erosion exposes 65 million years of the earth's past, dramatically illustrated by clearly visible geological strata, a variety of fossils, and the third largest concentration of petrified wood in the national park system.
- Theodore Roosevelt National Park preserves the landscape that inspired Theodore Roosevelt to adopt a conservation ethic. As president, he set aside more than 230 million acres of public land for future generations.
- Theodore Roosevelt National Park preserves the site of the Elkhorn Ranch, Roosevelt's second ranch in the North Dakota Badlands, and provides visitors with an exceptional opportunity to immerse themselves in the same setting where Roosevelt lived, worked, and wrote.
- Theodore Roosevelt National Park provides an unparalleled opportunity to observe bison, bighorn sheep, elk, mule deer, white-tailed deer, pronghorn, coyote, prairie dog, and other native animals in their natural habitat.
- Theodore Roosevelt National Park's night skies, clean air, and wilderness qualities offer exceptional beauty, silence, and solitude, which encourage personal growth, inspiration, and healing, as they did for Theodore Roosevelt in the 1880s.

- In the midst of continuing significant energy development in western North Dakota, Theodore Roosevelt National Park retains a high degree of resource integrity and is an unspoiled example of the North Dakota Badlands.

1.3 PURPOSE AND NEED FOR ACTION

The purpose and need of this comprehensive planning effort is to evaluate redevelopment concepts to meet current and future visitor and park staff needs including improving the visitor experience, meeting administrative functions, and providing for improved employee housing.

This planning effort represents the first comprehensive evaluation of potential improvements in more than four decades. The General Management Plan for Theodore Roosevelt National Park and the Master Plan are from 1987 and 1967, respectively. There has been a substantial amount of change in the park since the facilities and developed areas were reviewed in these documents. These changes include an increase in and change in types of recreation occurring and the maintenance needs of the park. Given this, many of the current visitor and administration facilities do not meet the current needs of visitors or park staff, let alone future needs, due to the trend of increased visitation across the park.

Development concepts are needed to explore how to best address these needs, and plan for future needs, within the greater context of the park, its natural environment, and its existing conditions. The level of facility inadequacies, uses, and needs vary across the five study areas of the park and are further described in section 1.5, Key Issues Identified at the Study Area, below. Development of a plan and evaluation of that plan through the National Environmental Policy Act (NEPA) process is needed to provide the park an opportunity to evaluate facilities and determine how best to meet NPS needs and improve visitor experiences, staff facilities, and park operations while preserving and protecting the park's natural and cultural resources.

1.4 PLANNING GOALS

The overarching goal of this project has been to develop planning concepts that address the need for actions, which also support the mission of both the National Park Service and Theodore Roosevelt National Park, as expressed in the NPS mission statement and the park purpose statements.

More specifically, concepts developed seek to improve the visitor experience and remain welcoming to new visitors, address facility inadequacies, document deferred maintenance, and guide future development proposals for all study areas. All planning concepts discussed in this plan address these objectives by studying proposed improvements in four categories:

- Staff housing
- Aging utilities and transportation/circulation systems
- Maintenance/administration
- Visitor orientation and services

This EA evaluates potential impacts that could occur with implementation of these concepts and details mitigation measures to avoid significant adverse environmental impacts to natural and cultural resources.

1.4.1 Housing Goals

- Provide sufficient, diverse, and modernized park housing with a variety of prototype units that would accommodate staffing changes and ensure adequate recruitment and retention.

1.4.2 Aging Utilities and Transportation/Circulation Systems Goals

- Update utility systems to protect park resources and ensure sustainability.
- Increase capacity of utility and transportation systems for visitor use, year-round services, safer travel, and quality of the visitor experience.
- Improve circulation and parking for efficient passage of modern-sized vehicles.

1.4.3 Maintenance/Administration Goals

- Establish workspaces that comply with codes and standards defined by the Architectural Barriers Act (ABA), Occupational Safety and Health Administration (OSHA), and General Services Administration (GSA) for all job functions.
- Ensure staff have safe, accessible, comfortable, and modern workspaces.

1.4.4 Visitor Orientation and Services Goals

- Provide visitor facilities that incorporate safety, accessibility, sustainability, and universal design to accommodate projected visitation growth and capture additional revenue.

1.5 KEY ISSUES IDENTIFIED AT THE STUDY AREAS

1.5.1 Medora Headquarters Area

The following key issues were identified at the Medora Headquarters Area.

1.5.1.1 Improving, Expanding, and Adding Facilities

Visitation at Theodore Roosevelt National Park has substantially increased since park facilities were originally constructed, and given this, they do not all meet the park's current needs and use patterns, let alone future needs. This is evident upon first entry to the park from Medora at the entrance station; increased visitation requires increased capacity at the entrance station to better facilitate the entry experience and reduce incidents of cars backing up onto the main city thoroughfare, Pacific Avenue. The visitor center itself is not adequate to meet staff or visitor needs and requires reorganization or expansion to better address parking, capacity limits, effective interpretation and orientation, and adequate space for Theodore Roosevelt Nature and History Association sales. The visitor center parking area requires additional capacity and better circulation for both visitors and park staff.

The maintenance facilities in the Medora Headquarters Area also require improvement to better meet staff needs and enable them to adequately maintain park facilities and resources. The current buildings are not large enough for modern vehicles used in the maintenance of the park, so new or improved buildings and better circulation through the area would better facilitate park operations.

The NPS housing in Medora is another area that requires improvement. Additional housing, both in terms of numbers of units and diversity of unit size, is needed to expand park staffing and to enable the successful recruiting required to handle increased visitation and park programming. The housing in this area is also located on the border between the park and the city of Medora so the relationship between these two entities is of additional importance in the context of this study area. Not only is the NPS housing and road system a direct extension of the city of Medora, the architectural styles and scale affects the layout and size of the NPS facilities. Any new or renovated NPS housing in this area should reflect the character of the buildings in Medora.

1.5.1.2 Enhancing and Expanding Visitor Opportunities and Experiences

The Medora Headquarters Area needs additional capacity for visitors to improve their experience. This expansion could also provide additional visitor experience opportunities, especially accessible outdoor visitor experiences, like picnicking, and a short loop trail that includes the Maltese Cross Cabin. The Maltese Cross Cabin, which is a key visitor experience, is also in need of additional protection from the elements. Its current location has some flooding concerns, and it could benefit from additional shelter for the structure itself.

1.5.2 Painted Canyon

The following key issues were identified at the Painted Canyon study area.

1.5.2.1 Improving Site Branding/NPS Identity of Arrival Experience

In addition to being a part of Theodore Roosevelt National Park, Painted Canyon is also a designated North Dakota rest area along I-94. The rest area use of the site creates some confusion because it is not clear to all visitors that Painted Canyon is part of the national park. An issue discussed in the design concepts is how to make the site feel more like a NPS site while still providing the functionality of a rest area. This includes the arrival experience to the site and efforts to connect the site to the rest of the park and further the functionality of the area for NPS purposes.

1.5.2.2 Improving, Expanding, and Adding Facilities

The current visitor center needs to be reconfigured or expanded to be ABA compliant and to better meet the needs of both park staff and visitors. The visitor center does not offer accessible store space, accessible restrooms for visitors or staff, or a break room for staff. In addition, the interior layout provides staff with poor visibility, which enables shoplifting and does not provide staff with adequate personal safety. The study area also does not currently have a year-round operable water/sewer system or funding to support year-round staffing, so it is closed in the winter.

Wildland fires are a regional issue for the National Park Service, US Forest Service, and state agencies. The park currently supports fire suppression efforts from dispersed and often shared spaces in the Medora Headquarters Area. With an expansive viewshed and direct access to I-94, the Painted Canyon study area is well positioned for an interagency fire center that could serve the needs of the park and be a center for the surrounding region as well.

1.5.2.3 Improving Site Circulation and Safety

Improvements to the functionality of the Painted Canyon area would also include improvements to the traffic circulation of the area and safety improvements for both staff and visitors.

1.5.3 Peaceful Valley Ranch

The following key issues were identified at the Peaceful Valley Ranch study area.

1.5.3.1 Improving, Expanding, and Adding Facilities

Peaceful Valley Ranch is listed in the National Register of Historic Places (NRHP), and given this, any proposed developments, changes, or additions to the study area must keep this in mind and intrude upon the study area as little as possible. The contributing structures in the study area (ranch house, bunkhouse, and barn) have recently been rehabilitated for modern programming. Additional space for environmental education, located outside of the cultural landscape, is needed to adequately meet park programming and education goals while offering additional experiences. This expanded use of the study area would also necessitate improved utilities and capacity for year-round use.

The trailheads currently in the area are not well defined and result in conflict between different user groups. A series of corrals are in various stages of use and disrepair.

1.5.4 North Unit

The following key issues were identified at the North Unit study area.

1.5.4.1 Improving, Expanding, and Adding Facilities

The North Unit entrance station has similar issues as that in Medora. The current entrance station is located too close to the highway, causing vehicle backups onto the highway with increased visitation. It would be preferable for the entrance station to be located beyond the visitor center in the entry sequence. The North Unit visitor center itself is another issue; the current location is prone to landslides, erosion, and instability from coal seams, which caused the previous visitor center in that location to fail. The current trailers being used as a temporary visitor center and staff offices are also at the end of their useful life and need to be replaced with a permanent visitor center and administration building in a more geologically stable part of the study area. The existing sewage lagoons also need to be relocated to an area where they are not threatened by the Little Missouri River.

Additionally, the maintenance area in the North Unit has issues similar to those of the Medora area, namely that the existing buildings are not large enough to adequately store and maintain the modern vehicles needed for park maintenance and operations and that they don't provide staff with the workspaces that comply with codes and standards defined by ABA, OSHA, and the GSA for all job functions.

The housing area of the North Unit needs additional and more diversity of types of housing to accommodate existing and proposed future staff.

1.5.5 Elkhorn Ranch Unit

The following key issues were identified at the Elkhorn Ranch Unit study area.

The Elkhorn Ranch Unit study area is remote and intentionally undeveloped with minimal alterations. The study area needs improved interpretation, archeological site preservation, and trailhead improvements to ensure the historic character of the site is understood and protected.

1.6 DESIRED CONDITIONS

1.6.1 Medora Headquarters Area

VISION: Revitalize and modernize visitor and administrator facilities that will support the future of Theodore Roosevelt’s conservation legacy and complement the proposed Theodore Roosevelt Presidential Library (adjacent to the park in the city of Medora). Re-envision a greater web of visitor experience that will serve future visitors through enhancing new partnership opportunities and efficient park operations.

Priorities for the Medora Headquarters Area are the following:

- Provide housing variety and quantity to accommodate staffing changes, local economy volatility, and promote recruitment, retention, and diversity.
- Expand entrance station capacity to accommodate increased visitation, provide a safe entrance experience, and reduce traffic congestion impacts to Medora streets and Business Route 94/Pacific Avenue.
- Increase parking and improve circulation for modern vehicles in coordination with the City of Medora.
- Improve visitor experience with new Visitor Discovery and Orientation Center and protection of Maltese Cross Cabin.
- Upgrade maintenance facilities with adequate services, protect equipment investment, and provide safe efficient work areas.
- Provide sufficient workspaces for all administrative functions.

1.6.2 Painted Canyon

VISION: Transform Painted Canyon visitor center into a year-round, multiagency information facility, gateway to Western national parks, and wildfire response center. Add fee collection point and enhance recreational access for picnicking, wildlife viewing, hiking, and horseback riding.

Priorities for the Painted Canyon area are the following:

- Upgrade utility infrastructure, including a year-round water and wastewater system.
- Create partnerships with multiple agencies for an effective, centralized fire management and response facility.
- Increase recreational access via improved trailheads, horse trailer parking, picnic area, and interpretive areas.
- Transform the area into a gateway to Western parks with exhibits and facilities that support the visitor experience and connect federal, state, and local interpretive media with orientation to western North Dakota tourism sites, recreational activities, and heritage sites.

1.6.3 Peaceful Valley Ranch

VISION: Adaptive reuse of the newly rehabilitated Peaceful Valley Ranch for proposed environmental education activities.

Priorities for Peaceful Valley Ranch are the following:

- Upgrade infrastructure compatible with the historic structures and cultural landscape to accommodate increased visitation and use.
- Improve safety for parking and vehicle circulation enhancing navigation and access to the area.
- Expand environmental education programming opportunities with multiple partners.

1.6.4 North Unit

VISION: Celebrate wilderness, outdoor recreation, and growing municipalities and their new diverse residents while implementing Theodore Roosevelt's legacy of conservation with unique partnerships that model resource conservation methods.

Priorities for the North Unit are the following:

- Relocate sewage facilities so they are not threatened by the Little Missouri River for sustainability and effective operations.
- Replace visitor orientation and administration facility in a stable location not affected by natural processes (erosion, landslide, unstable coal seams).
- Locate visitor information/orientation area in an appropriate area providing for visitor and staffing needs.
- Relocate entrance station for visitor safety, enhanced circulation, and efficient fee collection.
- Provide appropriate quantity and variety of housing to accommodate growing staffing needs.
- Provide appropriately sized and winterized maintenance facilities adequate to service and protect park equipment.

1.6.5 Elkhorn Ranch Unit

VISION: A public-private partnership to preserve the Cradle of Conservation, a unique sense of place offered by the land that healed Theodore Roosevelt's heart after a period of profound grief and later inspired his conservation legacy that continue to inspire visitors and conservation professionals today.

Priorities for the Elkhorn Ranch Unit are the following:

- Enhance interpretive opportunities to provide inspiration and conservation ethic.
- Improve visitor facilities.
- Provide additional signage to the site.

Introduction, Purpose, and Need

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2 ALTERNATIVES

Two alternatives, the proposed action and no-action, are carried forward for evaluation in this EA. Several suggestions and alternate designs were also considered and dismissed (see section 2.3).

2.1 ALTERNATIVE 1: NO ACTION

Under Alternative 1: No Action and as described in Tables 1 through 5, the continuation of current management serves as a benchmark for analysis and comparison of the potential impacts of continuing current management into the future, versus the potential impacts of the proposed action. Management of visitor use in the five study areas would continue to involve enforcing regulations during peak use to minimize impacts to resources and visitor experience, as well as the continued maintenance of facilities.

2.2 ALTERNATIVE 2: PROPOSED ACTION, IMPLEMENTATION OF FACILITY REVITALIZATION PLAN

Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, assumes that aspects of the Facility Revitalization Plan would be implemented, as funding is available and phased over 20 to 30 years. The plan proposes a range of management strategies and actions, as well as facility and infrastructure improvements that address the purpose and need for action. The proposed action, encompassing multiple concepts, represents a more proactive approach to managing visitor use and park needs that includes a wide range of strategies, as detailed in Tables 1 to 5. The facility and infrastructure improvements focus on enhancing housing, visitor orientation and services, maintenance and administration, and aging utilities and transportation/circulation systems. Conceptual site plans and illustrations for the proposed action are in Appendix A.

Implementation of the management strategies and actions proposed in this Facility Revitalization Plan would require additional NEPA or National Historic Preservation Act, section 106 (Section 106) compliance, as well as compliance with all other applicable federal, state, and local law polices, and standards. This compliance would occur during the future design and engineering phase, prior to construction, of that specific project. The additional compliance would occur as projects for each of the study areas are implemented.

TABLE 1. MEDORA HEADQUARTERS STUDY AREA COMPARISON MATRIX

ALTERNATIVE 1 NO-ACTION ALTERNATIVE	ALTERNATIVE 2 PROPOSED ACTION ALTERNATIVE (see Figure A-1 in Appendix A)
HOUSING: <ul style="list-style-type: none">Continue the use of existing housing for permanent staff<ul style="list-style-type: none">8 single-family homesContinue the use of existing seasonal housing<ul style="list-style-type: none">3 apartment buildings (6 beds each)Maintain the existing outdoor staff gathering space	HOUSING: <ul style="list-style-type: none">Increase permanent staff housing diversity<ul style="list-style-type: none">Up to 7 single-family homesUp to 3 duplex unitsReplace seasonal housing<ul style="list-style-type: none">Up to 3 eight-plex units1 four-plex unitFormalize/increase picnic areas

<p>ALTERNATIVE 1 NO-ACTION ALTERNATIVE</p>	<p>ALTERNATIVE 2 PROPOSED ACTION ALTERNATIVE (see Figure A-1 in Appendix A)</p>
<p>UTILITIES AND TRANSPORTATION/CIRCULATION:</p> <ul style="list-style-type: none"> • Maintain/expand existing park roads in accordance with current plans and practices • Maintain the existing visitor center and administration building parking in its current configuration • Continue using existing entrance station capacity and location 	<p>UTILITIES AND TRANSPORTATION/CIRCULATION:</p> <ul style="list-style-type: none"> • Expand the widths of the roads to match the width of City of Medora roads (as practical) • Expand passenger vehicle parking at the visitor center • Add RV parking at the visitor center • Expand the existing administration parking area • Expand entrance station capacity and relocate • Add an office associated with the entrance station as needed
<p>MAINTENANCE/ADMINISTRATION:</p> <ul style="list-style-type: none"> • Continue using the existing heated and unheated maintenance buildings • Continue using the existing storage buildings • Continue using the existing resources building in its current configuration and location • Continue using the existing administration building in current configuration and location 	<p>MAINTENANCE/ADMINISTRATION:</p> <ul style="list-style-type: none"> • Replace the current heated maintenance building • Replace the unheated storage building • Continue using existing storage buildings • Replace the existing resources building • Options for administration building: <ul style="list-style-type: none"> ○ Expand and reconfigure the existing administration building ○ Remove the existing administration building and replace it with a combined visitor center and administration building
<p>VISITOR ORIENTATION AND SERVICES:</p> <ul style="list-style-type: none"> • Continue using the existing visitor center and staff parking in current configuration • Maintain the existing picnic areas and outdoor areas • Maintain the existing use and configuration of Maltese Cross Cabin 	<p>VISITOR ORIENTATION AND SERVICES</p> <ul style="list-style-type: none"> • Options for visitor center: <ul style="list-style-type: none"> ○ Expand and reconfigure the existing visitor center ○ Remove the existing visitor center and replace it with a combined visitor center and administration building • Add dedicated administration parking adjacent to the new combined visitor center and administration building • Formalize/increase picnic area • Add exterior self-orientation and interpretation • Add a large outdoor gathering space • Add protection for Maltese Cross Cabin or move Cabin to be adjacent to new visitor center

TABLE 2. PAINTED CANYON STUDY AREA COMPARISON MATRIX

ALTERNATIVE 1 NO-ACTION ALTERNATIVE	ALTERNATIVE 2 PROPOSED ACTION ALTERNATIVE (see Figure A-2 in Appendix A)
HOUSING: <ul style="list-style-type: none"> There is no existing housing 	HOUSING: <ul style="list-style-type: none"> No proposed changes to housing
UTILITIES AND TRANSPORTATION/CIRCULATION: <ul style="list-style-type: none"> Maintain the existing water/sewer systems Continue using the existing parking area in current its configuration 	UTILITIES AND TRANSPORTATION/CIRCULATION: <ul style="list-style-type: none"> Add a year-round operable water/sewer system Add a vault toilet by the picnic/parking area Expand the visitor center parking area for both passenger and large vehicles with added access control Add a gravel horse trailer parking area
MAINTENANCE/ADMINISTRATION: <ul style="list-style-type: none"> There are no park maintenance/administration functions 	MAINTENANCE/ADMINISTRATION: <ul style="list-style-type: none"> Add an interagency fire center Add a potential spike camp location for use during fire suppression events
VISITOR ORIENTATION AND SERVICES: <ul style="list-style-type: none"> Maintain the current entry configuration and experience into the study area Continue using the existing visitor center in its current configuration Continue using existing picnic shelters, trails, and overlooks Maintain the existing interpretative signage 	VISITOR ORIENTATION AND SERVICES: <ul style="list-style-type: none"> Create NPS visitor experience with relocated park monument sign and additional site features on approach Expand or replace the existing visitor center with a multiagency welcome and information center or convert the existing visitor center to an outdoor visitor interpretive area Add picnic shelters and a large picnic pavilion Extend the Nature Loop Trail to the visitor center Add a new trail segment north of Lagoon Road Add exterior wayfinding, orientation, and interpretation at the visitor center

TABLE 3. PEACEFUL VALLEY RANCH STUDY AREA COMPARISON MATRIX

ALTERNATIVE 1 NO-ACTION ALTERNATIVE	ALTERNATIVE 2 PROPOSED ACTION ALTERNATIVE (see Figure A-3 in Appendix A)
HOUSING: <ul style="list-style-type: none"> There is no existing housing 	HOUSING: <ul style="list-style-type: none"> Add dormitory housing for educational program participants <ul style="list-style-type: none"> Up to 2 dorms with 4 bedrooms/2 bathrooms

ALTERNATIVE 1 NO-ACTION ALTERNATIVE	ALTERNATIVE 2 PROPOSED ACTION ALTERNATIVE (see Figure A-3 in Appendix A)
<p>UTILITIES AND TRANSPORTATION/CIRCULATION:</p> <ul style="list-style-type: none"> • Maintain the trailheads and parking area in their current configurations • Continue using the existing vault toilet • Maintain all corrals in their current configuration 	<p>UTILITIES AND TRANSPORTATION/CIRCULATION:</p> <ul style="list-style-type: none"> • Relocate the trailhead and add associated expanded parking • Reclaim the existing trailhead location • Options for improved parking area circulation: <ul style="list-style-type: none"> ○ Provide defined U-turn space ○ Add a new road to create one-way loop • Add a large vault toilet <p>Maintain the corrals around the rehabilitated historic barn. Reclaim the rest if they are determined not to be necessary.</p>
<p>MAINTENANCE/ADMINISTRATION:</p> <ul style="list-style-type: none"> • Continue using the ranch house, bunkhouse, and barn for office, meeting, interpretation, and educational program functions 	<p>MAINTENANCE/ADMINISTRATION:</p> <ul style="list-style-type: none"> • Use the ranch house for office space • Use the bunkhouse and barn for meetings, interpretation, and educational program support
<p>VISITOR ORIENTATION AND SERVICES:</p> <ul style="list-style-type: none"> • Maintain the existing trails in their current configurations and locations • Continue the current use of the existing structures, including the newly rehabilitated ranch house, bunkhouse, and barn 	<p>VISITOR ORIENTATION AND SERVICES:</p> <ul style="list-style-type: none"> • Extend the trail from the relocated trailhead to the existing trails • Add picnic shelters/tables, a single vault toilet, interpretation, wayfinding, and orientation at the new trailhead • Add interpretative signage, wayfinding, and orientation to equestrian parking area/trails junction • Add a trail connection from the equestrian parking area to the existing trails • Add a science, technology, engineering, and mathematics (STEM) or science, technology, engineering, art, and mathematics (STEAM) facility • Add an observatory and an amphitheater for additional outdoor educational opportunities • Add a trail connection from the new STEM or STEAM facility to the Peaceful Valley Ranch historic core

TABLE 4. NORTH UNIT STUDY AREA COMPARISON MATRIX

ALTERNATIVE 1 NO-ACTION ALTERNATIVE	ALTERNATIVE 2 PROPOSED ACTION ALTERNATIVE (see Figure A-4 in Appendix A)
<p>HOUSING:</p> <ul style="list-style-type: none"> • Maintain the existing housing for permanent staff <ul style="list-style-type: none"> ○ 3 single-family homes ○ 2 duplexes 	<p>HOUSING:</p> <ul style="list-style-type: none"> • Retain existing (3) single-family homes • Add permanent staff housing <ul style="list-style-type: none"> ○ Up to 3 single-family homes • Add seasonal housing <ul style="list-style-type: none"> ○ 1 eight-plex ○ 1 dorm • Add new community space for employees and their families
<p>UTILITIES AND TRANSPORTATION/CIRCULATION:</p> <ul style="list-style-type: none"> • Maintain the sewage lagoons in their current location • Continue using the entrance station in its current location at its current capacity • Maintain all the existing roads and access in its current configuration 	<p>UTILITIES AND TRANSPORTATION/CIRCULATION:</p> <ul style="list-style-type: none"> • Relocate the sewage lagoons farther away from the maintenance area and the Little Missouri River • Expand and relocate the entrance station • Retain the existing road to the housing and maintenance areas • Add a back road access to the new visitor center for employees • Add a road to the additional housing units • Add a two-track access road to the relocated sewage lagoons
<p>MAINTENANCE/ADMINISTRATION:</p> <ul style="list-style-type: none"> • Continue using the existing heated maintenance building in its current location and configuration • Continue using the existing storage buildings and spaces 	<p>MAINTENANCE/ADMINISTRATION:</p> <ul style="list-style-type: none"> • Replace the existing heated maintenance building with a new, larger heated maintenance building • Add an unheated storage building • Continue using the existing storage buildings and space

ALTERNATIVE 1 NO-ACTION ALTERNATIVE	ALTERNATIVE 2 PROPOSED ACTION ALTERNATIVE (see Figure A-4 in Appendix A)
<p>VISITOR ORIENTATION AND SERVICES:</p> <ul style="list-style-type: none"> • Maintain the existing historic park monument sign in its current location • Continue to use the existing temporary visitor center, office, and restroom trailers in their current locations • Maintain the existing picnic tables 	<p>VISITOR ORIENTATION AND SERVICES:</p> <ul style="list-style-type: none"> • Maintain the existing historic park monument sign in its current location • Remove the temporary administration and visitor contact trailers and reclaim land • Options for administration building and visitor center: <ul style="list-style-type: none"> ○ Add a combined administration building/visitor contact station and sales space in a more stable location between ravines AND locate associated parking directly adjacent to the building ○ Add a combined administration building and visitor center in a more stable location on the river side of the peninsula AND locate associated parking on the “gully island” with a bridge between the parking lot and the visitor center building ○ Add a combined administration building and Theodore Roosevelt Discovery Center in a more stable location on the river side of the peninsula AND locate associated parking on the river side of the peninsula so the parking and the building are directly adjacent • Formalize and increase the picnic areas • Add exterior self-orientation and interpretation at the new administration/visitor facility • Add a trail to a river overlook

TABLE 5. ELKHORN RANCH UNIT STUDY AREA COMPARISON MATRIX

ALTERNATIVE 1 NO-ACTION ALTERNATIVE	ALTERNATIVE 2 PROPOSED ACTION ALTERNATIVE (see Figure A-5 in Appendix A)
<p>HOUSING:</p> <ul style="list-style-type: none"> • There is no existing housing 	<p>HOUSING:</p> <ul style="list-style-type: none"> • No housing is proposed
<p>UTILITIES AND TRANSPORTATION/CIRCULATION:</p> <ul style="list-style-type: none"> • Maintain the existing trailhead parking area in its current configuration. 	<p>UTILITIES AND TRANSPORTATION/CIRCULATION:</p> <ul style="list-style-type: none"> • Add roadway signage
<p>MAINTENANCE/ADMINISTRATION:</p> <ul style="list-style-type: none"> • There are no existing maintenance or administration functions 	<p>MAINTENANCE/ADMINISTRATION:</p> <ul style="list-style-type: none"> • No maintenance/administration improvements proposed

<p>ALTERNATIVE 1 NO-ACTION ALTERNATIVE</p>	<p>ALTERNATIVE 2 PROPOSED ACTION ALTERNATIVE (see Figure A-5 in Appendix A)</p>
<p>VISITOR ORIENTATION AND SERVICES:</p> <ul style="list-style-type: none"> • Maintain the current interpretive signage at the historic cabin location and at the existing midpoint location along the trail from the parking area to the cabin foundation • Maintain all the existing trails and tracks • Maintain the existing trailhead parking area in its current configuration • Maintain the existing fencing • Maintain the existing archeological site and trees that have been on the site since Theodore Roosevelt was there 	<p>VISITOR ORIENTATION AND SERVICES:</p> <ul style="list-style-type: none"> • Improve the trailhead orientation and interpretation at the cabin foundation • Update the existing midpoint trail interpretive signage • Remove and reclaim the trail to the south of the midpoint trail interpretative signage • Add seating, vault toilet, and bike rack at trailhead • Maintain the existing fencing • Maintain the existing archeological site and trees that have been on the site since Theodore Roosevelt was there

2.3 ALTERNATIVES CONSIDERED AND DISMISSED

The National Park Service considered various elements or actions that could be part of a future proposed action alternative during the planning process and dismissed these elements for various reasons, including the following.

2.3.1 North Unit

- Relocating or rerouting a portion of Scenic Drive, the entrance road into the North Unit, was considered with the intent of offering a more direct route to new permanent visitor center locations. The idea was dismissed because the benefits did not outweigh the adverse impacts.
- Initially, a relocated entrance station for the North Unit was placed at the far west side of the study area along Scenic Drive in all concepts to increase stacking capacity and utilize flat terrain. This location was dismissed for all but one potential permanent visitor center location due to the distance between the visitor center and the entrance station. It is preferable to have the entrance station closer to the visitor center for visitor ease of use and so visitor center amenities like restrooms and fee operations are accessible to entrance station staff.
- The location where the temporary visitor center trailers are currently located was considered but dismissed as a location for a new permanent visitor center due to the study area's geologic instability. A permanent visitor center was previously placed on that site, and the building had to be condemned and removed due to ground movement and conditions. These same issues are occurring with the temporary visitor center trailers on the site, indicating a more stable location for the new facility is needed.

2.3.2 Peaceful Valley Ranch

Initially, the additional buildings proposed for the Peaceful Valley Ranch area, like the science, technology, engineering, and mathematics (STEM)/science, technology, engineering, art, and

mathematics (STEAM) facility and dormitory housing, were proposed for east of the bunkhouse, along the parking area, up on the river terrace. This was originally suggested in the Cultural Landscape Report as a location for additional facilities in keeping with the existing character of the landscape. This location was later dismissed due to new flood data for the area and concerns about the flood risk in that location.

2.4 CONSTRUCTION ACTIVITIES FOR THE PROPOSED ACTION

As noted above, the strategies presented in the proposed action would be completed as funding is available and projects for each of the study areas are phased into implementation.

The typical construction season is May through September. Construction of the proposed projects could involve the following types of activities:

- grading
- trenching and excavation
- ground disturbance
- tree removal
- vegetation removal
- revegetation
- construction staging
- laying asphalt
- pouring concrete
- building construction

2.5 MITIGATION MEASURES, BEST MANAGEMENT PRACTICES, AND DESIGN FEATURES OF THE PROPOSED ACTION

The National Park Service places strong emphasis on avoiding, minimizing, and mitigating potentially adverse environmental impacts. To help ensure the protection of natural and cultural resources and the quality of the visitor experience, the National Park Service would implement the following measures when a specific project is occurring. Additional measures could be identified when the project is proposed and when completing the additional compliance steps.

2.5.1 General

- All resource protection measures would be clearly stated in the construction specifications, and workers would be instructed to avoid conducting activities outside the project area. Areas of natural or cultural resource concern would be clearly indicated on construction drawings.
- A preconstruction meeting would be held to inform contractors about sensitive areas, including those for natural and cultural resources, and provide procedures for identifying and addressing any unanticipated discoveries.

- Staging and storage areas for construction vehicles, equipment, materials, and soils would be sited in previously disturbed or paved areas approved by the National Park Service. These areas would be outside high visitor use areas and clearly identified in advance of construction.

2.5.2 Cultural Resources

- Consultation with the North Dakota State Historic Preservation Office (SHPO) and Tribes would occur for each project prior to beginning construction. As indicated during consultation, needs for additional pedestrian surveys and testing would be explored in consultation with Tribes and SHPO.
- Known historic and prehistoric sites and isolated occurrences near the study areas would be flagged and avoided during project activities.
- Known archeological or structural resources near the study areas would be identified and delineated prior to project work. An archeologist who meets the Secretary of the Interior's professional qualification standards would monitor specific areas of ground disturbance indicated by NPS cultural resources staff. A traditional cultural specialist identified through consultation with tribal partners would also be present to monitor ground-disturbing activities, particularly in areas within or adjacent to known archeological sites.
- Coordination with SHPO would occur throughout the course of the projects if unknown cultural resources are discovered as a result of project activities.
- If human remains are discovered during construction activities, all work would stop and the park's inadvertent discovery plan, that would be developed in consultation with tribal partners prior to any ground-disturbing activities, will be followed in accordance with the provisions outlined in the Native American Graves Protection and Repatriation Act (1990).
- Park managers would ensure that all personnel who work on the projects are informed of the penalties for illegally collecting artifacts or intentionally damaging archeological sites or historic properties. Personnel would also be instructed on procedures to follow in case previously unknown archeological resources are uncovered during construction. Equipment traffic would be minimized in the vicinity of the project areas. Equipment and materials staging areas would also avoid known archeological resources. These measures would be implemented to reduce potential impacts to archeological or historic resources.
- Any new structures would be designed to blend with the existing cultural and historical landscape. All new construction will be consistent with the Design Guidelines that are currently under development as part of this planning effort.

2.5.3 Geology and Soils

- New or locally sourced topsoil would be evaluated for nonnative invasive plant infestations.
- All construction equipment would be inspected and washed to remove potential nonnative invasive plant seeds.
- Erosion control measures that provide for soil stability and prevent movement of soils during rain events (i.e., silt fences and tarps) would be implemented.

- Any ground surface temporarily disturbed during construction would be aerated and revegetated with native plants to reduce compaction and prevent erosion.
- A Stormwater Pollution Prevention Plan and project specifications for dust control measures within construction areas, including active haul roads and staging areas, would be developed and implemented. A qualified stormwater practitioner would ensure compliance with the plan.

2.5.4 Paleontological Resources

- Paleontological monitoring during ground-disturbing actions would be incorporated in areas known to contain sensitive paleontological resources in consultation with NPS paleontologists for the implementation phases of each project.
- All necessary steps would be taken and NPS paleontologists would be immediately notified if concealed paleontological resources are encountered during construction. Paleontological mitigation measures, such as specimen collection, would be implemented, and ground disturbance would be minimized where associated resources of scientific significance are found.

2.5.5 Visitor Use and Experience

- Visitors would be informed in advance of construction activities via multiple methods, including the park's website, various signs, and at the visitor center. Park staff would be available to address visitor questions during construction and provide regular updates to the public about project progress and any associated delays.
- The National Park Service would coordinate with the City of Medora and North Dakota Department of Transportation on installing appropriate signage regarding construction routes for public safety.
- Provisions for emergency vehicle access through construction zones would be developed.
- To establish a cohesive aesthetic throughout the park, all future facilities would adhere to the Theodore Roosevelt National Park Design Guidelines.

2.5.6 Water Resources

- All relevant requirements under the Clean Water Act, including management of stormwater-related nonpoint source pollutants under the National Pollutant Discharge Elimination System, would be complied with and met.
- Best management practices (BMPs) would be implemented for drainage and sediment control to prevent or reduce nonpoint source pollution and minimize soil loss and sedimentation in drainage areas. These practices may include, but are not limited to, silt fencing, filter fabric, temporary sediment ponds, check dams of pea gravel-filled burlap bags or other material, and/or immediate mulching of exposed areas to minimize sedimentation and turbidity impacts as a result of construction activities. As much as practicable, plastic materials would not be used. Erosion control measures would be left in place at the completion of construction to avoid adverse impacts to water resources, after which time NPS staff would be responsible for maintenance and removal.

- A delineation would be completed at Peaceful Valley Ranch and the Elkhorn Ranch Unit if, at the design phase, there is indication there are potential wetlands.
- Qualified NPS staff or certified wetland scientists would identify and clearly mark wetlands before construction work. Caution would be used during construction activities to prevent damage caused by equipment, erosion, siltation, or pollutant discharges.

2.5.7 Air Quality and Soundscapes

- All construction motor vehicles and equipment would have mufflers conforming to original manufacturer specifications that are in good working order to prevent excessive or unusual noise, fumes, or smoke.
- Dust generated by construction would be controlled as necessary by spraying water on the construction site, or other BMPs for dust control.
- Rock dust created during cutting or shaping would be controlled by a wet method to eliminate/reduce silica exposure for workers and visitors.

2.5.8 Wildlife and Species of Concern

- To reduce potential conflicts with wildlife and people, NPS managers would ensure that personnel conducting construction activities are instructed on appropriate behavior in the presence of wildlife. Bison fencing to reduce conflicts between wildlife and people are proposed in most, but not all, locations where future construction would happen.
- Trees would be removed only between November 1 and March 31 to avoid potential impacts to any roosting northern long-eared bat. Construction activities would be restricted to times outside when this species is likely present (November 1 through March 31). In consultation with the US Fish and Wildlife Service, the National Park Service would minimize work done during the June/July pupping season.
- If needed, records for known eagle nests would be reviewed and surveys for eagle nests in the vicinity of the project area conducted. Additional mitigation measures would be developed to prevent impacts if these species are present.

2.5.9 Visual Resources

- The visibility of structures from areas in the park would be considered.
- Topography and vegetation would be used for screening as appropriate so as not to intrude on views and maintain uninterrupted landscapes. (In some areas trees may attract attention as opposed to screening the view of structures due to the lack of naturally occurring vegetation in certain areas, e.g., prairie landscape areas.)
- The visual impact of all future development would be reduced or eliminated.
- Dark sky-compliant fixtures would be used.
- Organic forms, structures, and features that blend with the natural landscape would be used to intrude on it as little as possible.
- At the Medora Headquarters Area, the visibility of facilities from the entrance road and from the city into the park and vice versa would be minimized.

Alternatives

- At Painted Canyon, design features would be incorporated to minimize reflectivity and glare, such as the use of awnings, alcoves, or building orientation.

3 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 INTRODUCTION AND DEFINITIONS

This chapter summarizes the natural and cultural resources which could be affected by the alternatives and analyzes the impacts (or “environmental consequences”) of each alternative. The affected environment description is followed by the environmental consequences analysis for each impact topic. The impact topics analyzed in this chapter correspond to the impact topics retained for analysis in as described in section 3.2, Cumulative Impacts.

Affected Environment: The affected environment describes existing conditions for those elements of the natural and cultural environment (including human health and safety and the visitor experience) that could be affected by the actions proposed in the alternatives. These descriptions serve as a baseline for understanding the resources that could be impacted by implementation of Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan.

Impacts: According to the 2022 Council on Environmental Quality (CEQ) revised regulations, “effects or impacts” are changes to the human environment that include reasonably foreseeable (1) direct effects, (2) indirect effects and (3) cumulative effects (40 Code of Federal Regulations [CFR] 1508.1(g)).

Agencies consider the potentially affected environment and degree of effects to determine the significance of an action’s impacts. The degree of effects is assessed in the context of the park’s purpose and significance and any resource-specific context that may be applicable. When assessing the degree of effects, agencies consider:

- Both short- and long-term effects
- Both beneficial and adverse effects
- Effects on public health and safety
- Effects that would violate federal, state, tribal, or local law protecting the environment. (40 CFR 1501.3(b))

None of the alternatives analyzed in this EA would violate any federal, state, tribal, or local laws that protect the environment.

The methods used to assess impacts vary depending on the resource considered, but generally are based on a review of pertinent literature and park studies, the information provided by on-site experts and other agencies, professional judgment, and park staff knowledge and insight.

3.2 CUMULATIVE IMPACTS

The Council on Environmental Quality regulations that implement NEPA require assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions” (40 CFR 1508.7).

Cumulative impacts are considered for Alternative 1: No Action and Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan. Cumulative impacts were determined by

combining the impacts of the actions included in the alternatives with other past, present, and reasonably foreseeable future actions. Therefore, it is necessary to identify other past, present, or reasonably foreseeable future actions in the park that could result in cumulative impacts.

3.2.1 Past Actions

Theodore Roosevelt National Park preserves lands that commemorate the cultural history of Native American people with homelands in the area, natural landscapes and resources of the scenic North Dakota Badlands, and the interesting history of Theodore Roosevelt, 26th president of the United States. Roosevelt first came to the North Dakota Badlands in 1883. At the time he was a 24-year-old New York state legislator who was infatuated with the American West and wanted to hunt buffalo and other game in the Dakota Territory. By the end of this first 15-day hunting trip, not only had Roosevelt fallen in love with this part of the country, but he also became interested in the prospects of the cattle industry, which led him to invest in the Maltese Cross Ranch, near the city of Medora.

Roosevelt next visited the North Dakota Badlands in 1884, months after the tragic death of his wife and his mother, dying only hours apart from each other. After leading the New York delegation to the 1884 Republican Convention, Roosevelt left for the Dakota Territory. This time, he had the added motive of getting away and dealing with his grief.

Since the earliest days of the park as a national memorial in 1947 through its redesignation as a national park in 1978, buildings and facilities have been developed to support the operation and maintenance of the park, as well as for visitor use and experience. Most of the facilities were constructed for the current conditions and did not consider future use and expansion, leaving very little room to grow. Aside from these improvements, concentrated in a few locations throughout the park, much of the surrounding landscape remains the same as it was prior to and during Roosevelt's time here. Many of the buildings and facilities originally developed for the park still exist today and are in need of rehabilitation or replacement. From the early 2000s to the present, various roads, trails, and bridges that had the greatest need have been repaired and resurfaced, along with some facility rehabilitation and construction, supported by infrastructure improvements.

Natural conditions related to erosion and shifting soils typical of the North Dakota Badlands, along with some flooding in flood-prone areas of the river basin, regularly cause damage to roads and structures that the park needs to rehabilitate and repair. For example, the abandoned North Unit visitor center, constructed in 1992, experienced structural movement that led the building to be condemned and then removed from the park.

In 2021, the park completed the Peaceful Valley Ranch project consisting of restoration of windows, siding and repairs to floors of the house, and other repairs and updates to outbuildings.

3.2.2 Current and Potential Future Actions and Trends

A variety of current and future actions are in the planning, design, or implementation stages in the area—including areas within the park, as well as in Medora and nearby.

Theodore Roosevelt Presidential Library

The Theodore Roosevelt Presidential Library Foundation (TRPLF) has selected a site for the library, adjacent to the park in the city of Medora and has retained a design team including

Snohetta and JLG to carry the project through design. Schematic design was completed in February 2022 and the design process is ongoing with the goal to begin construction August 2023 and open the library by early 2026. The plan is that the library would be open for year-round operation, with seasonal changes annually.

NPS Roadway Improvements in Medora

The National Park Service is planning to improve several roadways in the Medora Unit in the near term, bringing these up to local street standards and making repairs as needed, including extension of some sidewalks and on-street parking locations. These improvements could temporarily alter the way people access destinations in Medora and some of the park facilities during construction, which is planned to occur in multiple phases. These improvements will occur in 2022 and will be completed by the end of the year.

Theodore Roosevelt Foundation and City of Medora Plans

Strategic planning is underway through collaborative efforts of the Theodore Roosevelt Medora Foundation and Medora city representatives and others. The vision is to connect people to Medora for positive, life-changing experiences, as was Theodore Roosevelt's experience during his time here. A variety of improvements and experiences are envisioned in various stages of planning, design, funding, and implementation. These include a new 1,000-seat rodeo arena that can house equestrian and western themed events, as well as a new 500-car parking lot, lodging, and programming and education for "dudes." Other entertainment programming and events are also being planned.

Saugus Fire and Hotshot Station, Angeles National Forest

A new wildland fire center is being planned in the vicinity of the Painted Canyon visitor center along Interstate 94, about 8 miles east of Medora. The project is in the planning and design phase, and it is anticipated that construction could occur in the next couple of years depending on securing NPS funding and support from agency partners. This Facility Revitalization Plan provides a programmatic level of analysis of potential effects of constructing the fire center related to some elements of the environment. More project-level environmental analysis will be potentially needed as part of the permitting process for the fire center.

North Dakota Department of Transportation

The North Dakota Department of Transportation and the National Park Service are exploring a Memorandum of Understanding to study, plan, and design improvements to the Painted Canyon area of the park (also a rest stop along Interstate 94 and the location of the proposed wildland fire center). In addition, the North Dakota Department of Transportation is currently leading a study process for the Pacific Avenue corridor and other transportation analysis and planning in the Medora area. An important objective of the planning study is to look ahead at the potential transportation needs for the area, considering the Presidential Library project; proposed improvement at the park that are part of this Facility Revitalization Plan; and other plans by the Theodore Roosevelt Foundation and city of Medora. All of these potential future actions will bring additional visitors to the area, and the North Dakota Department of Transportation and its partners will be evaluating not only needed roadway improvements, but also the potential for transit solutions and trails to better connect destinations in the vicinity of Medora.

Maltese Cross Cabin

Throughout the planning process there was discussion about the Maltese Cross Cabin currently located behind the South Unit visitor center. The cabin is not in its original location and has been disassembled and moved multiple times throughout its history. In its current location, it offers an experience of Theodore Roosevelt history for visitors at the South Unit visitor center. Visitors can walk through and experience the cabin and interior collections before they move on to other places in the park or they can join a ranger program about the cabin to get a greater understanding of Theodore Roosevelt's time in the area. The cabin offers an interpretive experience for visitors who might just visit the visitor center without going further into the park. It is also the most tangible connection to Theodore Roosevelt and his time in the Dakotas.

The cabin's current location is exposed to the elements, and over the long term, there could be a need to better protect the cabin. A variety of ways that the cabin might be better protected were discussed during the planning process including relocating the cabin within the park and/or enclosing the cabin within another building. Moving the cabin into a fully indoor setting, as has been discussed, could be disadvantageous in helping visitors understand the cabin's original context in an outdoor setting. As an important place in Theodore Roosevelt's life, a precedent has been established for the cabin to remain inside the park. Disassembling and moving the cabin again could potentially damage the cabin further, so other protection options for the cabin that do not involve complete relocation may be preferable.

Any changes to location would require a separate study process to evaluate potential alternatives and carefully consider if relocation would interfere with the experience of the park for visitors. A study of this scope and specific detail was not a part of the scope for this plan.

South Unit Loop Road Reconstruction Project

The Federal Highway Administration, Central Federal Lands Highway Division, in partnership with the National Park Service, proposes to stabilize sections of failed roadway embankment along Scenic Loop Drive between mile marker 22 and mile marker 28. Landslides of various magnitudes and poor subgrade material within the park have affected the road for many years. A 150-foot section of Scenic Loop Drive collapsed in spring 2019, requiring closure of the roadway. Subsequent sinkholes in the road required further closures. In fall 2019, the park found two other areas of potential roadway failure at Scoria Point and West Ridgeline, with other areas of concern identified. These areas of concern showed continued deterioration when reassessed in winter 2019–2020. The EA and FONSI for this project have been completed and construction is anticipated to begin in 2023, wrapping up in fall 2024.

Trends

The following trends are occurring in the park:

- Visitation at the park has substantially increased over time, from an annual average of 482,000 visitors in the 1980s to an average of over 700,000 per year from 2016 to 2021 (National Park Service 2022a). The busiest months are June, July, and August (National Park Service 2017).
- Recent climatic conditions are already shifting beyond the historical range of variability. Ongoing and future climate change will likely affect all aspects of park management, including natural and cultural resource protection as well as park operations and visitor experience (National Park Service 2014).

- Western North Dakota is in the midst of a massive oil boom, bringing rapid growth and development to the region (National Park Service 2015).

3.3 IMPACT TOPICS CONSIDERED

Issues were identified during internal and external scoping. Issues are problems, concerns, and opportunities regarding the proposed action and the alternatives being considered. The issues are organized by “impact topics,” which are headings that represent the impacted resources associated with the issues that are analyzed in detail. Generally, issues were retained for consideration and discussed in detail if:

- the impacts associated with the issue are central to the proposal or of critical importance;
- a detailed analysis of impacts related to the issue is necessary to make a reasoned choice between alternatives;
- the impacts associated with the issue are a big point of contention among the public or other agencies; or
- there are potentially significant impacts to resources associated with the issue.

If none of the considerations above applied to an issue or impact topic, it was dismissed from detailed analysis. The issues and corresponding impact topics retained for analysis in this EA are presented in Table 6.

TABLE 6. ISSUES CARRIED FORWARD FOR DETAILED ANALYSIS

Issue	Rationale
Soundscape (Noise)	Specific to Painted Canyon, the interagency fire center would create additional noise during fire suppression events or during training. Short-term temporary increases in noise during construction would occur in all study areas; BMPs would minimize these effects to the extent possible. Because of this, only Painted Canyon is evaluated in this EA.
Viewsheds/Visual Resources	The new visitor center and interagency fire center could have adverse impacts to the views in the Painted Canyon and North Unit areas. In addition, the Peaceful Valley Ranch area is a cultural landscape and visual resources need to be considered. Thus, this issue will be analyzed in detail to assess changes to the area’s scenic quality and the degree of visual contrast caused by the project.
Special Status or Threatened and Endangered Species: Fauna	Recent projects and concurrence from the US Fish and Wildlife Service indicate that the project areas have a low potential for special status or threatened and endangered wildlife to be present with the exception of the northern long-eared bat. Potential removal of cottonwood and other trees at Peaceful Valley Ranch, Medora Headquarters Area, and the North Unit will be evaluated because it is habitat for the northern long-eared bat.

Issue	Rationale
Cultural Resources	<p>There are known cultural resource sites near the projects that would be avoided. Measures listed in section 2.5.2, Cultural Resources, would help ensure there would be no significant adverse effects (under Section 106) to these resources. Construction monitoring would be implemented when recommended by archeological advisors or requested by tribal partners to further minimize effects to cultural resources. Therefore, cultural resources sites are not evaluated in detail in this EA.</p> <p>Peaceful Valley Ranch area is a cultural landscape. Any potential impacts to it will be evaluated in detail in this EA.</p> <p>The Elkhorn Ranch area is unique because it is as close as possible to what the landscape was like when Theodore Roosevelt was in the area. Any potential impacts to it will be evaluated in detail in this EA.</p>
Human Health and Safety	The project is intended to improve human health and safety and that improvement will be evaluated in the EA.
Visitor Use/Experience	The project is intended to improve the visitor use/experience and that improvement will be evaluated in the EA.

3.4 IMPACT TOPICS DISMISSED FROM FURTHER ANALYSIS

Table 7 provides a brief explanation for those impact topics that were dismissed from further analysis.

TABLE 7. ISSUES ELIMINATED FROM DETAILED ANALYSIS

Issue	Rationale
Realty, Land Use Authorizations, Rights-of-Way	At Painted Canyon the park entrance sign is on land is owned by the North Dakota Department of Transportation. At the Elkhorn Ranch Unit, the parking area would be on US Forest Service land. The National Park Service would coordinate with the North Dakota Department of Transportation and US Forest Service regarding project implementation.
Air Quality/Climate Change	There would be short-term temporary increases in emissions during construction; no long-term changes to air quality from the project are expected. The project would be unlikely to take the park out of air quality attainment status. Although parking areas may be expanded, and visitor use may increase over time, changes in air quality and greenhouse gas emissions would not likely be measurable but would be monitored over time.
Night Sky/Dark Skies	<p>The project would incorporate BMPs and minimization measures into the design, such as cut-off luminaires, that would minimize effects to a level that they would be very low. The areas where project light would be added (Painted Canyon, North Unit, and Medora Headquarters Area) have existing light sources at night and are not a pristine dark sky environment. Oil flares can be seen from Painted Canyon.</p> <p>Peaceful Valley Ranch is one of the only remaining dark sky areas left in the park due to surrounding oil and gas activity. Dakota Nights events take place in the area for that reason; more avoidance and minimization measures would be implemented in this area to preserve the dark sky at the time of project implementation.</p> <p>The Elkhorn Ranch Unit would have minimal proposed additional light sources.</p>

Issue	Rationale
Vegetation: Native Plant Communities	<p>Most of the proposed ground disturbance in the Painted Canyon, North Unit, Medora Headquarters Area, and Peaceful Valley Ranch areas would occur on already developed land where vegetation has previously been disturbed. Additionally, vegetation that would be disturbed is not unique or sensitive. Avoidance and minimization measures would further reduce potential effects. Cottonwoods in the Peaceful Valley Ranch are part of cultural landscape and would be avoided.</p> <p>The Elkhorn Ranch Unit would have minimal proposed vegetation disturbance (the vault toilet). The associated parking area is not on park land.</p>
Special Status or Threatened and Endangered Species: Flora	Special status plants or threatened and endangered plants would be avoided.
Noxious Weeds and Invasive Non-Native Species	The NPS programmatic plan for management provides BMPs to reduce the likelihood of introduction and spread of noxious weeds and invasive nonnative species. The plan also provides management strategies for species if they are introduced or spread.
Fuels (Fire Management)	The project would not change fire suppression and management activities in the park, such as prescribed burns. Vegetation would continue to be maintained under the park's current fire management plan and the project would not impede efforts.
Soils	<p>There are no protected soils in the project footprint, and BMPs would further avoid and minimize potential effects to soils.</p> <p>Unstable soils in the North Unit in the area of the existing temporary visitor center trailers is a main reason for siting the new visitor center in a different location without unstable soils.</p>
Wildlife	<p>In the North Unit, bison have trapped people in the temporary visitor center area. Bison fencing around the new visitor center is proposed to avoid this issue. Though wildlife may use the Painted Canyon, Medora Headquarters Area, and Peaceful Valley Ranch areas, the project would not change that use. Most of the proposed ground disturbance would be in areas previously disturbed, which would minimize effects to wildlife habitat.</p> <p>Effects to migratory birds, raptors, or bald eagles would be avoided by restricting tree removal to November 1 through March 31.</p> <p>The Elkhorn Ranch Unit would have minimal proposed habitat alteration (the vault toilet). The associated parking area is not on park land.</p> <p>Preconstruction surveys for nesting birds or seasonal restrictions may be considered during construction to minimize effects to wildlife that may use vegetation that would be impacted (e.g., northern long-eared bat, golden and bald eagles, migratory birds that could be nesting in trees).</p>
Invasive and Nuisance Wildlife	Though invasive and nuisance wildlife use Painted Canyon, the project would not change their distribution or abundance; no effects to invasive and nuisance wildlife are expected.
Geology	Caves, karst, and associated features are not present in the project footprint.
Paleontological Resources	Construction monitoring would help minimize and avoid effects to paleontological resources.
Social and Economic Values	The project would provide more housing in the area, which would improve the social and economic condition, but the impact context for the improvement would be so low that detailed analysis is not needed to determine significance.

Issue	Rationale
Wetlands/Riparian Zones	A wetland delineation was completed at the Medora Headquarters Area and the North Unit. This delineation confirmed there are no wetlands in the project footprint, except for human-made wetlands in the Medora area that do not meet the definition of a wetland per US Army Corps of Engineers or Federal Geographic Data Committee standards (Otak, Inc. 2020). It is unlikely there are wetlands in the project footprint at Painted Canyon because the project footprint is on a bluff. A delineation would be completed at Peaceful Valley Ranch and the Elkhorn Ranch Unit if, at the design phase, there is indication there are potential wetlands.
Environmental Justice	Proposed federal projects are required to comply with the provisions of Title VI of the Civil Rights Act of 1964, as amended by Title VIII of the Civil Rights Act of 1968. Title VI of the 1964 Civil Rights Act provides that no person will, on the grounds of race, color, religion, sex, national origin, marital status, disability, or family composition, be excluded from participation in, be denied the benefits of, or be otherwise subject to discrimination under a program of the federal, state, or local government. Title VIII of the 1968 Civil Rights Act guarantees each person equal opportunity in housing. Additionally, Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," requires federal agencies to identify and address disproportionately high and adverse human health or environmental effects on minority and low-income populations. Upon review of these laws and the proposed alternatives associated with this EA, no person would be excluded from or discriminated against in the proposed alternatives considered in this EA. Additionally, minority or low-income populations would be treated the same way as other groups under the alternatives considered in this plan and the proposed action would not have a disproportionately high or adverse effect on a minority or low-income population or community. Therefore, this impact topic is not analyzed in detail in this EA.

3.5 SOUNDSCAPE (NOISE)

3.5.1 Affected Environment

In addition to being within a national park, Painted Canyon is also a designated North Dakota rest area on Highway 94. Given this, there is a generally higher level of noise at this site than is present in other areas of the park. There is existing freeway noise audible and semi-truck traffic and idling in the parking lot is a frequent occurrence as drivers take advantage of the rest area and restroom features. The site is currently only open seasonally; it is closed in the winter as there are no year-round operable water/sewer systems. Current trends of additional visitor use (as discussed in section 3.10.1, Affected Environment) would potentially increase the noise in this area.

3.5.2 Alternative 1: No Action

Under Alternative 1: No Action, there would be no change to the noise levels at Painted Canyon from project activities. Visitor use would continue to increase, and the area could experience additional noise from increased traffic and human activity.

3.5.3 Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan

Over the long-term and specific to Painted Canyon, the interagency fire center would create additional intermittent noise during fire suppression events or during training. Short-term increases in noise during construction would occur in all study areas, however, BMPs would minimize these effects to the extent possible. Because of this, only Painted Canyon is evaluated in this EA.

Under Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, the Painted Canyon area would experience direct, long-term noise from daily operations of the interagency fire center, however, it is not anticipated that the daily operations noise would be increased over to the existing conditions described in section 3.5.1, Affected Environment. However, there would be direct, short-term additional noise during fire suppression events or during trainings. This increased noise would be for as long as the fire suppression or trainings last. Given that this area is generally a noisy location, it is unlikely that the increased noise would be noticeable to visitors in the area.

3.5.4 Cumulative Impacts

Past and present actions in the park include existing facility, trail, and road repairs or renovations. These actions, as described in section 3.2, Cumulative Impacts, have generally caused a short-term increase in noise at Painted Canyon during the construction activities.

Under Alternative 1: No Action, visitation is likely to continue to increase at the park in future years, which could result in more traffic, creating additional long-term increases in noise at Painted Canyon. However, due to the limited nature of the no-action alternative, when it is combined with past, present, and reasonably foreseeable future actions and trends, effects are anticipated to remain low.

Under Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, the Painted Canyon area would experience direct, long-term noise from daily operations of the interagency fire center that would be similar to existing conditions. None of the reasonably foreseeable actions overlap with the Painted Canyon study area. However, the trend of increased visitor use would continue to increase long-term noise in the study area.

3.6 VIEWSHEDS/VISUAL RESOURCES

3.6.1 Affected Environment

Theodore Roosevelt National Park is surrounded by the Little Missouri National Grassland. The main feature of the Little Missouri National Grassland is the rugged terrain of the badlands and its mixed-grass prairie, composed of both long and short grass species. The landscape of the North Dakota Badlands is stark and dramatic as it unfolds along the western edge of the western North Dakota prairie. As described in the park's foundation document, the landscape of the North Dakota Badlands "is one of striking contrasts. The gently rolling mixed grass prairies of the Northern Great Plains suddenly give way to fantastically broken terrain. . . . This rugged landscape of sheer cliffs, grassy plateaus, and colored bluffs of red, gray, tan, and golden hues" is the dominant view from most study areas described in this EA.

The viewsheds of the different study areas contain both undeveloped areas (described above) and some developed areas related to park infrastructure or historic landscapes (such as buildings, roads, trails, and parking lots).

There are several existing trends that have affected and will likely continue to affect the existing conditions for visual resources. A changing climate is a present trend that is expected to continue in the future. This is expected to result in an increased frequency of wildfire occurrence and severity. The greater quantity and severity of fires would increase the potential for fires to alter the visual landscape, including altering existing structures and cultural landscapes. Cultural landscapes are discussed under section 3.8, Cultural Resources.

Increased population growth and increased agricultural and industrial (oil and gas) use of lands near the park are expected to continue and potentially increase development outside the park but within the viewsheds of some study areas, namely Medora. Because the existing condition of Medora is already developed, additional growth would continue that trend, but changes would be unnoticeable from the existing conditions. Increased visitation is also expected to continue, which will continue to add more people, vehicles, and traffic to the landscape, which will add more contrast in form, line, color, light, texture, or scale to the existing landscape.

3.6.1.1 Medora Headquarters Area

The Medora Headquarters Area is relatively developed and contains paved roads, buildings, utilities, etc. It is closest to the city of Medora.

3.6.1.2 Painted Canyon

Painted Canyon is designated as a North Dakota rest area and receives a high amount of traffic (approximately 30,100 vehicles per month at peak summer season, [National Park Service 2022b]). It can be viewed from Buck Hill, which is a viewpoint that is approximately 72 feet higher than Painted Canyon and 2.2 miles away. In the existing view of Painted Canyon from Buck Hill, glare from car windows can be observed. Figures 3.5-1 through 3.5-3 show the existing conditions at Painted Canyon.



FIGURE 3.5-1. EXISTING CONDITIONS AT PAINTED CANYON



FIGURE 3.5-2. VIEW FROM PAINTED CANYON



FIGURE 3.5-3. TRAIL AT PAINTED CANYON

3.6.1.3 Peaceful Valley Ranch

Peaceful Valley Ranch is a cultural landscape (see section 3.8, Cultural Resources), with a completed cultural landscape report to guide treatment and preservation maintenance. The cultural landscape report was prepared in 2019 by Commonwealth Heritage Group and Historic Resources Group. The park has designated some historic viewsheds in the area (Commonwealth Heritage Group and Historic Resources Group 2019) (Figure A-3 in Appendix A) and sited proposed activities and infrastructure to protect those viewsheds.

Peaceful Valley overlooks badlands and Buck Hill (an overlook that is higher than Peaceful Valley). Figures 3.5-4 through 3.5-6 show the existing conditions at Peaceful Valley Ranch.



FIGURE 3.5-4. EXISTING CONDITIONS AS SEEN FROM THE ROAD INTO PEACEFUL VALLEY RANCH



FIGURE 3.5-5. EXISTING CONDITIONS AS SEEN FROM PEACEFUL VALLEY RANCH



FIGURE 3.5-6. EXISTING CONDITIONS AS SEEN FROM THE PARKING LOT AT PEACEFUL VALLEY RANCH

3.6.1.4 North Unit

Almost the entire land area in the North Unit is composed of the designated Wilderness, except for a narrow corridor alongside the unit's 14-mile scenic drive. As a result, the North Unit has less development than other study areas described in this EA. There is an active coal seam in this area; the old visitor center was located on the seam and the instability resulting from water movement in the seam is the reason the center was torn down. There are a few buildings, and a transmission line runs through the site. Figures 3.5-7 through 3.5-9 show the existing conditions at the North Unit.



FIGURE 3.5-7. EXISTING CONDITIONS AS SEEN FROM THE ENTRANCE TO THE NORTH UNIT



FIGURE 3.5-8. EXISTING TRANSMISSION LINE IN THE NORTH UNIT



FIGURE 3.5-9. EXISTING CONDITIONS AT THE NORTH UNIT

3.6.1.5 Elkhorn Ranch Unit

The Elkhorn Ranch Unit is relatively undeveloped except for an existing dirt access road to a trailhead and the trail (Figure 3.5-10).



FIGURE 3.5-10. EXISTING CONDITIONS AT ELKHORN RANCH UNIT

3.6.2 Alternative 1: No Action

Under Alternative 1: No Action, there would continue to be increased visitor use, which could result in increased glare from vehicles at Painted Canyon as seen from Buck Hill, which would continue to directly add contrast to form, light, and color that are not common in the existing landscape. These adverse effects will continue until the park adds or changes visitor facilities as these facilities are being designed to reduce the visual impacts currently occurring.

Under the no-action alternative, increased visitor use could result in a direct, long-term impact from the increase the number of vehicles in the Peaceful Valley Ranch, the North Unit, and the Elkhorn Ranch Unit study areas. The Medora Headquarters Area is heavily developed and additional vehicles are unlikely to impact viewsheds.

3.6.3 Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan

The analysis of impacts from Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, on visual resources assumes maximum project buildout as shown in Figures A-1 through A-5 in Appendix A. Because final building design is not complete, a full visual analysis with simulations would not be useful at this time. Thus, the changes that the project would generate on the landscape described qualitatively in the EA.

The following draft design guidelines to minimize impacts to visual resources at all study areas were considered in the analysis. Additional site-specific design features are described by study area below.

- Consider the visibility of structures from areas in the park.
- Use topography and vegetation for screening as appropriate. (In some areas, trees may attract attention as opposed to screening the view of structures due to the lack of naturally occurring vegetation in certain areas, e.g., prairie landscape areas).
- Reduce or eliminate visual impact of all future development.
- Use dark sky-compliant fixtures.
- Use organic forms, structures, and features that blend with the natural landscape and intrude on it as little as possible.

3.6.3.1 Medora Headquarters Area

There would be no changes to the existing (developed) condition of the viewshed at the Medora Headquarters Area, therefore no direct or indirect impacts are anticipated. Proposed additional housing buildings would be constructed in an area with numerous other buildings and development. Project elements would repeat the form, line, color, texture, or scale common in the existing landscape. The new buildings in the Medora area would incorporate design features to minimize visibility of facilities from the entrance road and from the city into the park and vice versa. Design features would also use vegetative screening of buildings so as not to intrude on views and maintain uninterrupted landscapes.

3.6.3.2 Painted Canyon

The project would expand the existing visitor center and add additional visitor center parking, a new trail segment north of Lagoon Road, and a new interagency fire center. As noted above, glare from car windows can be observed in the existing view of Painted Canyon from Buck Hill. As a result, the proposed new parking areas were sited to avoid the canyon rim to reduce impacts to visual resources. In addition, the interagency fire center was set back from the canyon edge to reduce the view and resulting contrast of the building as seen from Buck Hill. The interagency fire center would be the tallest structure in the area (1.5 stories tall), the other proposed building (expansion to visitor center) would be roughly the same height as the existing visitor center at the site.

The proposed buildings at Painted Canyon would incorporate design features to minimize reflectivity and glare, such as considering the use of awnings, alcoves, or building orientation. Thus, effects to the viewshed at Painted Canyon would be relatively minor when compared to the existing conditions. Most of the project elements at Painted Canyon would slightly modify the viewshed, but they would repeat the form, line, color, texture, and pattern common to the landscape character at such scale, that they would not be overtly noticeable. The interagency fire center would be the exception; because it would be taller than other structure or elements of the landscape, it would be visually prominent in the landscape. Effects to viewsheds and visual resources at Painted Canyon would be adverse, direct, and long term.

3.6.3.3 Peaceful Valley Ranch

The 2019 cultural landscape report recommends limiting building and landscape development in certain areas. The proposed buildings at Peaceful Valley Ranch were originally sited at the top of the river terrace north of the existing gravel parking lot. However, because of concerns about potential flooding, the buildings were re-sited further west, outside the cultural landscape to avoid the viewshed and areas of historic significance.

With the revised siting location and implementation of the design guidelines listed above, there would be minimal adverse, direct, long-term impacts to visual resources at Peaceful Valley Ranch.

3.6.3.4 North Unit

Because the North Unit has limited development, project structures were sited to be less visible from the future visitor center. No new structures are proposed on the existing coal seam. The additional structures and linear features would introduce form, line, color, texture, or scale not common in the landscape, which could degrade the scenic value. With the siting considerations and implementation of the design guidelines listed above, effects would be minimized. Effects to viewsheds and visual resources at the North Unit would be adverse, direct, and long term.

3.6.3.5 Elkhorn Ranch Unit

There would be no changes to the existing condition of the viewshed at the Elkhorn Ranch Unit as very few activities are proposed in this location, except for improving trailhead amenities and signage. The landscape character would remain intact, and project elements would not dominate the visual setting. Therefore, no direct or indirect impacts are anticipated.

3.6.4 Cumulative Impacts

Past and present actions in the park include existing facility, trail, and road repairs or renovations. These actions, as described in section 3.2, Cumulative Impacts, have generally maintained the visual and cultural landscape of the park. Reasonably foreseeable future actions of facility and roadway repairs or renovations, construction of new buildings (Medora), and relocation of existing structures are not likely to change the existing condition of visual resources in the study areas.

Under Alternative 1: No Action, the trend of increased visitation is likely to continue, which could result in increased use of existing visitor facilities, more vehicles, and more traffic. Additional visitation would continue to add contrast to form, light, and color that are not common in the existing landscape. However, due to the limited nature of the no-action alternative, when it is combined with past, present, and reasonably foreseeable future actions and trends, effects are anticipated to remain minor.

Under the Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, the new and upgraded facilities would better accommodate and visually integrate increased visitation by siting and designing facilities to minimize effects to visual resources; this would include integrating an increased number of visitors and increased number of vehicles. Though the proposed visitor facilities would add adverse, direct, long-term effects to visual resources by adding forms, lines, colors, textures, and patterns that are not common in the existing landscape, they would be less in most areas than the existing facilities. The South Unit Loop road repair treatments to the existing road in the project area would become permanent features on the landscape, potentially detracting from the scenic resources of the park and affecting visual quality. However, the project would

occur in areas where the presence of the road has already altered the natural setting and would not represent a noticeable departure from historic visual conditions. Only the new interagency fire center would add visual contrast that would be greater than Alternative 1: No Action when combined with past, present, and reasonably foreseeable future actions and trends.

3.7 SPECIAL STATUS OR THREATENED AND ENDANGERED SPECIES: FAUNA

Although special status wildlife may use other areas of the park, recent projects and concurrence from the US Fish and Wildlife Service indicate that the study areas have a low potential for use by special status or threatened and endangered wildlife other than the cottonwood trees and other trees that may provide habitat for northern long-eared bat (*Myotis septentrionalis*). Therefore, this analysis focuses on northern long-eared bat habitat.

The analysis assumes that prior to construction, special-status species surveys would be conducted, including eagle nest surveys. If special-status species are present, the project would be sited to avoid them. If eagle nests are present, the project would site activities at least 0.5 mile from nests or apply for an incidental take permit with the US Fish and Wildlife Service.

3.7.1 Affected Environment

Several studies have surveyed for bat presence in the park (Barnhart and Gillam 2017; National Park Service 2017). Acoustic monitoring has indicated there could be the potential for northern long-eared bat to be present, but there is no physical confirmation of bats in the park. Similarly, there are no known maternity roost trees or hibernacula for northern long-eared bats in the park (Barnhart and Gillam 2017; US Fish and Wildlife Service 2022). Thus, this EA section focuses on potential northern long-eared bat habitat in the project areas.

During the summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees. The species uses cottonwood trees, though junipers or ash trees may also be used. Cottonwoods and other large woody vegetation occur throughout the study areas, except at Painted Canyon. Warmer temperatures since 1976 have reduced flood peaks and the ice jamming that magnifies those peaks; as a result, channel movement, cottonwood establishment and cottonwood growth have decreased. Increasing temperatures associated with global climate change could continue this trend (Friedman 2017).

3.7.2 Alternative 1: No Action

Under this alternative, there would be no change to northern long-eared bat habitat from project activities.

3.7.3 Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan

The analysis of impacts from Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, on special status species assumes maximum project buildout as shown in Figures A-1 through A-5 in Appendix A. During project design, the amount of actual footprint disturbance would be refined.

The project could remove cottonwood trees or other large woody vegetation at Peaceful Valley, Medora Headquarters Area, and North Unit. Implementation of the projects in these study areas could remove up to 3.5 acres of trees. Endangered Species Act consultation with US Fish and

Wildlife Service would occur before the project was implemented. Noise from construction activities could have a direct short-term impact on northern long-eared bat. However, mitigation measures listed in section 2.5.8, Wildlife and Species of Concern, including restricting construction activities when bats are likely present (November 1 to March 31) and reducing work during the pupping season (June/July) would reduce this potential impact.

In addition, tree removal activities would be conducted outside of the northern long-eared bat pup season (June 1–July 31) or the active roosting season (April 1–October 31). This would minimize impacts to pups at roosts not yet identified. The US Fish and Wildlife Service recommended tree removal period is November 1 through March 31.

3.7.4 Cumulative Impacts

Past and present actions in the park include existing facility, trail, and road repairs or renovations. These actions, as described in section 3.2, Cumulative Impacts, have generally had a short-term increase in noise that could have had impacts on bats if they were in the area. However, all projects with potential to impact federally listed species would be required to consult with the US Fish and Wildlife Service and mitigation measures developed if an “effect” determination is made.

Under Alternative 1: No Action, reasonably foreseeable future actions could also have short term increase in noise that could have had impacts on bats if they were in the area. Similar to past and present actions, consultation would be required with the US Fish and Wildlife Service.

Under Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, up to 3.5 acres of trees could be removed due to implementation of the projects, resulting in loss of potential bat habitat. Reasonably foreseeable projects could add to the removal of the habitat. As discussed in Section 3.7.1, warmer temperatures since 1976 have reduced flood peaks and the ice jamming that magnifies those peaks; as a result, channel movement, cottonwood establishment and cottonwood growth have decreased. Increasing temperatures associated with global climate change could continue this trend (Friedman 2017).

3.8 CULTURAL RESOURCES

3.8.1 Affected Environment

3.8.1.1 Medora Headquarters Area

The Medora Headquarters Area contains the Maltese Cross Cabin, which was Theodore Roosevelt’s first home in North Dakota and was determined eligible for listing in the NRHP in 1978. As noted in the 1978 NRHP nomination form and on the NPS (2018) website, the logs of the Maltese Cross Cabin are the original ponderosa pine used in 1883. The original roof was removed by 1900, and the ceiling and pitched-style roof were restored when the cabin was transferred to the park. The structure has undergone varied restoration efforts over the years and is furnished with period objects.

3.8.1.2 Peaceful Valley Ranch

Peaceful Valley Ranch, which lies within the South Unit of Theodore Roosevelt National Park, is a designated cultural landscape. The ranch was listed in the NRHP in 1994 as significant under Criterion A for its association with dude ranching, open range ranching, and the establishment of the park, and under Criterion C, for its late nineteenth- and early twentieth-century design and

construction techniques. Contributing features consist of three buildings: the ranch house (ca. 1885), the bunkhouse (1920), and the log barn (1905). The period of significance extends from 1885, the approximate construction date of the Ranch House, to 1936, when the ranch was acquired by the National Park Service (Commonwealth Heritage Group and Historic Resources Group 2019).

As noted in the 2019 Cultural Landscape Report, “The ranch maintains integrity of location as the site of early free-range and fee simple ranching operations, and a tourist-oriented dude ranch. It also retains integrity of setting for its unchanged relationship with the larger Little Missouri badlands landscape and the easy proximity of its rugged hills and bluffs. In addition, the ranch retains integrity of association with the significant periods of its history because of its generally rustic aesthetic, and surviving buildings and cultural landscape features.”

Key components of the existing cultural landscape, which is generally bounded by East River Road to the south, Paddock Creek to the east, and the Little Missouri River to the north, that contribute to the integrity of the ranch include:

- Natural systems and features, topography, and spatial organization: The primary natural systems and features of Peaceful Valley Ranch are the Little Missouri River, including its river terrace, and Paddock Creek. These features have not substantially changed since the period of significance. Since its establishment in 1885, development at the ranch has always occurred on the natural river terrace.
- Vegetation: Most of the area is characterized by low native sage scrub. However, there is one large, cottonwood tree, standing about 12 feet west of the ranch house, that has been recorded historically in photographs.
- Circulation: Circulation within the project area includes both paved and unpaved roads, parking areas, and several multiuse trails. The original road to the ranch, which was demolished in the 1960s, and the parking/work area represent contributing features.
- Views and vistas: Views that are dominant historic features of the ranch and still contributing features today include views of the ranch upon approach and from the top of the bluffs southeast of the area and views from the ranch to the larger badlands landscape.
- Buildings, structures, and small-scale features: All three contributing buildings present at the ranch possess integrity of location, setting, materials, workmanship, feeling, and association from the period of significance (Commonwealth Heritage Group and Historic Resources Group 2019). Additionally, the ranch contains varied non-contributing agricultural and utilitarian structures, site furnishings, signs, features associated with the corrals, and utilities.
 - The ranch house was originally constructed around 1885, with many additions and modifications constructed in the late 1880s and early part of the twentieth century.
 - The bunkhouse is located directly north of the ranch house just across the access road. Constructed in 1920 atop a concrete foundation, the bunkhouse was built as a one-story single open room intended for recreation and socialization of guests of the newly opened dude ranch. Though less extensive, like the ranch house, the bunkhouse has undergone modifications and additions since its original construction.
 - The barn lies east of the ranch house and is situated along the access road. This building was constructed in 1905 under the ownership of George Burgess and is a good example of vernacular architecture dating from the early twentieth century.

Previous archeological investigations in the vicinity of the ranch have yielded historic debris and isolated finds. The potential for intact buried archeological resources to be present is considered likely (Commonwealth Heritage Group and Historic Resources Group 2019).

3.8.1.3 Elkhorn Ranch Unit

The Elkhorn Ranch Unit is a remote unit, located between the North Unit and South Unit of the park. The Elkhorn Ranch site was determined eligible for listing to the NRHP in 1978 due to its association with Theodore Roosevelt. In 1884, Theodore Roosevelt added the Elkhorn Ranch to his property holdings and operated it until 1892, taking advantage of the availability of open range for his cattle. The unit currently contains the historic homestead site, interpretive signage, and a trailhead. While the Elkhorn Cabin no longer stands, foundation stones indicate where the structure, built of the local cottonwood, was once located (National Park Service 2021). As noted in the 1978 NRHP nomination form, the remote, undeveloped setting of the ranch provides visitors with a unique opportunity to experience how ranch life may have been during Theodore Roosevelt's time, as the site looks much like it did at the turn of the century.

3.8.2 Alternative 1: No Action

Under Alternative 1: No Action, management of cultural resources would follow NPS Management Policies 2006 and Cultural Resource Management Guidelines (National Park Service 1998, 2006). Historic structures would continue to be protected in accordance with federal requirements and maintenance would continue to meet the Secretary of the Interior's Standards for the Treatment of Historic Properties. Therefore, there would be no direct or indirect adverse effect to cultural resources.

Current management of the park would have no direct or indirect adverse impact to archeological resources because there would be no ground disturbance where archeological resources may be present.

3.8.3 Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan

In this EA, cultural resources impact analysis complies with the requirements of NEPA. For the purposes of this EA, any project action that results in a change that would alter, directly or indirectly, any of the characteristics of a site, structure, or landscape pattern or feature that would qualify the landscape for inclusion in the NRHP would be considered adverse.

Under 36 CFR 800, the implementing regulations for Section 106, a determination of either adverse effect or no adverse effect must be made for affected NRHP-listed or eligible cultural resources.

3.8.3.1 Medora Headquarters Area

Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, could improve the Maltese Cross Cabin by adding weather protection. Any adverse impacts to historic or archeological resources from project activities would be avoided or minimized per section 2.5.2, Cultural Resources. The National Park Service could also choose to move the cabin to another location to reduce flooding risk. However, final design and plan components for the cabin have not been finalized. The National Park Service will prepare a detailed plan prior to plan implementation and conduct additional NEPA analysis and Section 106 compliance, as needed, to ensure that adverse effects to the historic Maltese Cross Cabin would be avoided or minimized. Therefore, there would be no direct or indirect adverse effects to the Maltese Cross Cabin.

3.8.3.2 Peaceful Valley Ranch

Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, would implement the following actions with potential to affect the cultural landscape:

- Construction of up to two dormitory housing for educational program participants
- Construction of a STEM or STEAM facility
- Construction of an observatory and an amphitheater for additional outdoor educational opportunities
- Trailhead relocation, new trail connection, picnic shelters/tables, a single vault toilet, interpretation, wayfinding, and orientation at the new trailhead, and expanded parking
- Reclamation of corrals
- Use of the ranch house, bunkhouse, and barn for office space, meetings, interpretation, and educational program support

The contributing structures in the study area (ranch house, bunkhouse, and barn) have recently been rehabilitated for modern programming. Use of those structures as proposed in the park plan would not require any structure modifications or additions that could alter the integrity of the buildings. Proposed new facilities would be constructed outside the cultural landscape boundary, so there would be no adverse effect to the integrity of existing historic buildings or changes to existing landscape characteristics that influence historic significance (e.g., the ranch house cottonwood tree or historic views). Placement of new facilities along the river terrace is not feasible due to flooding concerns; moving facilities outside the cultural landscape boundary would avoid the need to place facilities in a location that would be counter to the historic spatial organization of the ranch. Any adverse impacts to historic or archeological resources would be avoided, minimized, or mitigated per section 2.5.2. Since the proposed plan would maintain the location, setting, and feeling of the ranch, there would be no direct or indirect adverse effect.

Existing trailheads and trails and corrals proposed for reclamation are not a contributing resource to the cultural landscape, so proposed plan revisions would result in no direct or indirect adverse effects. The National Park Service would also avoid all known archeological sites (see section 2.5.2).

3.8.3.3 Elkhorn Ranch Unit

No changes to the existing homestead site or trees that have been on the site since Theodore Roosevelt was there would occur under the proposed plan. The proposed plan would maintain the intact, undeveloped feeling and setting of the ranch site, while enhancing visitor experiences and education. Adverse impacts to historic or archeological resources would be avoided, minimized, or mitigated, per section 2.5.2. Therefore, there would be no direct or indirect adverse effect.

3.8.4 Cumulative Impacts

Past and present actions in the park include existing facility, trail, and road repairs or renovations. These actions, as described in section 3.2, Cumulative Impacts, have generally maintained the cultural landscape of the park, as much of the surrounding landscape remains the same as it was prior to and during Theodore Roosevelt's time. Reasonably foreseeable future actions of facility and roadway repairs or renovations, construction of new buildings, and potential relocation of

existing structures are not likely to change the existing condition of cultural resources in the park. These projects would undergo additional NEPA analysis and Section 106 compliance, as needed, to ensure that adverse effects to cultural resources are avoided, minimized, or mitigated.

Under the no-action alternative, there would be no additional cumulative impact beyond those disclosed in section 3.8.2, Alternative 1: No Action, because no project construction, relocation, or reclamation activities would occur that would impact the integrity of existing archeological or historic resources or cultural landscapes.

Under Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, there would be no change to the existing homestead site or trees for the Elkhorn Ranch Unit and placement of new facilities would occur outside the cultural landscape boundary for Peaceful Valley Ranch. Any adverse impacts to cultural resources would be avoided, minimized, or mitigated per section 2.5.2. The projects could improve the Maltese Cross Cabin by adding weather protection. Therefore, there would be no cumulative adverse effect when proposed action impacts are added to past, present, and reasonably foreseeable impacts.

3.9 HUMAN HEALTH AND SAFETY

3.9.1 Affected Environment

The level and nature of facilities' inadequacies and safety concerns vary across the five study areas of the park; however, the following general concerns for human health and safety are common to all five.

Visitation at the park has substantially increased over time, from an annual average of 482,000 visitors in the 1980s to an average of over 700,000 per year from 2016 to 2021 (National Park Service 2022a). The busiest months are June, July, and August (National Park Service 2017). Because visitation has increased so drastically since the original construction of park facilities, such as entrance stations and parking areas, these facilities do not meet the park's current needs and use patterns. The park also sees a larger variety in the types of users visiting the park than in the past. Wayfinding and circulation within parking areas and at trailheads is not designed to accommodate larger, more modern vehicles and these diverse user types, which can result in conflicts and safety concerns among user groups.

Trails throughout the park include many steep grades, possibly created or worsened by buffalo or other wildlife, and are difficult to maintain safely. Many trails in the park are not necessarily compliant with approved trail design standards as enumerated in a Memorandum of Understanding among North Dakota Park and Recreation, US Forest Service, and Theodore Roosevelt National Park.

Wildfires are a regional issue for the National Park Service, US Forest Service, and state agencies. An average of one to two wildfires occur per year within the park, most commonly caused by lightning. There are also roughly 20 to 40 coal seam fires burning in the park at any given time, which have the potential to grow into a wildfire. While some wildfires are naturally occurring and even necessary for maintaining natural ecosystems, fires that are started by humans or threaten human lives or property must be extinguished by firefighters (National Park Service 2021). The park currently supports fire suppression efforts from dispersed and often shared spaces in the Medora area. There is currently no dedicated, centralized fire management and response facility to service the various areas of the park, which results in long response times and inefficient mobilization in the event of a wildfire.

Past, present, and expected trends have affected and will likely continue to affect human health and safety within the park and the study areas in the future. As regional population growth and visitor use of the park continue to increase, the existing issues regarding human health and safety are likely to worsen over time. Increased visitation to the area would result in a corresponding increase in traffic, demand for parking, and visitor and staff use of park facilities that are not updated and not fully equipped to support the increased visitation. Increased demand for park services may require hiring additional staff, which would exacerbate the existing problems with workspace availability and suitability. Increased visitation by all types of users would increase the risk of unsafe conflicts among users in parking areas and at trailheads. Ongoing climate change is expected to result in an increase in the frequency and severity of wildfires, putting more staff and users at risk of injury and increasing the demand for firefighting services. The dispersed and inefficient locations of firefighting facilities in the region combined with these larger and more frequent wildfire events would exacerbate existing issues with response times and mobilization.

3.9.1.1 Medora Headquarters Area

The existing buildings within the Medora Headquarters Area (including the visitor center, administration building, resources building, maintenance and storage buildings, seasonal and permanent staff housing, and entrance kiosks) do not meet the most current standards of the ABA applicable to federal buildings. Therefore, visitors and employees with disabilities cannot be fully accommodated. Entrances, doors, door hardware, approaches to doors, restroom fixtures, surface heights, dimensions, and turning radii in the restrooms and kiosk work areas are noncompliant with ABA standards.

Many of the administration buildings on-site have reached the end of their useful lives and can no longer accommodate the types of tasks required of park staff. Many buildings on-site, particularly storage and maintenance buildings, are not climate-controlled. The current vehicle storage building is unheated and is not large enough to accommodate modern vehicles now used for park maintenance. The resources building is particularly unsuited to the types of work that must be accommodated. It lacks a sanitary wet lab area, secure storage for controlled substances, and proper storage for firearms. The maintenance area also lacks the proper space for operations, and staff workspaces do not currently comply with codes and standards defined by ABA, OSHA, and the GSA for all job functions.

Vehicle access, parking, and circulation also present safety concerns at the Medora Headquarters Area. The entrance station is limited in its capacity to accommodate increasing visitation, leading to unsafe vehicle backups onto Pacific Avenue. The current entrance footprint does not safely accommodate larger, modern vehicles, such as RVs, motorhomes, and snowplows, which creates a safety risk to employees and visitors. Currently, there are no separate parking areas for visitors and staff, leading to conflict between vehicles and pedestrians and unsafe and inefficient circulation of park staff and maintenance vehicles within visitor use areas.

3.9.1.2 Painted Canyon

The visitor center at Painted Canyon does not currently have a year-round operable water/sewer system, so it is closed in the winter. The visitor center also lacks accessible storage, fully accessible restrooms for visitors or staff, and a staff break room. The interior layout of the Painted Canyon visitor center, particularly within the gift shop, results in poor visibility, which enables shoplifting, causing general security issues. Wildlife conflicts, particularly with bison, have resulted in unsafe situations with visitors and park staff around the Painted Canyon visitor center.

Parking circulation and accessibility is also a concern at Painted Canyon. The Painted Canyon area doubles as a rest stop along I-94. Due to its nature as a short-term rest stop, the parking area experiences high turnover rates, resulting in consistently higher levels of traffic compared with the entrance stations at the Medora Headquarters Area and the North Unit (National Park Service 2022b) and subsequent conflicts among cars, trucks, semi-trucks, larger recreational vehicles, horse trailers, and pedestrians. Furthermore, the parking area is not separated by vehicle type, meaning passenger cars must use the same entrance and exit as large vehicles and navigate the same area. Trails in this area allow horseback riding; however, trailheads are not well defined and parking areas do not have dedicated horse trailer parking, which can lead to hazardous conflicts between horses, pedestrians, and vehicles. The parking area at the Painted Canyon visitor center has wheelchair-accessible spaces, but they are not fully ABA-compliant.

3.9.1.3 Peaceful Valley Ranch

The historic structures at Peaceful Valley Ranch have recently been rehabilitated. However, the existing utilities, like the septic system, power, and phone/data service, available in this area are operating at their full capacity and do not allow for any expansion of use. The dirt parking area at Peaceful Valley Ranch is very small and does not have dedicated space for large vehicles to turn around, which can create conflicts and safety concerns between different types of users. The current trailhead is also not well-defined, which results in conflict between different user groups as well.

3.9.1.4 North Unit

The North Unit entrance station and parking areas have issues similar to those of the entry area in the Medora Headquarters Area; the current entrance station is located too close to US Highway 85 and is overwhelmed by increased park visitation, causing frequent backups onto the highway on high visitation days.

The North Unit visitor center currently consists of temporary trailers, which are at the end of their useful lives. The current location of the temporary visitor center, staff offices, and restroom trailers is a geologically unstable area that is prone to landslides, erosion, and instability from coal seams, which has caused the previous visitor center in that location to fail. The existing sewage lagoons are also in an unstable area and are too close to the Little Missouri River and existing employee housing, which creates a risk of flooding and health concerns. Also, due to a lack of fencing in the visitor center area, wildlife conflicts are common and there have been incidents in which visitors and staff have been trapped in the visitor center because of bison in the area.

Additionally, the maintenance area in the North Unit also has issues similar to those of the Medora Headquarters Area, namely that the existing buildings are not large enough to adequately store and maintain the more modern vehicles needed for park maintenance and operations. The administration workspaces within the maintenance area do not currently meet staff needs and do not comply with codes and standards defined by ABA, OSHA, and the GSA for all job functions.

3.9.1.5 Elkhorn Ranch Unit

The Elkhorn Ranch Unit is a very remote area with very little development. The study area currently includes a trail, wayfinding, benches, interpretive waysides, and connections to the MDHT system but no other development or facilities. Bikes are extremely common on the MDHT as it is not on NPS land, but they are not allowed on the Elkhorn Ranch site.

3.9.2 Alternative 1: No Action

Alternative 1: No Action represents a continuation of existing conditions and maintenance activities; therefore, there would be no short- or long-term, direct or indirect, adverse or beneficial impacts to health and human safety. Existing issues regarding human health and safety would continue to persist. The entrance stations would remain in their current locations, and all buildings would be maintained in their current condition. Staff workspaces would not be updated to comply with codes and standards defined by ABA, OSHA, and the GSA and would continue to be unsuitable for the types of work that occur in those spaces. Facilities would continue to be inaccessible to visitors and park staff with disabilities. All park users, including passenger cars, large vehicles, horses and horse trailers, pedestrians, and park staff, would continue to use the same parking areas and trailheads, and the associated conflicts among users would continue. Any trails and trailheads that are currently not in compliance with accepted design standards would continue to present hazards related to steep grades. In the event of a wildfire, park staff would continue to rely on dispersed fire caches and local firefighting teams, which would continue to result in long response times and inefficient mobilization to suppress fires. These measures do not adequately address the health and human safety concerns of the park.

3.9.3 Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan

The purpose and need of the project includes addressing human health and safety concerns throughout the park, including improvements to utilities, parking and circulation, and administration workspaces.

Under Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, construction activities at all study areas could result in direct, short-term, adverse impacts to human health and safety during the construction period. The presence of large vehicles, construction equipment, and debris could create hazards for employees and visitors and could impact emergency vehicle response times. However, temporary fee collection areas would be set up where appropriate to divert visitors and staff away from construction areas and keep employees separate as facilities are being upgraded. Therefore, the risk of injury to employees and visitors would be extremely low.

Construction activities would be conducted in accordance with established safety protocols to reduce potential safety hazards for visitors, employees, and construction crews. During construction, appropriate barriers and barricades would be used to clearly delineate work areas and prevent visitor travel near construction areas. Visitors would not be allowed into construction zones. Site staging and storage areas for construction vehicles, equipment, materials, and soils would be located in previously disturbed or paved areas outside of high visitor use areas and would be clearly identified in advance of construction. Trucks hauling debris and other loose materials would be covered to prevent spillage. Emergency response protocols and emergency vehicle access routes would be developed for implementation during construction. To reduce potential impacts to normal park operations during construction, employees and construction crews would be required to park their vehicles in designated locations. The Theodore Roosevelt National Park would coordinate with the city of Medora and North Dakota Department of Transportation on installing appropriate signage regarding construction routes for public safety. To reduce potential conflicts with wildlife and visitors, construction personnel would be instructed on appropriate behavior in the presence of wildlife and on proper storage and handling of food, garbage, and other attractants. Overall, with the implementation of these best practices, the direct, short-term, adverse impacts to human health and safety would be minor to negligible.

3.9.3.1 Medora Headquarters Area

Under Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, accessibility and facilities in the Medora Headquarters Area would be improved through the reconstruction of all existing buildings to meet federal accessibility standards, improving conditions for park employees and visitors with disabilities. The existing resources building would be replaced with a facility that provides safe storage for firearms and controlled substances. All staff workspaces would be designed to comply with codes and standards defined by ABA, OSHA, and GSA for all job functions. The entrance station would be relocated and expanded to accommodate increased visitation, which would reduce safety hazards related to traffic congestion on Pacific Avenue and other local roads. The parking areas at the visitor center and administration buildings would be expanded and reconfigured to accommodate larger modern vehicles and improve circulation for all user types, including areas designated specifically for RV parking and park employees, which would further reduce opportunities for hazardous conflicts between users.

The existing fire cache at the Medora Headquarters Area would be removed to construct the new housing and maintenance facilities, which may temporarily impact fire response and suppression activities. However, this fire cache would be replaced by an interagency fire center proposed to be located at Painted Canyon, discussed in further detail below.

Overall, the proposed activities at the Medora Headquarters Area would result in a direct, long-term, beneficial impact to human health and safety.

3.9.3.2 Painted Canyon

Under Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, facility improvements to the Painted Canyon visitor center would be similar to the building improvements proposed at the Medora Headquarters Area. The proposed action would also include improvements to the circulation of the Painted Canyon area and safety improvements for both staff and visitors. The visitor center parking area would be expanded and reconfigured to accommodate both passenger and large vehicles with added access control. Fully accessible ABA-compliant parking spaces would be added. A designated horse trailer parking area would reduce conflicts between horses and other trail users. Clarification of the pedestrian flow to the visitor center entrance would improve visibility between parking areas and the visitor center, improve circulation of pedestrian visitors and employees, and reduce conflicts between pedestrians and vehicles. Bison fencing is proposed around the visitor center, which would remove potential points of conflict between visitors and bison. Utilities would be upgraded to current code, including a year-round operable water and sewer system so the Painted Canyon facilities could remain open all year.

Painted Canyon is the proposed location for a centralized interagency fire management and response facility. The park would partner with multiple agencies, including but not necessarily limited to the US Forest Service, Bureau of Land Management, and North Dakota state agencies. Storing fire suppression equipment and vehicles from multiple agencies in one centralized location would be mutually beneficial for all agencies involved and would result in more efficient and timely mobilizations and more efficient training operations. This area has an expansive viewshed and direct access to I-94, which would further reduce response times. Prescribed fire and fuels management activities would continue as indicated in each agency's respective fire management plan.

The proposed activities at the Painted Canyon area would result in a direct, long-term, beneficial impact to human health and safety and would be consistent with the purpose and need of the project.

3.9.3.3 Peaceful Valley Ranch

Under Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, the existing trailhead at Peaceful Valley Ranch would be relocated and a larger parking area would be constructed. A separate, dedicated equestrian parking area would also be constructed, including a new connector trail and wayfinding to connect the equestrian parking area to existing trails. All trail improvements would be constructed in accordance with the approved design standards in the Memorandum of Understanding with North Dakota Parks and Recreation, US Forest Service, and Theodore Roosevelt National Park.

Improved interpretative signage, wayfinding, and orientation at the relocated trailhead, regular parking area, and equestrian parking area would reduce or eliminate hazardous user conflicts. Circulation in the parking area would be improved either by providing a designated U-turn space or by adding a new road to create a one-way loop, which would eliminate traffic conflicts as vehicles enter or exit the area. The proposed activities at the Peaceful Valley Ranch would result in a direct, long-term, beneficial impact to human health and safety.

3.9.3.4 North Unit

Activities proposed at the North Unit would have similar beneficial impacts as the improvements at the Medora Headquarters Area. The temporary trailers that currently house the visitor center and administration spaces would be replaced with a single permanent building in a more geologically stable area, reducing or eliminating the risks of landslides, erosion, and coal seam instability that threaten the current facilities. The sewage lagoons would be relocated further from employee housing, maintenance areas, and the Little Missouri River to minimize health risks. New employee housing, maintenance, and administration facilities would be designed in accordance with all NPS, OSHA, ABA, and GSA standards and would be large enough to accommodate administration workspaces, vehicle storage, and other park maintenance and operations. New access roads would be constructed between employee housing areas and the new visitor center, which would improve employee circulation and reduce conflicts between employee and visitor vehicles. The entrance station would be relocated and expanded to accommodate increased visitation, which would reduce safety hazards related to traffic congestion on US Highway 85 and other local roads. Overall, the proposed activities at the North Unit would result in a direct, long-term, beneficial impact to human health and safety.

3.9.3.5 Elkhorn Ranch Unit

Under Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, amenities such as bike racks, interpretive signage, and a vault toilet would be added to the existing parking area. No long-term impacts to human health and safety are anticipated.

3.9.4 Cumulative Impacts

Past and present actions in the park include existing facility, trail, and road repairs or renovations. These actions, as described in section 3.2, Cumulative Impacts, have generally maintained or improved the health and human safety aspects of the park. Reasonably foreseeable actions such as facility and roadway repairs or renovations, construction of new buildings, and potential relocation of existing structures are expected to address safety considerations to some extent. However, these potential future actions will also bring additional visitors to the area, resulting in a corresponding increase in traffic, demand for parking, and visitor and staff use of park facilities.

Under Alternative 1: No Action, the safety issues described in section 3.9.1, Affected Environment, would continue. The park would continue to address safety issues on a case-by-case basis subject to funding availability. Construction activities associated with any of the planned actions discussed above would result in short-term, minor, localized adverse impacts on human health and safety, but would be mitigated through best practices. The no-action alternative, when combined with past, present, and reasonably foreseeable future actions and trends, is therefore likely to result in short- and long-term, direct and indirect, adverse impacts to human health and safety.

Under Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, facilities for visitors and staff would be upgraded and expanded to serve the increasing levels of visitation in the region that may occur over time as a result of other planned actions. Entrance facilities would be relocated and expanded to accommodate increased visitation and reduce safety hazards related to traffic congestion on local roads, which would contribute to the long-term, beneficial impacts of other planned actions such as roadway improvements. The proposed interagency fire center would enable more effective fire suppression efforts in the face of increased frequency and intensity of wildfires due to climate change and would therefore contribute to a cumulative beneficial impact on fire suppression services in the region. Construction activities may contribute to the short-term adverse impacts to human health and safety of other planned actions due to the presence of large vehicles, construction equipment, and debris. However, best practices would be employed to minimize risks to human health and safety during construction, so the incremental short-term impact would be negligible. When combined with the past, present, and reasonably foreseeable impacts, the proposed action would result in a long-term, beneficial cumulative effect.

3.10 VISITOR USE/EXPERIENCE

3.10.1 Affected Environment

Visitation at the park has substantially increased over time, from an annual average of 482,000 visitors in the 1980s to an average of over 700,000 per year from 2016 to 2021 (National Park Service 2022a). The busiest months are June, July, and August (National Park Service 2017). Because visitation has increased so drastically since park facilities such as entrance stations and parking areas were originally constructed, these facilities do not all meet the park's current needs and use patterns.

Past, present, and expected trends have affected and will likely continue to affect visitor use within the park and the study areas in the future. Regional population growth and visitor use of the park are likely to continue to increase, the existing issues are likely to worsen over time.

3.10.1.1 Medora Headquarters Area

Entry into the park from the Medora Headquarters Area is currently accessed through a two-lane entrance station on East River Road. Visitors then continue to the visitor center parking area and the visitor center itself, which is somewhat nestled/hidden among trees, before accessing the park. The visitor center includes bookstore space, a theater, a small museum, restrooms for visitors, and office space for park staff and the Theodore Roosevelt Nature and History Association. Behind the visitor center is the Maltese Cross Cabin which visitors can walk through and is accessed by a dirt path.

The entrance station into the park has become inadequate to handle increased visitation to the park, lines at the station frequently back up onto Pacific Avenue and additional capacity and

stacking room are needed. The parking area at the visitor center is currently mostly passenger vehicle parking and there is not enough parking for RVs or other large vehicles.

The visitor center itself does not meet the needs of visitors and park staff. The visitor center sign and parking entrance draw visitors in, but the building itself is somewhat hidden by trees and exterior information kiosks would help visitors gain information before entry. There is also no exterior restroom access, so there are porta-potties in parking spaces for use when the visitor center is closed, and the existing restrooms do not meet current ABA standards.

The bookstore space inside is also rather constrained and doubles as a gathering space for tour groups. The theater has a projection room that is no longer needed and could better serve a different function. The museum space has dated exhibits, has no security system, and is in need of an update overall.

The outside area around the building needs additional picnic shelters; visitors currently move picnic tables closer to the building in search of shade and additional trails in the area, particularly around the Maltese Cross Cabin.

3.10.1.2 Painted Canyon

The Painted Canyon site is prominent from I-94, but currently there is limited indications that visitors are entering a national park. The site is accessed as a rest area off the highway and has a large parking area, visitor center, picnic areas, and trails along the rim and overlook.

The parking area for the site is large for the number of visitor facilities available and has ABA parking spaces, but they are not compliant. It also frequently has semi-truck traffic due to its function as a rest area. The site is currently not open in the winter as it does not have year-round operable water/sewer systems. The addition of those systems would increase its use and serve visitors year-round.

The visitor center itself essentially functions as a bookstore, which is run by the Theodore Roosevelt Nature and History Association and has the largest quantity of merchandise sales for the park. The building has a basement storage space for merchandise which requires volunteer staff, who are often retired and elderly, to carry items up the stairs to restock the store. As an alternative to this, Theodore Roosevelt Nature and History Association staff often haul goods from Medora. The basement storage and staff and public restrooms are not accessible.

3.10.1.3 Peaceful Valley Ranch

Peaceful Valley Ranch is listed in the NRHP and is also one of the best places in the park for dark skies and astronomy activities. The park hosts an annual astronomy festival here and has also recently rehabilitated the three contributing historic structures on the site. These structures are intended to be used for educational programming and park operations. Outside of the cultural landscape is a good location for additional environmental education programming, building on what is already there.

The parking area is dirt and needs modifications to improve circulation and reduce potential conflicts between different types of users. The location of the trailheads and lack of interpretation causes confusion for visitors. Currently there is a vault toilet that is used by visitors.

3.10.1.4 North Unit

The North Unit of the park is accessed off US Highway 85 and currently has three trailers serving as a temporary visitor center, restrooms, and office space for staff. This area also has issues with the current entrance station location being too close to the highway with not enough stacking room, which results in backups toward the highway.

The area is also in need of a permanent visitor center building in a more geologically stable location on the site and the removal of the temporary trailers. The current trailers are at the end of their useful life, and they do not provide enough space for visitor center functions, bookstore sales, storage, or park offices. They also currently provide a restroom “trailer” that is also a temporary trailer at the end of its lifespan, located in a geologically unstable area and in need of replacement.

3.10.1.5 Elkhorn Ranch Unit

The Elkhorn Ranch Unit is a very remote area with very little development, and it is also the area most closely associated with Theodore Roosevelt and his time in the North Dakota Badlands. It is an area of solitude, and it is desired to remain that way.

The area is surrounded by a collection of lands managed and preserved by the US Department of Agriculture, state parks, and private landowners and is also adjacent to National Grasslands campground at the intersection with the MDHT. Bikes are extremely common on the MDHT as it is not on NPS land, but they are not allowed on the Elkhorn Ranch site.

3.10.2 Alternative 1: No Action

Under Alternative 1: No Action, visitor use would continue to increase. Visitor experience and park infrastructure would remain at current levels and continue to be inadequate to address visitors needs in the park.

3.10.3 Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan

Under Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, activities at all study areas could result in direct, short-term adverse impacts visitor use during the construction period. Visitors would not be allowed in construction areas, but construction would cause additional noise that could impact visitor experience. However, the park would inform visitors in advance of construction activities via multiple methods, including the park's website, various signs, and at the visitor center. Park staff would be available to address visitor questions during construction and provide regular updates to the public about project progress and any associated delays. In addition, the park would coordinate with the city of Medora and North Dakota Department of Transportation on installing appropriate signage regarding construction routes and construction timing.

3.10.3.1 Medora Headquarters Area

Under Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, the Medora Headquarters Area entrance area would be improved and would reduce the current issue of vehicles backing up onto Pacific Avenue. The expansion/reconfiguration/replacement of the visitor center would allow the park to better meet the needs of visitors, including providing space for additional gathering spaces both indoors and outdoors and better use of the existing space. Also, there would be an increase in seasonal housing, which would allow for the park to better staff this

area to meet visitor needs. The proposed action would have a direct, long term beneficial impact to the visitor experience in this area.

3.10.3.2 Painted Canyon

Under Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, the Painted Canyon study area would be improved to better meet the needs of visitors. The area would be improved to create more of a NPS lands experience, including expanding or replacing the visitor center or converting the existing visitor center to an outdoor interpretive area, adding picnic shelters, trail segment, and exterior wayfinding, orientation, and interpretation at the visitor center. These actions would result in a direct, long term beneficial impact to the visitor experience in the area and could better connect the site to the rest of the park while also providing additional information about attractions in the area. If park managers decide to convert the existing visitor center to an outdoor area, that would result in the loss of the existing bookstore. However, the Medora area has proposed to expand the existing bookstore space there, which would offset the loss of the bookstore at Painted Canyon.

3.10.3.3 Peaceful Valley Ranch

Under Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, the Peaceful Valley Ranch study area would be improved with new dormitory housing for educational program participants and expanded parking. Relocation and formalization of trailheads with additional interpretation would also help to better direct visitors and create necessary space for different functions, like horse trailer parking. Additional restrooms and improved utilities for the area would also be necessary for new facilities and increased visitation. The proposed action would have a direct, long term beneficial impact to the visitor experience in the area.

3.10.3.4 North Unit

The expansion and relocation of the entrance station would reduce backups toward the highway, improving visitor experience when entering the park. The various options for a visitor center would improve the visitor experience as the trailers do not provide enough space for visitor center functions. Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan would improve the visitor experience in the area.

3.10.3.5 Elkhorn Ranch Unit

Amenities such as bike racks, interpretation, and a vault toilet would be added to the existing parking area. This would give visitors a place to stop, learn about the area and have a place to store their bikes while they explore the area. The addition of these amenities would improve the visitor experience in the area, while still keeping it as an area of solitude.

3.10.4 Cumulative Impacts

Past and present actions in the park include existing facility, trail, and road repairs or renovations. These actions, as described in section 3.2, Cumulative Impacts, have generally maintained or improved visitor use within the park. Reasonably foreseeable actions such as facility and roadway repairs or renovations, construction of new buildings, and potential relocation of existing structures are expected to improve visitor use, however, these potential future actions will also bring additional visitors to the area, resulting in a corresponding increase in traffic, demand for

parking, and visitor and staff use of park facilities, which could have direct, adverse, long-term impacts to visitors who desire a quiet experience.

Under Alternative 1: No Action, the visitor use issues described in section 3.10.1, Affected Environment, would continue. The park would continue to address visitor use issues on a case-by-case basis subject to funding availability. Construction activities associated with any of the planned actions discussed above would result in short-term, minor, adverse impacts on visitor use, but would be mitigated through best practices. The no-action alternative, when combined with past, present, and reasonably foreseeable future actions and trends, is therefore likely to result in short- and long-term, direct and indirect, adverse impacts to visitor use because no project activities would be taken to address the issues described in section 3.10.1.

Under Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan, facilities for visitors and staff would be upgraded and expanded to serve the increasing levels of visitation in the region that may occur over time because of other planned actions. Entrance facilities would be relocated and expanded to accommodate increased visitation and have a long-term beneficial impact to visitor use. Construction activities may contribute to the short-term adverse impacts to visitor use due to the presence of large vehicles, construction equipment, and debris. However, appropriate signage regarding construction routes and construction timing would be placed to inform visitors about these activities. The South Unit Loop road construction activities are unlikely to overlap with implementation of any of the activities proposed in this EA, however, the reconstruction of the road would contribute to the improvement of the visitor experience. When combined with the past, present, and reasonably foreseeable impacts, the proposed action would result in a long-term, beneficial cumulative effect to visitor use.

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4 CONSULTATION AND COORDINATION

4.1 CONSULTATION AND COORDINATION WITH OTHER AGENCIES, OFFICES, AND TRIBES

During the NEPA process for the project, letters soliciting input from resource agencies and Native American tribes were distributed on October 27, 2021, requesting input by November 30, 2021. The letters included the civic engagement package provided to the public and were sent to the following agencies and Tribes:

- US Army Corps of Engineers
- US Department of Agriculture Natural Resources Conservation Service
- US Fish and Wildlife Service
- US Forest Service
- North Dakota Department of Transportation
- North Dakota Game and Fish Department
- State Historical Society of North Dakota
- McKenzie County Tourism Bureau
- Mandan, Hidatsa, and Arikara Nation
- Standing Rock Sioux Tribe
- Crow Tribe
- Fort Peck Assiniboine and Sioux Tribes
- Chippewa Cree Tribe
- The Blackfeet Nation

Tribes were consulted as part of annual planning for park projects during March and April 2022. Consultation letters, including descriptions of this and other planned work in the park, were sent to Tribes on February 22, 2022, and online meetings were held with Tribal Historic Preservation Officers (THPOs) on March 14 and April 7, 2022. THPOs from four of the eight Affiliated Tribes participated and expressed no concerns for work at four of the five sites. For the Painted Canyon site, the THPO from Standing Rock Sioux Tribe expressed interest in viewing the lithic scatter site associated with lagoon infrastructure. The park is working to facilitate a site visit with this THPO during summer 2022.

During June 2022, the park contacted SHPO by phone to begin discussions regarding the archeology and historic-era structures that may be affected by the project. The state archeologist is coordinating information-gathering efforts with staff from the NPS Midwest Archeological Center, and the historic architect is reviewing past consultation determinations on park structures in preparation for receiving project consultation letters and the draft EA in August 2022. Further consultation under Section 106 is underway with the intent to request concurrence with no adverse effect from this plan. Formal consultation with the US Fish and Wildlife Service would be done on a project-specific basis. This additional compliance would tier off this EA, and issues pertaining to

northern long-eared bat would be managed by requiring removal of trees/structures during November 1 to March 31 of each year. Concerns with eagles may also be managed, but no eagle nests are known to be within 0.5 mile of the five study areas considered under this EA.

Coordination with the agencies and tribes will continue, as needed, prior to and during construction of any of the projects presented in Chapter 2 of this EA.

4.2 PUBLIC INVOLVEMENT

The park conducted civic engagement to make the public aware of the facility revitalization planning work in process and to invite the public to comment on early ideas and concepts. The park hosted two public meetings to gather on November 3 (virtual) and 4 (in person), 2021, and posted a newsletter and story map on the NPS Planning, Environment, and Public Comment website for public comment. The National Park Service held an open comment period from October 27, 2021, through November 30, 2021. Eleven separate correspondences were received during the open public comment period. The comments received during the civic engagement period were general statements of support or concern or out of scope comments.

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Appendix A

Alternative 2: Proposed Action, Implementation of Facility Revitalization Plan Figures

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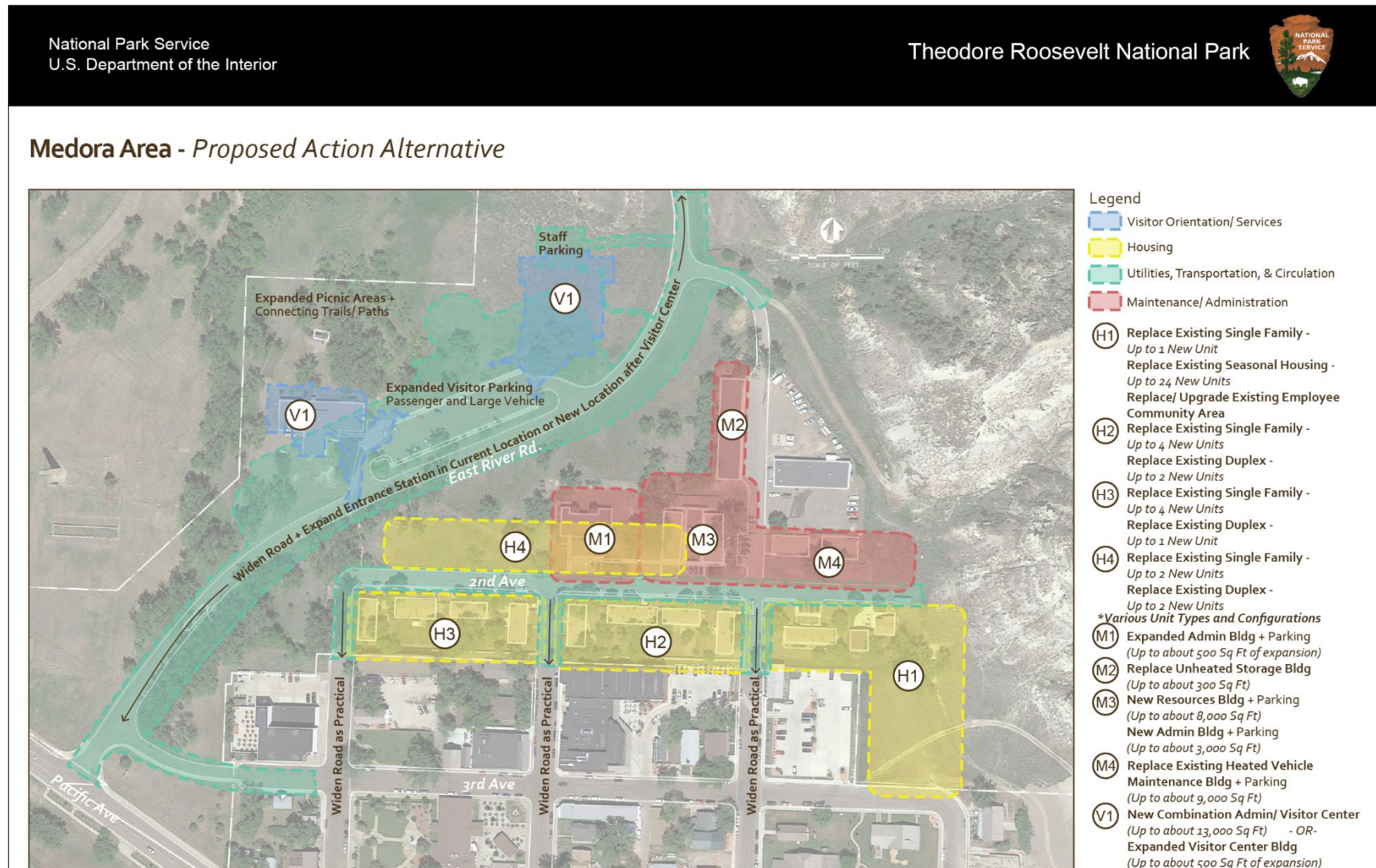


FIGURE A-2. MEDORA HEADQUARTERS AREA ALTERNATIVE 2: PROPOSED ACTION, IMPLEMENTATION OF FACILITY REVITALIZATION PLAN

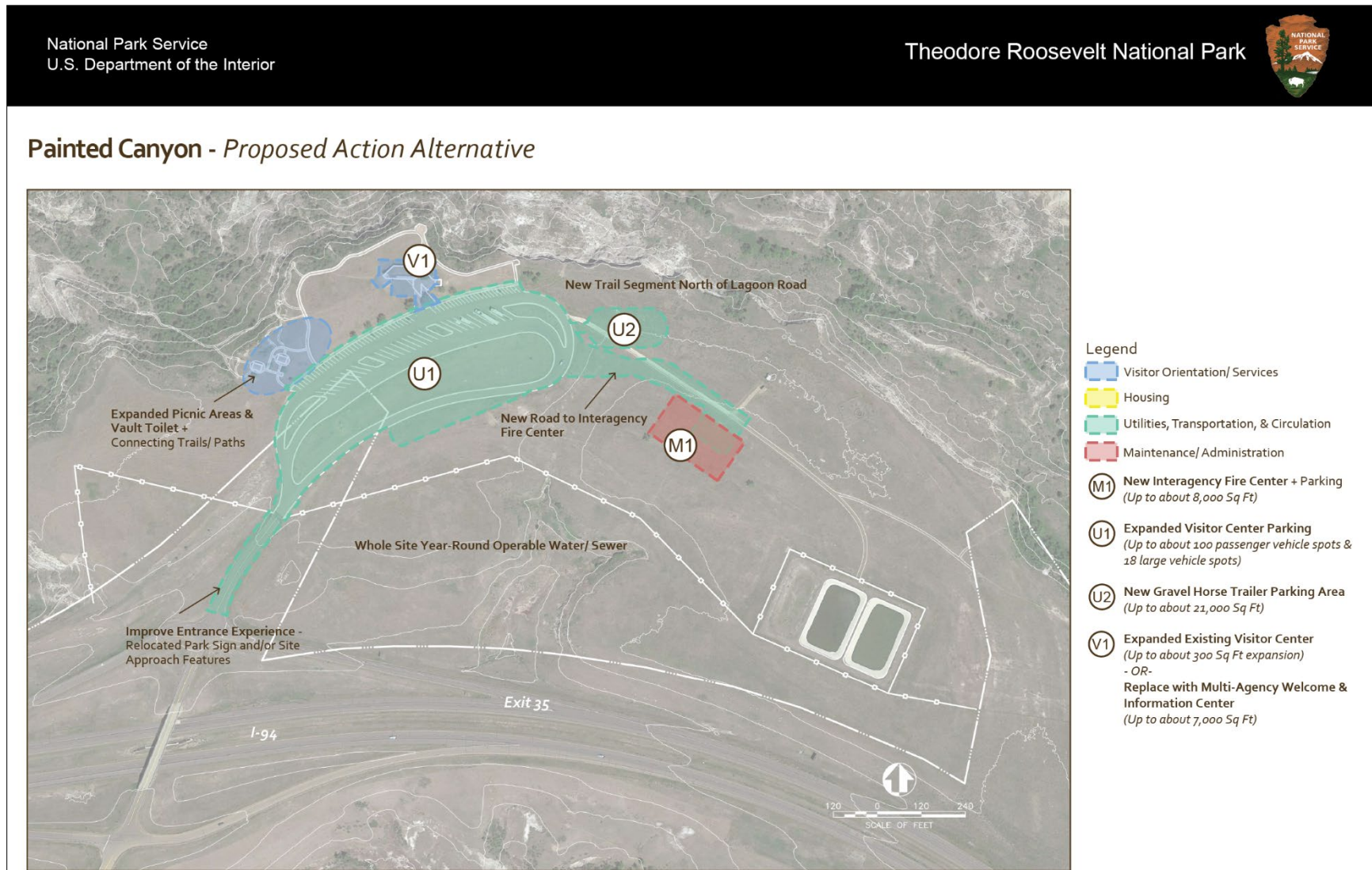


FIGURE A-3. PAINTED CANYON ALTERNATIVE 2: PROPOSED ACTION, IMPLEMENTATION OF FACILITY REVITALIZATION PLAN

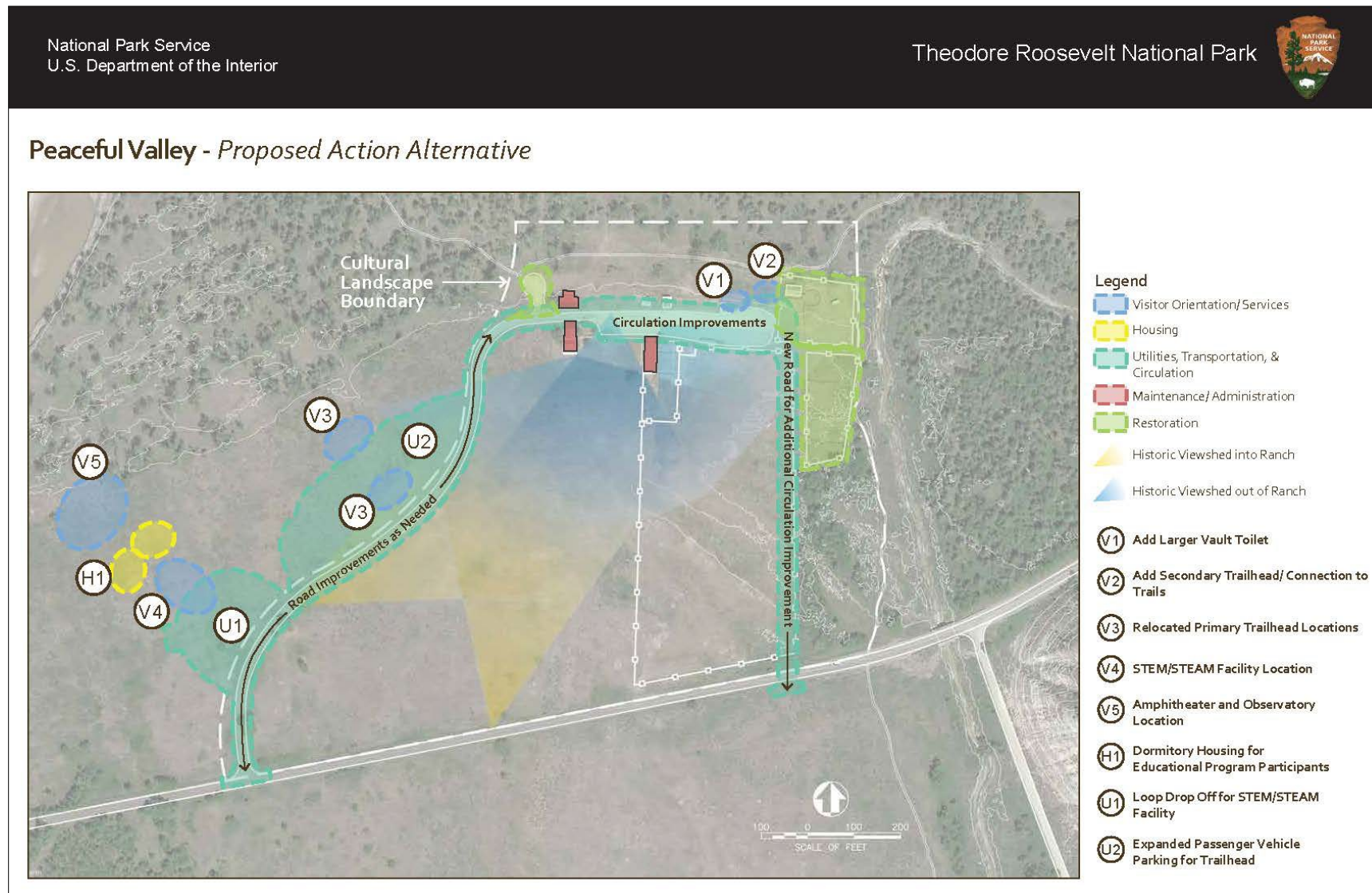


FIGURE A-4. PEACEFUL VALLEY ALTERNATIVE 2: PROPOSED ACTION, IMPLEMENTATION OF FACILITY REVITALIZATION PLAN

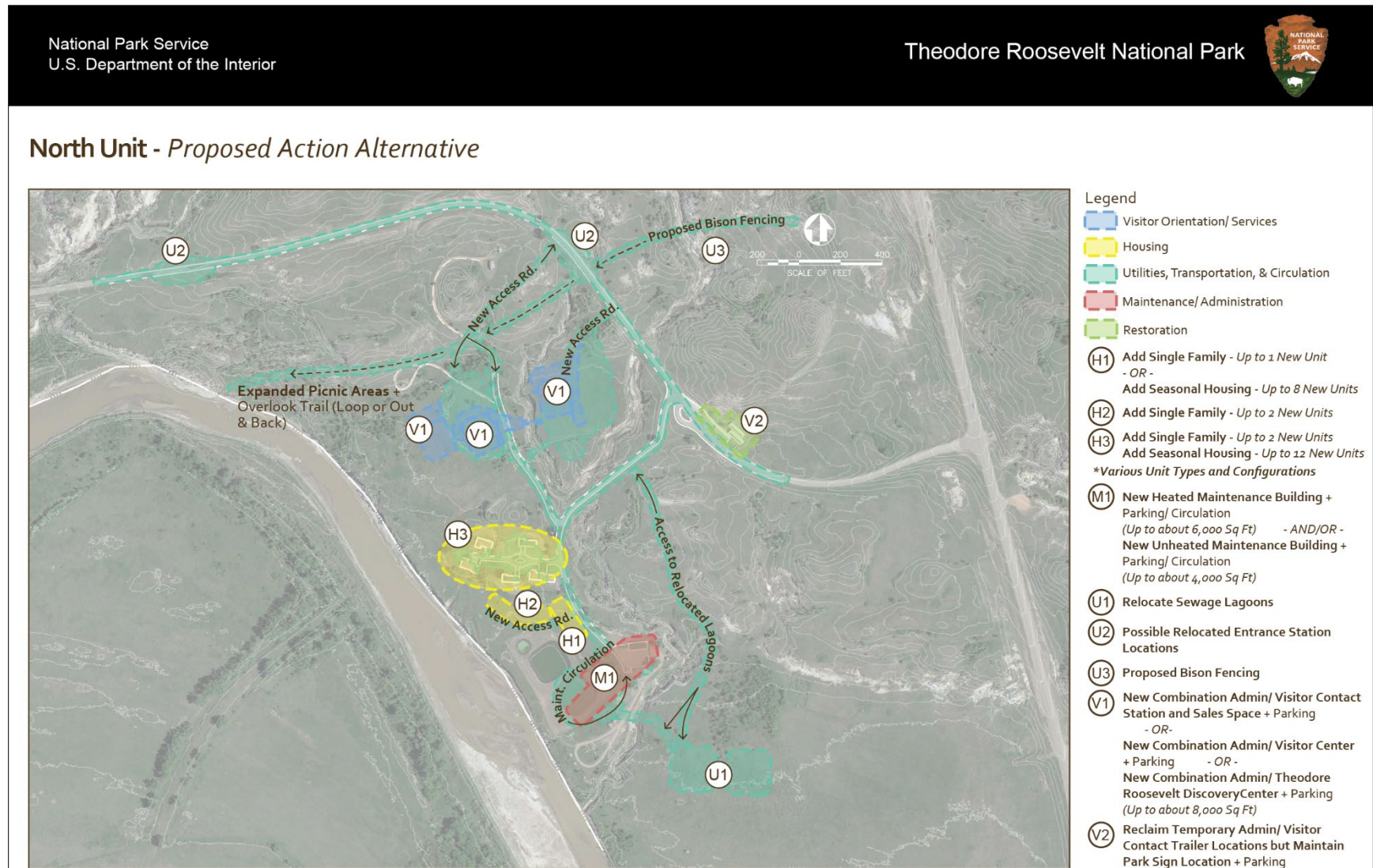


FIGURE A-5. NORTH UNIT ALTERNATIVE 2: PROPOSED ACTION, IMPLEMENTATION OF FACILITY REVITALIZATION PLAN

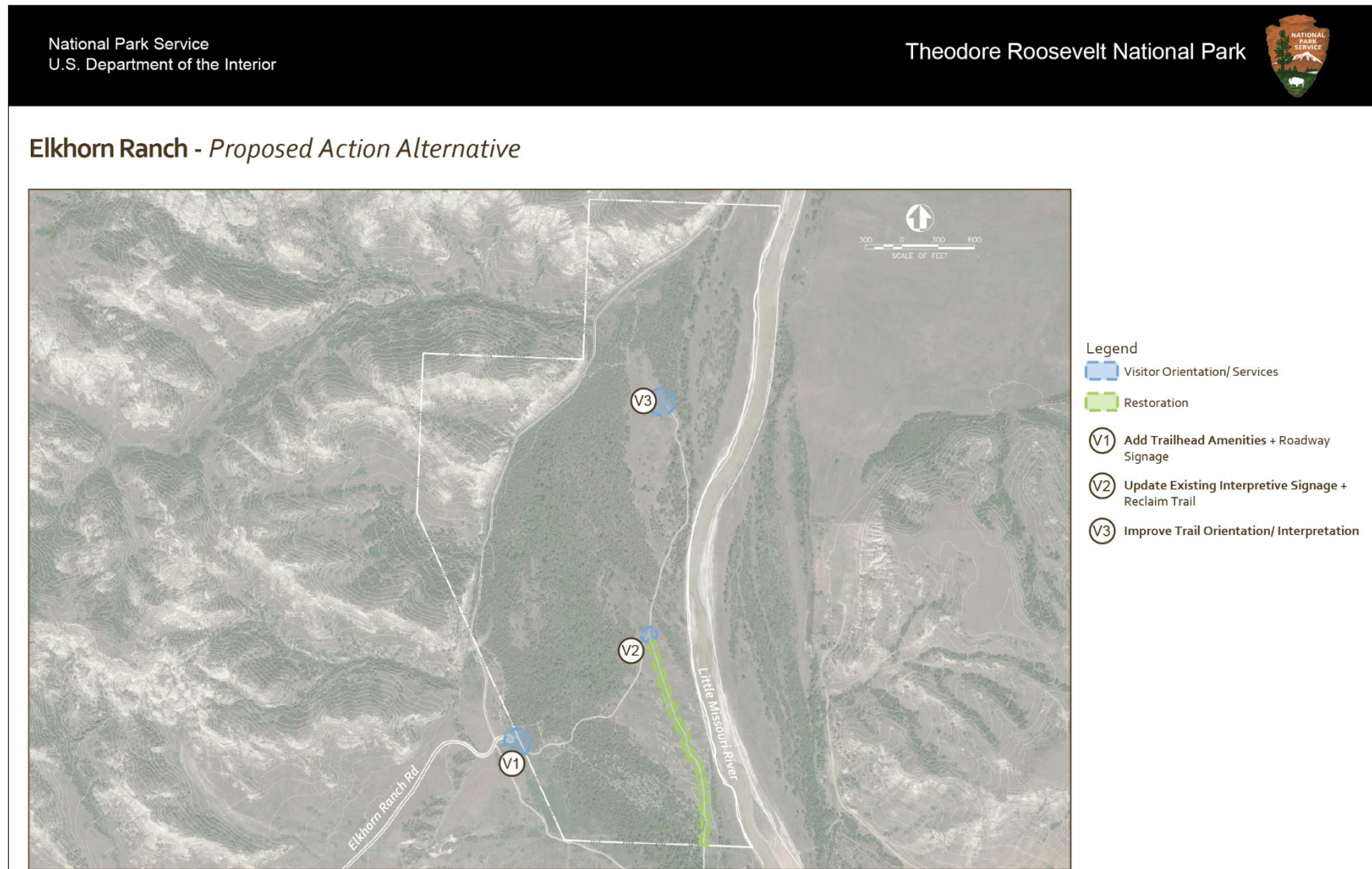
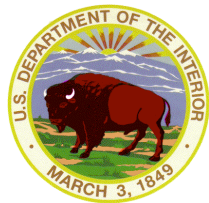


FIGURE A-6. ELKHORN RANCH ALTERNATIVE 2: PROPOSED ACTION, IMPLEMENTATION OF FACILITY REVITALIZATION PLAN



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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